

THE
PHRENOLOGICAL
MAGAZINE





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THE
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I N D E X .

PAGE		PAGE
A Few Thoughts on the Develop- ment of the Brain 12,	67	<i>Delineations—Continued.</i>
Answers to Correspondents 393,	439, 565	Capt. Shaw 355
Augusta, Empress 311		Dr. Wm. Huggins 399
Autobiographical Account of Mr. Wright 504		Francis Galton 443
Beall, Dr. E. C. 497		Mr. Wm. Brown 487
Bible, The Psychology of ... iii,	55	Mr. Theodore Wright 502
Bishop Hawkins 133		Mr. W. Cross... .. 519
Book Notices, 42, 83, 130, 173, 214, 260, 309, 483		Mr. J. B. Keswick 526
Boys and Girls, Our 3,	47	Mrs. Keswick... .. 528
Boys and Girls of our Times ...	331	Mr. J. Thompson 535
Brain, A Few Thoughts on the Development of the 12,	67	Mrs. Thompson 537
British Phrenological Association, The 158,	203	Mr. Mark Moores... .. 539
British Medical Association... ..	379	Mr. J. Coates... .. 542
British Association or Parliament for Advancement of Science 406,	451	Mrs. Coates 543
Brain and Mind 401		Mr. Hatfield 547
Brown, Mr. W. 487		Mr. A. Hubert 549
Bureau, Labour 159, 262,	307	Madame Patenall 552
Caine, Mr. W. S. 265		Mr. G. H. J. Dutton 556
Captain Shaw 355		Mr. Stooke 557
Character Sketches from Photo- graphs 43, 86, 131, 174, 217, 262, 308, 351, 396, 439, 485,	566	Mr. R. B. Doss 560
Coates, Mr. J.... .. 542		Development of the Brain, A Few Thoughts on 12,
Goates, Mrs. J. 543		67
Cross, Mr. W. 519		Doss, Mr. R. B. 560
Children's Column... .. 395,	550	Dutton, Mr. G. H. J. 556
Christmas with a Portrait	521	Dr. S. Kennedy 177
Clippings, Science 394		Dr. Koch I
Concerning Thought and Ideas ...	463	Dr. Richardson 45
Conference of Medicals 554		Drs. Gall and Spurzheim 274
Correspondence, 41, 84, 128, 173, 215, 349, 435, 482		Enthusiasm 151
Cranio-Cerebral Topography, 461,	506	Exercise, Rest, etc. 197
Criminals, Humanizing the	144	Experience of Phrenology, My ...
Curiosities in Memory 336		530
Darwinism, A. R. Wallace's	91	Eyraud and Bompard, Lombrose on
Delineations from Photographs:—		63
Dr. Koch I		Faces 267
Dr. Richardson 45		Finger-tips, Identification by ...
Rider Haggard 89		445
Bishop Hawkins 133		Fowler Institute, The 37, 147, 203,
Dr. S. Kennedy 177		255, 307, 342, 384, 434, 480,
Prof. Romanes 221		540
W. S. Caine 265		Fowler Institute Soiree... .. 72
Empress Augusta 311		Function of Individuality, What is the 75
		Future, The Phrenology of 240
		Gall and Spurzheim, Drs. 274
		Galton, Francis, Esq., F.R.S. ...
		443
		Haggard, Mr. Rider 89
		Happiness 371
		Hatfield, Mr.... .. 547
		Hawkins, Bishop 133
		Hubert, A. 569
		Huggins, Dr. William 399
		Hydropathy in London... .. 517

	PAGE		PAGE
Humanizing the Criminal	144	Phrenology, What is Pure	313
Hygienic and Home Department		Phrenological Nomenclature, Sug-	
38, 120, 167, 204, 256, 303, 343,		gestions towards obtaining an	
389, 432, 477, 544		Improved	316, 408
Identification by Finger-tips... ..	445	Phrenology up to Date	489
Individuality, What is the Function of	57	Phrenologists, What are Doing 41,	
Influenza, a Biological Study ...	300	81, 125, 170, 210, 349, 393, 436,	483
Institute Lecture	255	Photographs, Character Sketches	
Kennedy, Dr. S.	177	from 43, 86, 131, 174, 217, 262,	
Keswick, Mr. J. B.	526	308, 351, 396, 439, 485	485
Keswick, Mrs. J. B.	528	Pneuma, The Organ of the	95
Know Thyself... ..	181	Prehistoric Trephining in Peru ...	335
Koch, Dr.	1	Psychology of the Bible	55, 152
Lombrose, on Eyraud and Bompard	63	Reason why we should Study	
London, 1891,	384, 421, 474 558	Phrenology, The	34
Medical Association, British... ..	379	Reasons why Phrenology is not	
Medical Women	230	more generally accepted, What	
Memory, Curiosities in... ..	336	are the	154
Memory Viewed Phrenologically... ..	282	Reminiscences of L. N. Fowler	
Men and Women of our Times 110,		286, 322, 357, 414, 455, 512	512
183, 246, 293, 448		Rest and Exercise... ..	197
Men of our Times	18	Richardson, Dr.	45
Month, Notes and News of the, 79,		Rider Haggard, Mr.	89
123, 169, 207, 258, 346, 392,		Romanes, Prof. G. J., LL.D.,	
432, 479		F.R.S.	221
Moore, Mark... ..	539	Science Clippings	394
Notes and News of the Month		Shaw, Capt.	355
79, 123, 169, 207, 258, 346, 392,		Slojd	466
432, 479, 565		Socialism viewed from Phreno-	
Notices, Book... ..	42, 83, 130, 173,	logical Standpoint	139
214, 260, 309, 483		Some Objections to Phrenology ...	59
Objections to Phrenology, Some	59	Strike, A... ..	538
Oratory and Orators	499	Stooke, Mr.	557
Organ of the Pneuma, The	95	Suggestions towards obtaining an	
Our Boys and Girls	3, 47	Improved Phrenological Nomen-	
Our Times, Men and Women of		clature	316, 408
110, 183, 246, 293, 448		Temperance Notes, 127, 172, 211,	
Patenall, Madame	552	261, 350	350
Phrenology Proved 20, 98, 160,		Testimonial to Prof. L. N. and	
190, 224, 297, 327, 422		Miss J. A. Fowler	200
Phrenology, The Psychology of		The Organ of the Pneuma	95
31, 116, 136		Thompson, Mr. J... ..	535
Phrenology, The Reason why we		Thompson, Mrs.	537
should Study	34	Times, Men and Women of our	
Phrenology, Some Objections to	59	110, 183, 246, 293, 448	
Phrenological Standpoint, Socialism		Trephining, Prehistoric, in Peru... ..	335
Viewed from a	139	Wallace's, A. R., "Darwinism,"	91
Phrenology is not more generally		Wells, Mr. R. B. D.	511
accepted, What are the Reasons		What is the Function of "Individ-	
Why	154	uality"	75
Phrenological Association, The		What are the Reasons why Phren-	
British... ..	158, 203	ology is not more generally	
Phrenology of the Future	240	accepted	154
Phrenology in the Light of Modern		What is Pure Phrenology	313
Science	250	What Phrenologists are Doing	
		41, 81, 125, 170, 210, 349, 393,	
		436, 483, 563	563
		Wright, Theodore... ..	502

THE
Phrenological Magazine.

JANUARY, 1891.



DR. KOCH.

THERE is more than average balance of power connected with the organisation of Dr. Koch. The physiological indications are most favourable to health and strength. He is capable of enduring a great amount of labour. There is also a fair balance of power between the face and the head, both being fully and evenly developed: the head is somewhat remarkable for its fulness, and is well rounded out. He has a high and fully-developed forehead, which gives an indication of grasp of mind, originality of thought, and power to criticise and analyse. His comparison and intuition, being decidedly large, give him superior abilities to examine subjects closely and to get distinct

ideas of things. He is not wanting in perceptive power, but his intellectual forte is more in originating, thinking, and comprehending subjects than it is in mere observation and memory.

He has a lively perception of the mirthful, witty, and absurd. He has comprehensiveness of mind, and a full development of imagination. He is particularly versatile in his talents, and ready at contriving and devising ways and means.

He is quite youthful in his manner, having the organ of agreeableness large.

Constructiveness is prominently indicated, but he has more of the powers for invention and discovery than for the mere manipulating of tools as a mechanic. He should be known for order, method, and arrangement; is capable of planning out work and laying safe foundations. He is well qualified to talk, to tell what he knows, for language is large. His head, being broad, indicates more than ordinary force of character and power of execution. He can keep his own affairs to himself, and is comparatively conservative and discreet in what he says and does. His head, being high, indicates a great amount of will-power, decision, determination, and perseverance. All the moral brain is fully developed, which helps to give stability to his character. His mind is open to impressions: he is not naturally an infidel or sceptic, but he is willing to examine all subjects; and his spirituality, being apparently quite large, would greatly facilitate him in his investigation of new subjects. He must have been remarkable all through his youthful days for his many schemes, projects, plans and inventions. He is naturally enterprising, full of hope and anticipation, and is continually looking forward, as if the thing most to be desired was yet to be discovered.

He is a man of more than average integrity; he is a lover of truth, and is anxious to establish what is true. He is not a trifler, but is reliable. His sense of music, order, and punctuality must enter largely into his character, by way of giving precision and disposing him to be particular and exact in what he does. He is remarkably industrious, has not a minute to lose, and has that degree of activity of mind that keeps him doing one thing or another. His eventuality, as connected with comparison, would lead him to be almost extravagantly fond of experiments, of testing things, and of studying results. He has the power of drawing people to him, of making himself agreeable, but is not so familiar as to lose personal influence by contact with others.

Taking all things into account, he is a very fairly rounded out and fully-developed man, both mentally and physically,

and is able to sustain himself in almost any position in which he may be called upon to act.

L. N. FOWLER.

Dr. Koch, the discoverer of the remedy for consumption and other tuberculous diseases, was born in 1843 in the Hartz Mountains district. He took his degree in 1866, and after acting for some time as assistant-physician in a hospital, he was appointed, in 1872, to one of the medical departments at Woolstein, where he remained for seven years. In the meantime he prosecuted his scientific studies, and won his medical spurs by a book on the methods of the artificial dyeing of microscopic objects, especially of bacteria. Between 1879 and 1883 he succeeded in identifying the germs of cattle disease and of consumption. In the latter year he was sent by the German Government to India to investigate the causes of cholera. In 1884 he discovered and established the existence of a bacterium as the cause of cholera, thus anticipating the labours of Dr. Timothy Lewis and Dr. Vandyke Carter. He was appointed Professor of Hygiene at Berlin in 1885.

OUR BOYS AND GIRLS.

BY L. N. FOWLER.

ONE of the earliest commands of God to man was to go forth and multiply upon the earth and subdue it. That work is still going on ; for the earth is being subdued and brought into use, as well as being filled with human beings at the rate (so it is calculated) of about 3 per minute over all the world.

The greatest and most important reality in this world is a man—not a horse, not a monkey—a man. He was created with more organs and functions than any other organised being ; hence he indicates more. A horse indicates strength and speed : a man indicates much more than that. Whatever his organization teaches, that teaching can be relied upon as being true, useful, scientific, and important to all. That is what we ought to know.

What does phrenology teach ? Some people think they may believe in phrenology or not ; that they are more scientific to reject it than to admit it : but they should understand that phrenology is either true or false. If it is true, it is so from the foundation. The first man who was created indicated his phrenology as much as men do now-a-days. It is part and parcel of our organization, and we can no more

dispute it—when we fairly comprehend the principles of it—than we can dispute our own existence. It is a matter of importance that we admit the truth of this science ; and it is our duty to recognise ourselves as moral and accountable beings.

What does phrenology teach ? We are liable to go to books, to the Bible, to the teachings in the pulpit, and to a great many other things, to know what we should do. Phrenology tells us the whole story. Let us know what it is, and listen to what it teaches us, and we shall find our duty.

Man was made last, and is the most important of all that exists on the earth. The Bible began to be written by Moses thousands of years after man's creation. Man lived on the earth thousands of years before he had a Bible. It was written for man ; the Sabbath was made for man ; Jesus was crucified for man ; this world was made for man. Had it not been for man being on the earth, it would not have paid the Almighty to have made it and to have filled it with animals to quarrel with each other. The world was made for man.

Eternity is the inheritance of man. Who, below the Son of God, is more important and valuable than a man ? We cannot put too high a value on man. We do not put half enough value on our mentality and immortality. We are liable to place more value on dress than on our immortal souls.

Man being the climax of all created things, the powers invested in him are all-important and should be thoroughly understood, and the best possible use made of them. They are not to be trifled with. Man is so complicated and rounded out that he is a deep study ; and the more is known of him the more important and responsible he appears to be. Those who have not given man any study at all—only so far as he has appetites and feelings and intellectual curiosity—know very little about him. It requires a continued study year after year, and a deep study, and great experience, for us to fully comprehend the value of man ; and then we fall short, for we cannot comprehend the human organism to its fullest extent.

Of all that is valuable on earth the child is the most so : for a child can be trained into what a man ought and can be. You can train the child—not so the old man ; nor the middle-aged man so much ; but the child, with its malleable mind, can be trained and moulded to what it ought and can be.

There is no sight on earth so beautiful and suggestive as a perfectly healthy family. I cannot conceive anything more beautiful than that : father, mother, son and daughter all healthy, all happy. An artist cannot make or find any picture equal to that.

Children have all the elements of mind and body peculiar to grown-up persons. In growing from infancy to manhood, no new elements of mind are given ; the mind is only being unfolded, so that the child that did not know A, becomes a very learned man and a deep thinker after awhile. It was all there. It was all in Moses in the bulrushes, and it was in Moses guiding the children of Israel to Palestine.

The mind grows and opens like a rosebud. The bud in the pot in the window is closed, it is small ; but watch it from day to day, nourish it, put it in the sun, and you will see it swell and develop and unfold and get larger. By and by the outer leaves open a little ; the second course of leaves open a little ; and they all continue to open more and more and make room for the inner leaves, until there is a beautiful, full-blown rose.

So with the child. If you fail to nourish that bud in the pot in the window it becomes stunted, and does not fully unfold ; it is not a beautiful rose : but it would have been had you nourished it. So it is with many children. They are not cared for, and their minds are not fed and unfolded and brought forward to the fullest extent of their natural ability. The minds of children need to be fed with suitable food in order to secure the growth and development of their minds. We know a little about feeding the body, but none too much. Many children are not fed as they ought to be. We know less about feeding the minds of children. Hence the mind is more stunted than the body. Farmers understand perfectly well that, if they want a well rounded-out horse, it must be fed well as a colt ; and when they bring their horses to market or to the show, they are pretty careful to fill their skins full before they go. If we would educate our children properly, we could introduce them into Paradise with much more fully-developed minds. Learn to feed the minds of your children : not with all sorts of "Mother Goose" stories, or any kind of rhythm that we may hitch together, but put right thoughts into their minds ; tell them something worth thinking about while you are talking to them.

The future, if not the destiny, of a child, is established by its parents before its birth. What is the child ? What are the parents ? that answers the story. It is the stock and quality that makes a great difference. Bunyan and Cromwell and Milton had a good start in nature. Before they were born they were Bunyans and Cromwells and Miltons in quality ; they had it in their nature, not in their education—for two of them certainly had not a very good education ; but it was in their blood to be what they were.

Parents take upon themselves great responsibilities, and should feel and act as though posterity was in their hands, for it really is. Children require the aid and support and guidance of both parents. It is a misfortune for a child when it has only a mother to guide it. It is a greater misfortune when a child has only a father to guide it. The child wants the masculine and the feminine minds together to exert that mind influence necessary to bring out all the powers of the mind.

Parents cannot begin too early to train their children—even as soon as they are born, for some of their faculties are then brought into action, and habits are being formed. This reminds me that parents ought to be careful what kind of nurses they have for their children. There are a great many “old fogey” nurses, who do children more harm than good. One nurse, in order to put the child to sleep, will sing it to sleep. The nurse doesn't know that it can go to sleep in any other way ; and after a week it has got into the habit and it must be sung to sleep. Another nurse trots the child to sleep on her knees, or rocks it in the cradle, and the child after a time won't go to sleep in any other way. Another will hop and skip round the house, and jar and swing the child in her arms to put it to sleep, until it becomes dizzy and cannot keep awake any longer. This rocking and running and singing of children to sleep does their brain harm, and they ought not to be put to sleep in that way. Do you ask how a child should be put to sleep ? Lay it down and let it go to sleep, that is the way. You say the baby will cry if you put it down. It will cry if you put it to sleep in any other way. It may as well cry quietly on the bed till it gets tired and then goes to sleep, as to cry while you are trying to put it to sleep. It does not hurt children to cry if there is a good bandage around them.

Parents, by understanding phrenology, will know the organization of their children ; and that should be their guide in managing them. John is very different from James, and Mary is very different from Susan. John should be managed according to John's organisation ; Susan should be managed according to Susan's organisation ; and so on all the way round. You should not manage all children alike, because all children are not alike ; and they should not be managed alike when they are not alike. People who have horses do not manage all horses exactly alike ; they manage them according to the spirit of the horse ; and so we should manage and educate our children according to their capacity.

Phrenology teaches us whether a child is heroic or mild ;

whether it is self-confident or lacking in spirit ; whether it is intelligent or foolish ; and it should be managed according to the abilities it possesses.

Parents should be consistent in the management of their children. They should not break their promises. Some parents are exceedingly careless in their promises. "O yes, I'll bring you home something, if you are good while I am gone." The child is good in anticipation of something. "Mother, did you bring me anything?" "Oh, there! I forgot it!" And she intended to forget it. That is a promise broken. Parents have no business to break their promises to their children. What promises they make they should fulfil.

A mother had her little boy with her on board a steamboat, and the boy was restless and noisy, as children are apt to be. The mother said—"Henry, if you don't be still—if you do that again, I'll throw you overboard!" The boy straightway did it again, and she didn't throw him overboard! I say—Don't make a promise, or keep it ; one of the two.

Parents are very apt to say they do not know how to manage their children. A lady said so when I was giving this lecture. I said, "How old are you?" She said, "I am 36." I said, "How old is your child?" "Six years old." "Then your child knows more than you, does it? It must be a wonderful child, or else you are a wonderful mother to have a child so wise. And you don't know how to manage your child—you 36 years old, and your child six! There is something wonderful about it one way or the other." Parents should not acknowledge that, even if it is so. But if parents would educate themselves to be parents, they would know how to manage their children. But many parents do not know any way to manage their children but to give them a whack right off when they are disobedient, just as if the child knew what it ought to do.

Parents should manage their children so as to command respect. That is a matter of very great importance, both with reference to children, and with reference to husbands and wives. Some husbands do not treat their wives in a way to command their respect, yet those very husbands want their wives to love them ever so much. A woman cannot love a man she does not respect. If you can command the respect of your wife, you will be pretty sure to command her love, but not otherwise.

Ingenuity is necessary in managing children about as much as in managing a city. We have to do a great variety of things to adapt ourselves to the whims of children. Parents should be particularly careful to obtain willing obedience, not

forced obedience, from their children. For a child to be willing to do a thing is worth a dozen forced obediences.

Children should be taught to take the responsibility of their actions. Parents taking the responsibility prevents the child from taking it. All the way from infancy up the child should be educated with that thought—taking responsibility.

A sick child wanted a certain kind of food which was strictly forbidden. The mother told the child that the doctor had said she must not have that food. "Well," said the child, "I want it," as if she could not get along without it. The mother said, "But you must not have it." The child insisted on having it. Finally the mother said, "I will give it to you, but you must take the consequences, and I do not know the damage it will do to you, for the doctor says it may kill you. Nevertheless, I will give it to you, and you shall take the consequences of eating it." She gave the food to the child, but the child would not eat it when it had to take the consequences, for it said, "I want you to take the responsibility." No, don't you take the responsibility. If you can possibly throw it upon the child, you will strengthen the will and the resolution of the child.

Evils increase in proportion as we lack self-government and allow the will to act with the passions instead of the moral feelings. The will going with the passions is sure to lead us astray; the will going with the judgment and the moral sense is sure to guide us in a better way.

A child's will should not be broken, but it should be guided. I know that many parents think they must break the will of their children, just as some men think they must break the spirit of their horses. Now, horses that have their spirit broken have to be governed by the whip all the time. But when a horse that is broken to the saddle or harness without having his will broken, pretty much all that is necessary is to speak to the horse; or if it is conscious there is a whip anywhere about, it is enough for that horse. Crack the whip, and that horse will almost jump over the traces, it is so spirited; but a horse with its will broken is like a donkey hounded by boys to get it along, and has to be whipped every step it takes. No, don't break the will of your child, but guide it; no matter how strong the will is, guide it.

Cultivate in the child that which it is necessary for the man to possess. You as a father and a man, and you as a mother and a woman, ought to have some consciousness of what is necessary to be a man or a woman, to act like men and women, the qualities of mind necessary to be in action to discharge the duties of a man or a woman. Cultivate in your

children those things which are necessary in their manhood and womanhood.

The demands of the age require that the minds of children should be guided into useful channels. Why the demands of the age? Because there are so many temptations, so many ways in which the mind can be exercised, so many chances to do wrong as well as to do right. Hence, it is important that the mind of the child should be guided into ways of usefulness.

I say, learn phrenology, for it is a matter of very great importance that we all study phrenology; and others will advise you to study other things. There are many things to be learned. I think the minds of children are a little sharper now than they were many years ago, and they get through their lessons quicker as a general rule; they receive impressions quicker—that is the order of the day. Man is more impressible now; he has a higher state of the nervous system than he had; his skin is thinner; his nerves are on the surface more. Take a boy with a thick skin; try to get hold of his mind and you cannot. You may talk as loud as if he were deaf as a door, and you do not make an impression on his mind; you have to speak twice before he will hear you. Take a boy with a thin skin and bright eyes, and you only need to speak once, and he feels the full force of what you say. The time probably is coming when the human mind will be so clear and transparent that we shall be almost able to see over the bridge on to the other side. We shall see and know a great deal more about the future then. “Now we see through a glass darkly,” because we have so much that is physical in our natures; we are so animal in our tendencies, and so worldly in our desires. But as the world grows older, eternity will come nearer to us, or we shall come nearer to it, and young people will begin to think about a hereafter, instead of leaving it till they are old people just ready to die.

Children should be taught to govern themselves. What! Children taught to govern themselves? Yes; that is the business of the teacher, to teach children to govern themselves. Can they? Yes; I know they can. I once took charge of a rude school that had turned the master out of the schoolhouse, and would not allow him to come in, and broke up the school. I was about twenty years of age when called upon to take charge of that school. You may imagine I did not know any too much, but I had sense enough to so manage the school that it became the best school they had had for years because of its good order. Yet I had not a dunce-block, or a whip, or a ferule, or anything of the kind to govern

them by. Parents came from curiosity to see how the children were managed, for they said the children never behaved themselves so well at home as since I came into the school. They thought I spent all my time in flogging the children to make them behave. I simply put it to them to regulate their own conduct, and do as they wanted others to do when they were studying, and they all behaved themselves without any trouble. But when we don't know how, there's the difficulty! The more a child is governed, the less it will govern itself.

Children should be taught to take care of and wait upon themselves. "I can afford to have servants to wait on my children." Then you can afford to spoil your children, that's all. Children should wait on themselves. You have got an only boy, and there are two servants to wait upon him, and they trot up and down the stairs to wait upon him, to get his boots, and almost help to put them on. You are spoiling that boy. Children should be taught to wait upon and take care of themselves as much as possible, then they will be prepared to be independent when they go out into life. Many a young man and young woman when they get married have to go home and ask mother how to do so-and-so. Mother always used to do it for them.

Fear and threats should not be used in governing children. All threats are bad. Children should be taught not only to govern themselves, but they should be taught to be courageous and to protect themselves. How readily the child runs to mother or to father. They do not know where the danger is, but they imagine it is somewhere, and they run for protection as a chicken does to the old hen. Encourage your child to take the responsibility of governing itself, of fighting its own battle. It has to do it in life, and should learn to do it before it is 21 years of age. I don't mean learn to fight exactly; I mean to contend with difficulties, to overcome obstacles, and to be courageous, and have presence of mind. My father taught me that lesson, and he did me a very important service in doing so.

Children can be made courageous very easily. One experiment sometimes is all that is necessary to make a child courageous. A mother put "Charley" to bed one night, and as soon as the rats began to run in the ceiling of the old house, Charley took the notion that they were after him, and were going to carry him away. He began to cry, and his mother had to take him up and put him in another room and quiet him. She told her husband when he came home. The husband said, "That won't do; we must stop that. Let me put him to bed to-morrow night." So father put the boy

to bed the next night. As soon as the rats began to run in the ceiling, Charley began to be afraid, and his father spoke to him to hush him up. But there the rats were running, and he was more and more afraid. Finally the father went to him to hush him up, and the boy caught hold of his father with such frenzy that he could not disengage himself, and he had to take him into the other room. He said, "Charley, this won't do. You must drive those rats off. It won't do to have them about you when you want to go to sleep." So he got a stick, and said, "Now Charley, take that stick and go and drive the rats off." Charley's heart was up in his throat and he hardly breathed at all. The idea of taking the stick to scare the rats was a task ; but the father flourished it, and put it into his hand and made him strike upon the wall to drive the rats away. They waited awhile and no rats came back." "There," said the father, "the rats are afraid of you, instead of you being afraid of them. Now you keep that stick, and every time the rats come and bother you, you drive them off." The father said he never had any more trouble with Charley. One experiment was enough to wake up his combativeness and give him courage.

Parents should not get into a passion when they punish their children. The boy is angry and the parent is angry, and he punishes the child because the child is angry. Which is the worst ?

My father was very careful about punishing his children. He told me once not to do so-and-so. I did it. He told me again not to do that. I did it. He told me a third time not to do that, and that if I did it again he would punish me, for he would not know what else to do. I did it the next time. Father then said—"I told you that if you did it again I would punish you. You have done it. Now I am going to punish you ; but I am not going to punish you now ; I feel too much excited to think that you should have disobeyed me in this way, when there was no cause for it. But I shall punish you next Monday morning at 10 o'clock. You meet me at a certain place, and we will settle this affair." Next Monday morning, at the place and time appointed, I met him. Father sat down and talked with me about the evil of doing wrong, and the good of doing right. Then he knelt down and prayed with me with tears in his eyes. When he whipped me, he showed that he did not want to do it, but did it as a duty. I never wanted to be whipped after that. That one whipping answered the purpose. Many parents are in such a passion when correcting their children, that they use profane language instead of praying. It is not every child who has

such a father as I had—high intellectually, and still higher in the moral brain, with a very strong love for children. I never knew so faithful a man as my father.

Children should not be deceived or told falsehoods. Tell the truth, or tell nothing. Sometimes children ask questions that you do not wish to answer. Then tell them so. Say—“You are not old enough. Wait a little. In time you will know all these things yourself. Don't be in too great a hurry to know things.” Or if you do tell them, tell them in such a way that you will respect the truth when you tell them.

To stoutly oppose children and threaten them if they disobey, will tend to make them want all the more and disobey all the more. People need to be humoured. A great many men and women get into difficulty in love affairs. She has got in love with him. Poor soul ! she could not help it. He does not know how to break it off, and he uses rude means perhaps, and in doing so he spoils her altogether. He should gradually wean himself, gradually introduce somebody else, and occupy her mind in some other way so as to draw her attention in another direction, rather than try to break up the attachment by force. So children need to be handled gently. Something else should be said or done to divert their attention.

To be continued.

A FEW THOUGHTS ON THE DEVELOPMENT OF THE BRAIN (OR ENCEPHALON) AND SKULL.

SYNOPSIS OF A LECTURE GIVEN AT THE FOWLER INSTITUTE, JULY 9TH, 1890.

A SCIENTIFIC knowledge of the brain, as it unfolds in its early development, is of importance to the phrenologist as well as to the anatomist, and deserves the close attention of all who study the so-called empirical science in other than a smattering or even popular style. Much of the time spent by men and women in pursuit of superficial knowledge, might be more profitably given to the investigation of solid literature written by the patient, deep-thinking scientist of this and the past decades. Thus we are indebted to such men as Kölliker, Lockhart, Clarke, Foster, Balfour, and Reichert ; Vorderhirn, Zwischenhirn and Bischoff, German embryologists ; and among our professors, Gray, Quain, Allen Thompson, formerly Professor of Anatomy in the University of Glasgow ; George

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Dancer Thane, Professor of Anatomy in the University College, London ; and Edward Albert Schäfer, F.R.S., Assistant Professor of Physiology in the University College, London, and others.

In order to plainly indicate for reference the three principal vesicles or five fundamental parts of the brain, we shall find the following table will illustrate first the primary divisions,

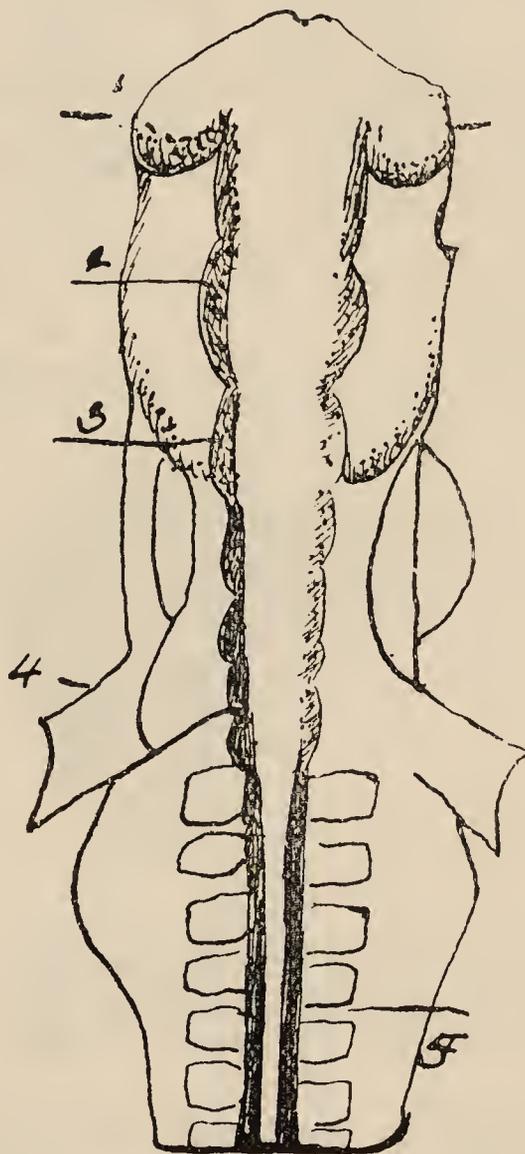


FIG. 1.

Fore-part of the embryo, viewed from the dorsal side. (From Kölliker.

1, ocular vesicles or fore-brain ; 2, mid-brain ; 3, hind-brain ; 4, omphalomesenteric veins, entering the heart posteriorly ; 5, medullary canal.

namely, posterior, middle, and anterior (from behind forwards, then upwards and backwards, until the cerebral masses cover in succession the thalami, corpora quadrigemina and cerebellum, which all stood originally behind them, as they do in the lowest vertebrates); secondly, how each vesicle is arranged according to its secondary divisions; and thirdly, how the various parts of the brain correspond with the divisions:—

I. ANTERIOR PRIMARY VESICLE.	}	Prosencephalon, Fore-brain, i.	}	Cerebral Hemispheres, Corpora Striata, Corpus Callosum, Fornix, Lateral Ventricles, Olfactory Bulb, Thalami Optici, Pineal Gland, Pituitary Body, Third Ventricle. Optic Nerve (Primary).
II. MIDDLE PRIMARY VESICLE.	}	Mesencephalon, Mid-brain, iii.	}	Corpora Quadrigemina, Crura Cerebri, Aqueduct of Sylvius. Optic Nerve (Secondary).
III. POSTERIOR PRIMARY VESICLE.	}	Epencephalon, Hind-brain, iv.	}	Cerebellum, Pons Varolii. An terior part of Fourth Ventricle.
	}	Metencephalon. After-brain, v.	}	Medulla Oblongata, Fourth Ven- tricle, Auditory Nerve.

These primary vesicles are respectively called hind-brain, mid-brain, fore-brain.

The changes which occur to alter the form of the brain from

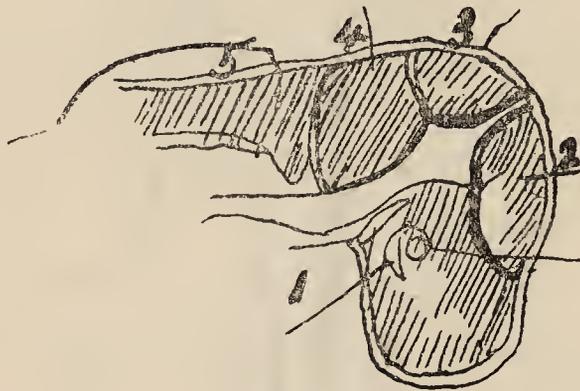


FIG. 2.

Longitudinal section through the head of an embryo of four weeks. (From Kölliker.)
1, anterior encephalic vesicle, cerebral portion; 2, inter-brain; 3, mid-brain;
4, cerebellum; 5, medulla oblongata.

these primary vesicles are noticeable from the above illustration, for there has been a gradual development on each side of the ocular vesicle or fore-brain, and, instead of presenting a single appearance, it is divided into two, the second enlargement being called the inter-brain or thalamencephalon. This lateral expansion on each side becomes the foundation of the two cerebral hemispheres. We then find another division of the posterior vesicle which corresponds to the cerebellum or hind-brain, the second division or after-brain corresponding to the medulla oblongata or metencephalon.

Thus we find that from the primary condition of the brain with its three divisions, the first vesicle becomes converted into the cerebral hemisphere and the vesicle of the third ventricle, the middle vesicle remains undivided, and the

posterior vesicle is divided into the cerebellum and medulla oblongata. (See Figure 2.)

As the ocular vesicle progresses, the middle and posterior vesicles are thrown backward and downward, and on the enlargement of the cerebral vesicles the lateral ventricles extend into their interior.

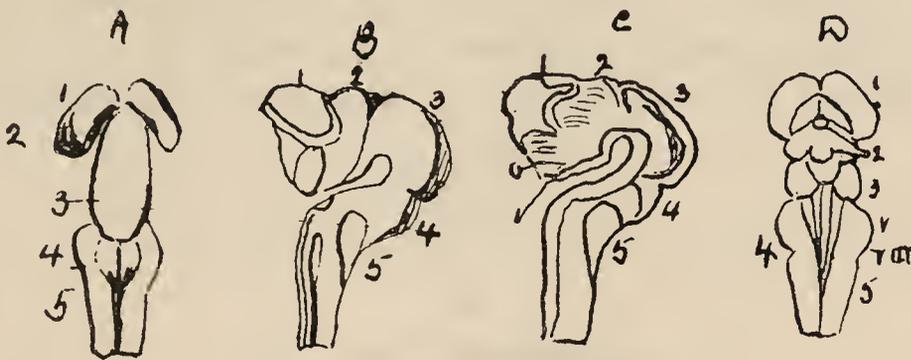
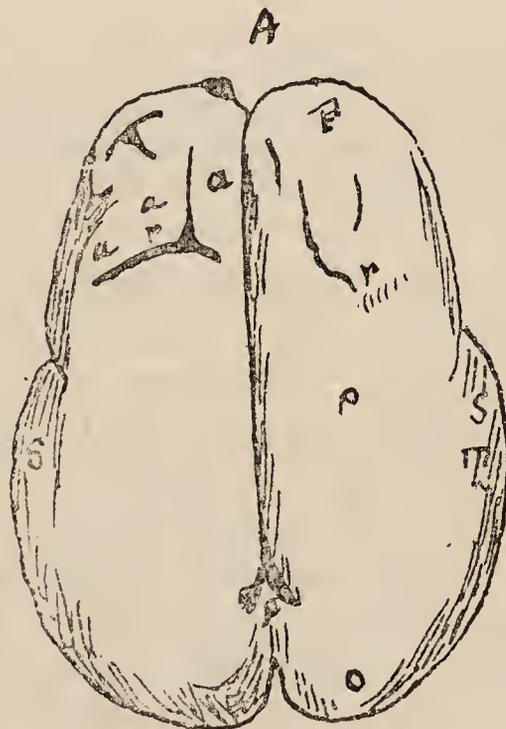


FIG. 3.

Four views of the brain of an embryo kitten in the stage of first division into the five cerebral rudiments, magnified three diameters. (From Reichart.)

A, from above; B, from the side; C, vertical section, showing the interior; D, from below.

The five distinguishing rudiments of the brain are clearly—
 v., the hinder part or posterior vesicle, which passes into the spinal marrow, and is the medulla oblongata and part of the fourth ventricle. (See table above.) The iv. is the cere-



bellum, the pons varolii, and part of the fourth ventricle. The iii. comprises the middle vesicle, and includes the corpora quadrigemina and crura cerebri, with its contracted hollow or passage way (the iter a tertio ad quartum ventriculum), between the third and fourth ventricles. The ii, or posterior

division of the fore-brain, includes the cavity of the third ventricle, the infundibulum, and the primary ocular pedicles. The i., the prosencephalon, include the cerebral hemispheres, with their ventricular hollows, the corpora striata, and the olfactory lobes. (See Figure 4.)

How do these five fundamental parts arise out of the simple primary divisions? They arise by an increased thickening of the medullary wall in some parts, and the relative thinning in others, thus enforcing an expansion or contraction, as

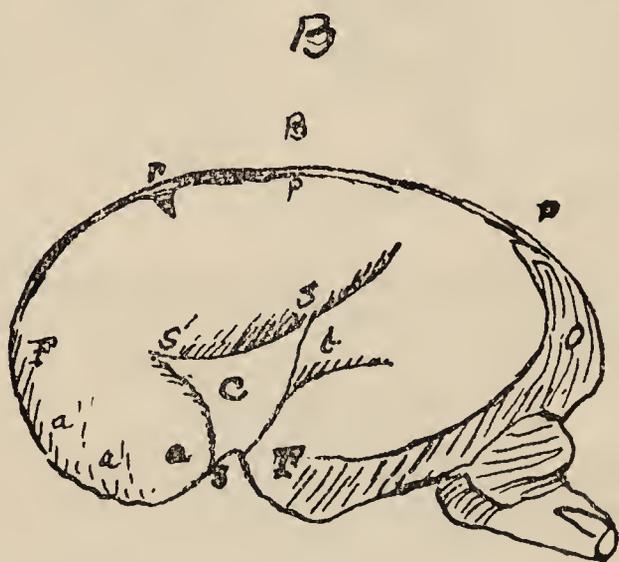


FIG. 4.

The surface of the foetal brain at six months. (From R. Wagner.)

Commencement of principal fissures and convolutions.

A, from above; B, from left side. F, frontal lobe; P, parietal lobe; O, occipital; T, temporal; a, a, a, slight appearance of frontal convolution; s, Sylvian fissure; C, the central convolutions of the island of Reil; R, fissure of Rolando; P, parieto-occipital fissure.

the case may be. The cerebral hemispheres and corpora striata are the principal parts formed by the lateral thickening and expansion of the medullary wall in the fore-brain, and, later on, the corpus callosum and fornix. In the inter-brain, or the posterior part of the fore-brain, the thalami optici form the most solid parts for expansion of the lower and lateral region. The corpora quadrigemina are the main parts for thickening in the upper wall of the mid-brain, and the crura cerebri arise by an added deposit in the lower part. The cerebellum is certainly a large deposit in the upper wall of the hind-brain, and the pons varolii a thickening of the lower part. In the after-brain, we find that the parts forming the medulla oblongata are expanded by an increased deposit in its lower and lateral wall.

The development of the ventricles is an interesting study by itself, but taken in conjunction with the development of the

whole brain, has an added importance. The two largest ventricles situated in the fore-brain, are expansions of the fore-part of the ventricular cavity, which result from the enlargement of the right and left cerebral hemispheres, the foramen of Munro acting as a communication between them and the third ventricle. The third ventricle, at the first part of the medulla hollow, is narrowed on the sides by the increased growth of the thalami optici, and projects downwards into the pituitary fossæ, and at its upper side is opened up by the thinning of the corpora quadrigemina and crura cerebri; it forms the aqueduct of Sylvius, and is succeeded by the fourth ventricle. The fourth ventricle is quite irregular and diamond-

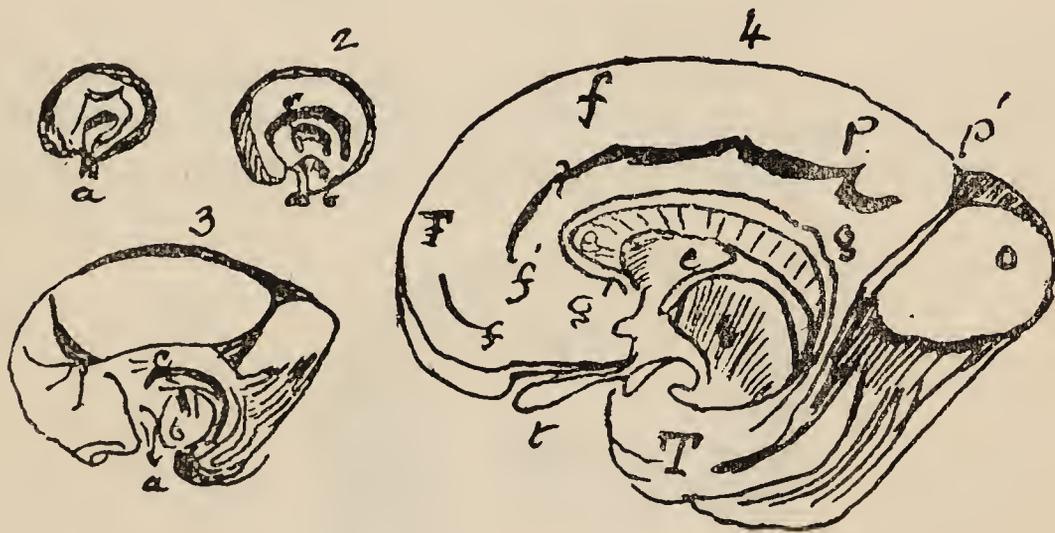


FIG. 5.

Inner surface of the R. Cerebral Hemisphere of the foetal brain of various stages of development. (From Schmidt.)

1, 2, 3, foetuses—eight, ten, and sixteen weeks. 4, foetus—six months.

A, Lamina terminalis, part of primary vesicle which adheres to sella tertiæ; B, cerebral peduncle, as it passes into the thalamus, and corpus striatum; C, part of fornix and septum lucidum; E, corpus callosum; F, marginal convolution.

shaped. The lower end of the ventricle has the shape of a writing pen, and is hence termed *calamus scriptorius*. In its early development it undergoes much change, like the third ventricle, and its size is reduced in that part before the cerebellum to the thin lamina forming the valve of Vieussens. The roof is formed by a flattened epithelium, covered with pia mater containing the foramen of Majendie. The three solid parts of the medulla oblongata begin to be early distinguished. First the restiform bodies, connected with the commencing cerebellum, and afterwards the anterior pyramids and olives. We are given to understand that the change of relative positions of the parts is largely owing to the passage of bundles of medullary fibres from the posterior part of the cord to the opposite side of the anterior median fissure, and

appears to break up to a great extent the grey matter of the anterior cornu, which is traversed by the bundles. And, secondly, the opening up of the central canal, and separation of the lips of the posterior median fissure, bring the grey matter to the surface of the fourth ventricle, while the posterior cornu is shifted to the side. The extent to which the decussation is visible varies considerably in different individuals: for in some the bundles take a deeper—in others, a more superficial course.

J. A. F.

To be continued.

MEN OF OUR TIMES.

MR. F. SCHNADHORST. The organisation of this gentleman indicates a man of more than common strength of mind. He is given very much to thinking and general meditation.



MR F. SCHNADHORST.

He is not the man to show off so well at first, but will bear acquaintance, and appear to better advantage after several interviews. He is not in a hurry to tell what he knows, but wants to be sure first. He does not talk without having some-

thing to say, and his words are burdened with ideas, rather than his ideas burdened with words. He seldom has to retract or take anything back that he has said : he is not characterised for making mistakes or blunders. His brain is so fully developed that, if circumstances favoured the manifestation of his mind as a whole, he would be about equally clever in one thing as in another, only he has more thought and strength of mind than he has the powers to express himself easily on the spur of the moment. He is a man of method ; his plans are well laid ; he is not careless how his work is done. He has a capital memory of ideas, arguments, the faces and forms of persons and things. He is ingenious in putting forth his ideas, or in laying out his work. He commands respect ; is no trifler ; his moral brain is so large as to make him in earnest, and conscious of his responsibilities. He is a law-abiding man ; he regulates his own conduct ; he may be at times too reticent and cautious. He is not wanting in faith, but he must have a good foundation for it before he will venture far. He is very steady, firm, persevering, and sufficiently dignified to command respect. He is more of a friend than he pretends to be, for he is not so forward to manifest his affections, or even any other qualities of mind, as to be at all prodigal. He knows how to economise time, strength, money, and knowledge. If he fails in an enterprise, it is because he is too scrupulous and careful in venturing on ground he is not familiar with. Mr. Schnadhorst was the originator of the great Liberal Federation, and, in ten years, collected the sum of £10,000 for it.

SIR WILLIAM V. HARCOURT. The head of this gentleman is large and well proportioned. He possesses a high degree of the vital and mental temperaments, and is not wanting in the motive or muscular, but the mental temperament rather predominates. His mind is sharp, quick, emotional, and pliable : he is not of the cold, stiff, formal, forbidding kind ; he is decidedly social, companionable, fond of company and amusement. He has great power of observation and intuition ; he is very apt in remembering and telling stories and anecdotes. He is a free, easy, copious talker, language being large, and he has any number of stories to relate. He is genial, full of sympathy, and is very much interested in others. He is generally respectful, and knows his place, and gives due deference to superiority. He may not be quite so circumspect and consistent as he is kind and respectful. His social brain enters largely into his character, and shows itself strongly in his expressions. His power as an intellectual man is in using

his knowledge to a good advantage: he can tell what he knows, and so tell it as to lead people to think that he knows



SIR WILLIAM HARCOURT.

From photo by permission of Mr. A. Bassano, 25, Old Bond-street, W.

much more. He is known by the *nom de plume* of "Historicus," and his articles on International Law are noted for their exceptional ability.

ORION.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

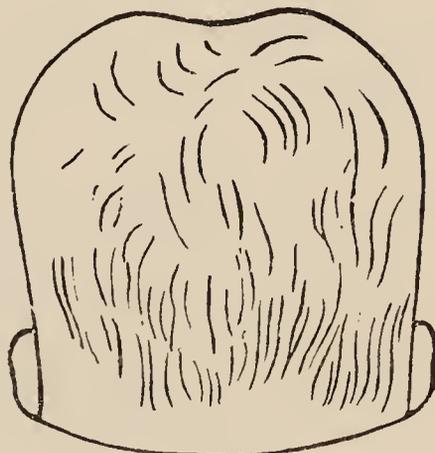
COMBATIVENESS.

Propensity to defend, resist, and oppose.

The influence of combat. upon the other faculties, and indeed upon the whole character, manifests itself not only in physical, but also in moral and intellectual opposition. The action is necessary whenever in the execution of a difficult project, anything is to be resisted or over-

come. It acts upon animate, as well as upon animated objects, and imparts to its possessor that nerve and determination which induce him to grapple with all his undertakings as though he could and would effect his purposes. The direction of this faculty and the character of its manifestations, are determined chiefly by its combinations and the education of the individual. When it is under the control of the higher sentiments and of reason, and directed to its proper objects, no manifestation of the mind is more virtuous or praiseworthy; but when not controlled and directed, its manifestation is objectionable and vicious in the extreme. It was by this organ, directed and stimulated by conscientiousness, self-e., the domestic faculties, reason, &c., that the Americans achieved their independence; and yet, from this organ in its perverted manifestation, arise party strife, family and village dissensions, quarrels and physical combats, which disgrace humanity.

VERY LARGE.—The manifestation of combat. very large, when combined with large self-e. or approbat., firm. and destruct., and only full conscien., secret., benev., ven., and caus., actuates one to attack and provoke others without sufficient cause, to dispute and quarrel with those around him, crowd himself forward, push his opinions on others, create disturbance, kindle strife, encourage quarrels and engage in them, and creates a quarrelsome, combative, contentious spirit. One having very large combat., with large destruct., is terrible and desperate in the onset, and fights with fierceness and determination; with large amat., philopro., and adhes., will fight for his family, yet quarrel with them himself; with large acquis., will quarrel for a penny; with large benev., conscien., and reasoning organs, will be able to regulate his anger only by turning abruptly from his opponent, and by avoiding everything calculated to excite his combative spirit; find extreme difficulty in governing his anger, and, when really roused, be desperate.



Combativeness Large.

LARGE.—One having combat. large, with self-e. full, and firm. large, will be eminently qualified to meet difficulties, overcome obstacles, brave dangers, endure hardships, contend for privileges, maintain and advocate opinions, resist encroachments, resent injuries and insults, &c.; will defend his rights to the very last; suffer no imposition; seize upon whatever he undertakes with the spirit and determination

requisite to carry it through all opposing difficulties ; rather glory in opposition than shrink from it ; be always ready, if not glad, to act upon the defensive, if not upon the offensive ; inclined to call in question and oppose the opinions and the proceedings of others, and partly from pure love of opposition ; will often urge his own opinions ; generally take sides upon every contested question ; and, with approbat. also large, will seek to distinguish himself ; with a full or large brain, will possess energy and force of character in an eminent degree ; and, with an active temperament, unless restrained by large benev., conscient., and caus., will be naturally too violent and too hasty in his temper, and subject to sudden ebullitions of passion.

One having large combat. and destruct. will unite harshness and severity and a kind of fierceness with his resistance, and frequently show quite too much spirit, and, with an active temperament, will not only be quick-tempered, but also very severe and vindictive when roused ; but, with destruct. moderate, may be quick to resent and resist, and cool and intrepid in the onset, yet will inflict as little pain as possible ; will conquer, yet spare the vanquished, and can never punish one who has surrendered, especially if conscient. and benev. are large ; is more courageous than cruel ; more petulant than violent ; more passionate than harsh ; and, when anger is manifested, will not add to it that fierceness, and that spirit of revenge, which give it a threatening aspect, and make it dreadful ; with very large self-e., large destruct., and the selfish propensities stronger than the moral and reasoning faculties, will protect himself and his own exclusive privileges first of all ; seem to claim the services of others merely upon the ground of his own superiority, and without thinking of returning an equivalent, and perhaps abuse those who infringe upon his rights, and with conscient. moderate those also who do not render him all the service and honour he claims ; will seldom evince gratitude for favours received, because he will feel that they of right belong to him ; will be naturally selfish and jealous, and apt to treat his fellowmen, except those whom he condescends to make his particular friends, with a kind of contempt, and, if they cross his path, with scorn ; with acquis. large, self-e. large, and caus. only full, will defend his property, stand out for every farthing that belongs to him, and be very angry at those through whom he may have sustained any pecuniary loss ; but, with acquis. only moderate, and self-e. or approbat. large, will permit the injury of his property with comparative impunity, yet boldly sustain his injured honour, and preserve his character unsullied to the last, cost him what it may ; with self-e. only moderate, and adhes. large, will suffer others to impose upon himself, yet will take the part of a friend with a great deal more readiness and warmth of feeling than he would his own part ; with amat. large will defend the other sex sooner than himself or his own sex—the character, the person, &c., of a lover, sooner than of himself, &c. ; with concent. and destruct. moderate, and an active temperament, will be subject to sudden bursts of passion, which will continue but for a moment, and then leave him as calm as before, and perhaps vexed

with himself because he cannot suppress his anger ; with lang. and the reasoning organs large, is extremely fond of debate, very much inclined to start objections to what has been said, to argue on the opposite side of the question, even in opposition to his real belief, merely from love of argument ; and with large firm., though vanquished, will argue still.

FULL.—One having combat. full, is always ready, when opposition is called for, to engage in it, and, with a nervous temperament, soon excited to resent and resist, and naturally quick-tempered ; will possess all necessary boldness and efficiency of character, and rather court opposition than shun it ; yet will be far from being quarrelsome, or seeking opposition for its own sake. One having combat. full, with conscien., firm., benev., and caus., large, though his anger is strong, will generally govern it ; will be mild, kind, well disposed, and peaceable, avoid quarrelling and contention, and yet possess a large share of moral courage, and owe the combative spirit he may manifest more to the powerful stimulus he may experience, than to the natural activity and power of the passion ; will show this feeling more in his business, and in moral and intellectual resistance, than in quarrelsomeness or physical combat, and seldom employ physical force, except when powerfully excited.

MODERATE.—One having combat. moderate, will contend no more than the case really demands, and sometimes not even as much ; will not tamely allow himself or others to be really abused and trampled upon, and yet will bear long before he will manifest resistance, and be quite as forbearing as manliness and virtue will allow ; will not be, in reality, tame and cowardly, nor yet very efficient ; will exercise but little indignation, and be amiable, peaceable, easy with all, quiet, and inoffensive.

One having moderate combat. and self-e., and large philopro., adhes., acquis., benev., and conscien., will contend for children, family, friends, the oppressed, his religious opinions, moral principles, &c., with much spirit, and yet suffer personal abuse with impunity ; with large self-e., firm., conscien., and the reasoning organs, will maintain his opinions with stability, and pursue his plans with firmness, and yet do it in a quiet, but firm and effectual manner ; seek to accomplish whatever he undertakes without opposition, act chiefly upon the defensive, make but little noise or bustle, yet hold on and persevere till his purpose and plans are carried through ; and, with cautious. also large, will take the castle rather by siege than by storm ; accomplish much, and in the best manner, but must take his own time for it, and will be distinguished for his stability, judgment and success ; with large or very large caus. and compar., and large intellectual organs generally, will not distinguish himself in argument or debate, unless when powerfully excited, yet, if his head is large, will then be original and logical, and express many important ideas.

SMALL.—One having combat. small, will be unable and unwilling to encounter his fellow men ; be mild, amiable, inoffensive, and rather inefficient ; lack spirit and presence of mind in time of danger ; quail

too quick under opposition, and shrink from it ; love peace, and seek it even at a great personal sacrifice ; avoid quarrelling ; endeavour to reconcile the contending ; surrender rights rather than contend for them ; endure oppression rather than shake it off, take abuse in good part ; be forbearing, and generally beloved ; and with destruct. moderate, whatever may be his other qualities, will be unable to effect anything of importance ; and with large domestic, moral and intellectual organs, will seek his chief gratification in retirement from the noise and bustle of active and public life, in literary and scientific acquirements, religious exercises, &c. ; and, though he may have a high endowment of natural talent, will have nothing to stimulate and bring it out ; and with cautious. large, will be timid, irresolute, cowardly, and easily overcome by alarm.

VERY SMALL.—One having combat. very small, with cautious. very large, is passive, tame, cowardly, chicken-hearted, weak, destitute of spirit, force, and energy of character, is excessively timid, does not stand his ground, never ventures, will never manifest anger, and be utterly unable to withstand opposition.

In the town of Milton, Pa., in 1836, one of the editors of that place, who was a decided opponent of phrenology, for the purpose of testing the science, brought forward a lad who was distinguished for his talents, his shrewdness, high-toned, manly feeling, and for his apparent boldness and daring in horsemanship. To make the experiment more satisfactory, the author was blindfolded. The lad was described as possessed of extraordinary talent, and high moral feeling, joined with some cunning, but with small combat., and so extreme a development of cautious. as to make him timid and cowardly—too timid to run any risk, or venture near the brink of danger. All present allowed that the description, throughout, was very correct, except that the most marked feature of his character had been reversed. He was considered the most daring and reckless youth in the whole village. Many instances, however, were soon cited, of his unwillingness to mount horses with which he was not fully acquainted, and which were considered fractious. His brother also stated that he was excessively afraid in the dark ; and only a few days previous his father had remarked to someone present, that although he affected great daring, bravado, and willingness to fight, &c., yet, when brought to the sticking point, he always contrived, and sometimes very ingeniously, to get out of the scrape without coming to blows.

The real explanation is this. His very large self-e. and large approbat. created the demand for apparent bravery, and his very large intellect. and large secret. enabled him to devise this method of supplying his want of native courage with this counterfeit bravery ; while his predominating cautious., which caused his excessive fear, kept him from exposing himself to any real danger ; and his self-e. gave him the self-confidence necessary to carry out the ingenious expedient which his intellect had devised.

What is generally considered bravery is more frequently produced by approbat. or self-e., than by combat. Hence, great cowards often appear to be men of real courage.

The amount of combat. manifested, depends in no small degree upon the stimulus under which it acts. For example : suppose two young men, possessed of an equal share of combat., and alike in every respect, except that one possessed a very large share of approbat. and very small adhes., and the other only a small degree of approbat., but very large adhes. Now, under given circumstances, the former would be as much more indignant at an insult offered to him, and touching his honour, than the latter would be ; whereas the latter would take up the quarrel of a friend much quicker than the former. This illustration presents a general principle, which applies with equal force to the combinations of any of the other faculties with that of combat., and to all the combinations of the organs.

The application of this principle will most satisfactorily explain how a man may be perfectly honest in some things and quite dishonest in others, as well as ten thousand other interesting phenomena of the human mind. It will explain to us how the timid and delicate mother, in rescuing her darling children from imminent danger, can assume the boldness of the hero, nay, the fierceness of the tiger.

Combativeness has three divisions : (1) defiance, the lower and back portion ; (2) defence, the front portion ; (3) courage, the upper portion

LOCATION.—In a common-sized head, combat. is located about an inch and a half behind the top of the ear, and extends itself in a perpendicular direction. When it is very large, and the surrounding organs large, it will cause a thickness of this part of the head, which may be the more easily observed by placing the thumb upon the organ on one side, and the fingers on the opposite side ; but when it is moderate, there will be little protuberance or breadth in this region on the posterior part of the superior temporal convolution.

7.—DESTRUCTIVENESS.

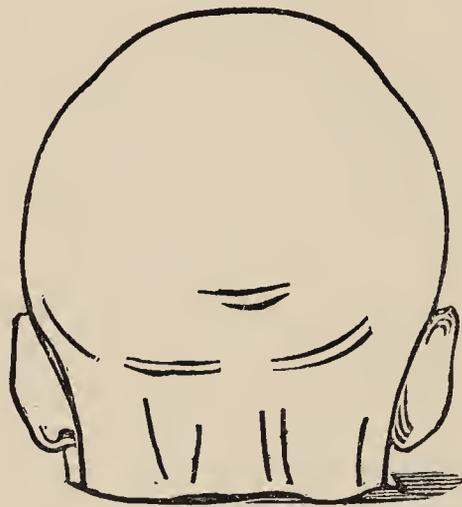
Propensity to destroy, exterminate, and inflict pain.

In the economy of human society, many things are to be destroyed to make life even tolerable. Death and destruction enter largely into the great law of nature. Hence the necessity of some faculty to exercise this propensity to destroy. We often see it in the child, which manifests an innate and strong propensity to tear in pieces, break and destroy whatever comes in its way. As it advances in life, it even makes a pastime of tormenting and killing flies, and all such animals as fall into its power. When a little older, it delights in hunting, and indulges feelings of hatred and revenge.

We, moreover, see that this same characteristic of destruction enters into every department of organized matter, and forms no unimportant feature, as well of the moral as of the natural, government of God. The exercise of this function, must therefore be both right and necessary, else wly should it be exercised by the Creator ? And there evidently exists not only no reason why this class of functions should not be performed by a distinct mental faculty, but there certainly exists every reason for supposing that this is the case. It is homogeneous in its kind, and unlike any other in its character ; and, con-

sequently, demands a distinct faculty for its exercise, and upon the same ground with any other class of functions.

VERY LARGE.—One having very large destruct., benev., conscien., and caus., may be enabled so to govern and restrain his indignation, that it will seldom carry him beyond the bounds of reason and justice, or break out into ungoverned rage and violence, yet when roused, will be dangerous, and like a chafed lion, and be obliged to avoid the causes of excitement; will be fond of teasing, and also of hunting, and the warlike array of a general muster, &c.; and, with large combat., self-e., approbat., firm., and hope, will excel as a soldier, &c.



Destructiveness Large.

LARGE.—One having destruct. large, with large combat., firm., and self-e., possesses that sternness and severity of character, which makes others fear to provoke him, and that force of character which enables him to prostrate and surmount whatever obstacles oppose his progress; accompanies his mandate with a threat, either implied or expressed; is pointed and sarcastic in his replies; feels strong indignation towards those that displease or injure him, and is disposed to persecute them by injuring their feelings, reputation, or interests, or by treating them with entire contempt and neglect; experiences a feeling of revenge which, unless restrained by secret., conscien., benev., &c., he does not fail to show.

One having large destruct., adhes., loves his friends dearly; yet often injures their feelings by saying bitter things to them, which, with conscien. large, he often afterwards regrets: with combat. moderate, is slow to wrath, but bitter and vindictive when once roused, and will have satisfaction before he can be appeased: with secret. large, and conscien. moderate or small, watches his opportunity to take vengeance, and strikes in the dark; but with secret. small, warns before he strikes; with benev. large, may be sometimes harsh in his efforts to do good, and thus often cause needless pain, but will do this more by his manner than from any cruel design; will be kind and sympathetic, and sensitive to the sufferings of others, and yet, very harsh and severe when provoked; and generally exercise this faculty upon inanimate, rather than upon animate objects; with conscien. and

combat. large, and secret. small, is apt to find considerable fault, and that in a very harsh manner : with large compar., applies epithets to his enemies, and compares them to some most odious object ; is pre-eminent for his sarcastic comparisons, which always fit the one for whom they are made,* &c.

FULL.—One having destruct. full, with large firm., and full combat. and self-e., has sufficient harshness and severity of character to keep off and punish those who would otherwise injure him, to take the rough and tumble of life, and push his own way through it, and to destroy or subdue whatever is prejudicial to his happiness, yet is neither morose nor cruel ; when driven to it, can witness and inflict pain, but does it reluctantly, and causes as little suffering as he consistently can ; when his anger is not highly excited, is mild in his disposition, and seldom shows strong indignation.

One having destruct. full, with large benev., conscient., ideal., and adhes., will possess uncommon sympathy and tenderness of feeling, mingled with little sternness and harshness ; will secure obedience and accomplish his wishes by kindness and persuasion, more than by threats and passion, and be beloved more than feared ; with large benev., cannot bear to see pain or punishment inflicted, except when he is angry, and then may inflict it with delight ; yet, with large combat. and mirth., delights to tease and tantalize others ; will not be wanton and cruel in the infliction of pain, yet will seldom allow his indignation to slumber when his own interests, or those of his friends, or the cause of justice or humanity demand it ; in ordinary circumstances will inflict but little pain, yet will not readily forget the objects of his displeasure, and will possess a tame and insipid character.

MODERATE.—One having destruct. moderate, will often spare what should be destroyed or punished ; and, with large benev., will be unable to witness suffering and death, much less to cause them, and will not possess sufficient force of mind or fierceness of character to drive through important undertakings ; with benev. and the moral organs generally large, will be beloved more than feared, will possess an extraordinary share of sympathy, so much so as sometimes to amount to a weakness, and will secure his wishes more by persuasion and mild measures, than by threats or harshness.

SMALL.—One having destruct. small, manifests his anger in so feeble a manner, that it effects but little, and provokes a smile rather than fear ; with benev. very large, possesses too little hardness of heart to inhabit a world of suffering and endure its cruelties and hardships, and cannot himself endure physical suffering.

In its perverted exercise, this faculty creates a vindictive, over-bearing spirit ; delights in tantalizing ; produces cruelty towards beasts ; gives a relish for hunting, killing, destroying, witnessing public executions, and such amusements as the fighting of men, dogs, and fowls, in bull-baiting, bear-baiting, &c. ; produces a propensity for war, murder, violence, bloodshed, &c. ; instigates children

* John Randolph.

and others to stone, catch, torment, and destroy birds, insects, and such animals as fall in their way, and also to stamp, strike, tear in pieces, and exhibit other signs of rage, violence, &c. ; and with approbat. and self-e. very large, to engage in duelling, &c. ; and pursue enemies till revenge is fully satisfied.

That the class of functions here described constitutes a very extensive and a very influential portion of the mental operations, no attentive observer of human nature can entertain a doubt. Every page of the history of man, from that which records the murder of Abel by his own brother, to the wars of the present day, is written in characters of violence. Even the most favourite amusements of men have been the theatrical representations and gladiatorial shows which have delighted mankind. Almost every newspaper is stained with the details of some murder, duel, or suicide, or some other act of destruction in some of the unnumbered forms it assumes. If phrenology did not make provision for this class of functions, this omission would be *prima facie* evidence of its destitution of truth and inconsistency with nature.

Its exercise is either virtuous or vicious, according to the circumstances in which, and the objects upon which, it is exercised. Perhaps no organ is liable to be more abused than this, or productive of more misery ; and yet this is by no means owing to the nature and the original character of the faculty, but solely to its perversion. Hence the importance of its proper education.

Destructiveness has two divisions : (1) extermination, the back part of the organ ; (2) executiveness, the front part.

LOCATION.—This organ is located beneath the temporal bone, and when large, extends from three to six-eighths of an inch above the top of the ear in the temporal convolutions. When it is very large, it thickens the middle of the base of the head, and makes the ears stand out from the head. When it is large and secret. is small, it produces a horizontal ridge which extends about half an inch above the top of the ears.

8.—ALIMENTIVENESS.

Appetite for sustenance—desire for nutrition.

This faculty creates a relish for food, drink, &c. ; renders important assistance in selecting the kinds of food best calculated to nourish the body ; when the system needs a further supply of food and drink, produces hunger and thirst, and, when it is unperverted, and the stomach is in a healthy state, is a sure directory as to the quantity and the quality of food necessary for the purposes of nutrition and health.

VERY LARGE.—One having aliment. very large, will be too much given to the indulgence of a voracious appetite ; too ready to ask “ what he shall eat and drink ” ; will think as much of his meals as of almost anything else, and be strongly inclined to act the epicure.

LARGE.—One having aliment. large, is very fond of the good things of this life, and frequently eats more than health and comfort require ;

partakes of food with a very keen relish ; sets a very high value upon the luxuries of the palate ; and, according to his means, is a good liver

One having large aliment. and acquis. will indulge his appetite, when he can do so without too great expense ; but, when good eating is costly, will sometimes suffer hunger rather than pay a high price to appease it, except where he is ashamed not to eat ; will expend money reluctantly for sweetmeats, &c., unless his aliment. is stimulated by a favourite dish, but will nevertheless find it hard to keep from eating whatever delicacies may be in his way ; with acquis. moderate will spend his time and money freely for rich viands and rare liquors ; and, if large adhes. be added to this combination, will not only take the greatest delight at the convivial board and the social meal, but will spend money even more lavishly than is necessary to entertain his friends ; with conscien. large will feel guilty whenever he over-indulges his appetite, and will endeavour to regulate his eating according to his ideas of duty, yet will be obliged to struggle hard against this as “an easily besetting sin,” by which he will nevertheless be often overtaken ; with conscien. and ven. large, will be thankful for his food as a bountiful gift from the hand of his Maker ;* with lang., mirth., and adhes. large, and secret. only moderate, will be conversational, social, and humorous at the festive board ; with the intellectual organs generally large, will prefer conversation upon rational and scientific subjects ; with ideal, large, must have his food prepared in the nicest manner, and in elegant and fashionable dishes ; but, with ideal. moderate, thinks more of the food and of the cookery than of the ceremonies or the style of the table ; with self-e. large, and acquis. only moderate or full, will be satisfied only with the first and the best table, even if he is obliged to pay a high price for it ; with large approbat. and ideal., will be very ceremonious at table ; but with ideal. only moderate, and self-e. and caus. large, will despise ceremony, yet, with large benev., will provide bountifully, and show great hospitality at table without much splendour or ceremony, &c.

FULL.—One having aliment. full, partakes of food with a good relish, yet is not a gormandizer, nor very particular in regard to what he eats and drinks ; can endure a poor diet, yet is partial to a variety of rich dishes, and sometimes overloads his stomach.

MODERATE.—One having aliment. moderate, is not destitute of a relish for food, yet, when in health, is not particular as to what he eats ; prefers a plain, simple diet to that which is highly seasoned and rich, &c.

One having aliment. moderate, with acquis. large, will grudge the money he pays for his meals, and frequently suffer hunger rather than pay the customary price for them ; will prefer to take up with a poorer meal or a cold bite at a lower price, than to pay well for the best ; with conscien. large or very large, finds little difficulty in governing his appetite, because he has so little to govern, &c.

SMALL.—One having aliment. small, will have but an indifferent or

* Hence, the custom of “asking a blessing” upon food, and of “returning thanks” for it.

a poor appetite ; will care little about what he eats, or when he eats ; and, with *acquis. large*, go long without food, and live very poorly, rather than part with his money to pay for food.

Luxurious living, intemperance in all its forms, and the unnatural cravings of the stomach, are the perverted exercises of this faculty. To see the pains taken, and the preparations made, and the time and money worse than wasted merely in gratifying this propensity, is most astonishing : and, above all, to see the monstrous perversions of it which everywhere abound, to the reflecting, sober mind, is humiliating in the extreme. That man, made in the image of his God, and endowed by nature with such transcendent powers of thought and feeling, that man should, for the mere purpose of indulging to excess this animal passion, thus demean and degrade himself so far below the brute creation—thus clog the wheels of this wonderful machine which we call mind, exhibits, in a most mortifying light the depravity into which human nature is capable of being led. Yet such is the deplorable fact, and such is likely to be the character and condition of man, so long as he “lives to eat,” instead of “eating to live,” and thus continues to indulge his animal propensities at the expense of his moral and intellectual faculties.

The experience of all mankind shows that there exists a reciprocal and most intimate connection between the faculty of aliment. and the state of the stomach, and, also, between the state of the stomach and the conditions of the brain ; and still further, between the state of the brain and the mental operations, or, between the state of the stomach and the operations of the mind. But this subject will be enlarged upon in a subsequent chapter upon physiology.

Alimentiveness has two divisions (1) desire for solids, the back part of the organ, (2) desire for liquids, the front part of the organ.

LOCATION.—Aliment. is located just before, and a little below, *destruc.*, in front of the top part of the ears, above the back part of the zygomatic process, and beneath the anterior portion of the temporal bone.* It may be distinguished from *destruc.* by its being situated farther forward than *destruc.*, and a little below it. It is generally large or very large in children.

* “Ferrier admits that the gustatory centre is situated towards the lower extremity of the middle temporal convolution. The appetite of hunger is the desire to satisfy or remove a local sensation, referable to the stomach, in which the physiological needs of the organism express themselves. The sub-strata of the feeling of hunger and appetite for food are the stomachic branches of the vagus and their cerebral centres.” (Page 431.) Dr. Hoppe, of Copenhagen, writes, “According to my opinion hunger and thirst must be discriminated from the desire of food, which we call appetite. Yet there is a very intimate connection between these ; thus nothing can more effectually rouse appetite than hunger. I have been led to think since I wrote last that the place where its different degrees of development are manifested in the living body, is in the fossa zygomatica.” Dr. Crook, of London, mentions that, several years before the publication of Dr. Hoppe’s papers, he himself had arrived at similar conclusions with respect to this faculty and the position of its organ.

THE PSYCHOLOGY OF PHRENOLOGY.—No. II.

BY NICHOLAS MORGAN.

THE FUNCTION OF INDIVIDUALITY.

MR. COMBE'S article on the "function of individuality," of which I gave a brief review in the September number of the MAGAZINE, occupies upwards of five pages in the beginning of Vol. 2 of his system, and it bears the marks of thoughtful care and painstaking research. It is, in truth, like all his writings, a well-finished composition, a masterpiece of clearness; hence there is no mistaking the meaning. Nevertheless, it does not appear to have given him entire satisfaction. Misgiving, as to its convincing force, seems to have laid hold of him while he was defining the respective functions of the other perceptive faculties, and suggested the necessity of infusing into it more nerve and vigour so as to carry conviction in its train. With this object, then, he subsequently added several pages consisting of a re-statement of his views in different words, which are enforced by opposite and telling verbal illustration. In this addenda, the author puts forth all his strength, and makes the best of his case. Let us then look at it with the eye of true enquiry, and with due deference to him as a teacher, and an authority. But let us also fully realize the important fact, that it is the work of a mortal, fallible being, we are about to examine. Moreover we must bear in mind another fact of more importance still, namely, that the science of phrenology has a greater claim upon us than the most noble of its advocates. Man is here to-day and away to-morrow. On the contrary, phrenology, as far as it is in accordance with truth, is all-abiding, never-ending.

Phrenologists are (or ought to be) the conservators of the truth and purity of phrenology; but not of the opinions of authorities simply as such. Unhappily for the science, there is too much reliance upon self-asserted authority. Besides, the glib-tongued and the unscrupulous plagiarists wield a damaging influence. These, however, are but a few passing remarks, and have no reference to Combe and his compeers.

At p. 148, Vol. 2, Mr. Combe writes, "One important function of individuality is to form a single conception out of the different items of information communicated by the other knowing faculties, which take cognisance of the properties of external objects." He further writes, p. 149, "The function of individuality, therefore, is to combine the elements furnished by these other knowing faculties into one, and to produce out of them single conceptions of aggregate objects."

In these passages the author manifests his usual clearness of style, but not the same carefulness in diction. In the beginning of the first, he says, "One important function of individuality is," &c., as though the faculty has a plurality of functions. This, to say the least, is an inappropriate phrase, and one that, coming from so high an authority, is to be regretted, inasmuch as it is likely to lead those astray that lean upon authority, of which there is a large number.

The second extract begins differently, and more correctly, thus, "The function of individuality is to combine," &c. Here is boldness, strength and truth, as far as expression is concerned; but the principle involved in the extracts bears the marks of weakness, and a will-o'-the-wisp inaccuracy which has allured many into the bog of error. The mind is represented as receiving the qualities of external things, not as they inhere in the objects themselves, but as separate and distinct items of knowledge. An object of sight, a tree for instance, would, according to Combe, not pass through the eye to the mind as a whole, but in a piecemeal kind of way. The qualities, form, size, colour, would go in first, and be observed by the respective faculties to which they are related, and afterwards would be put together and formed into a tree by individuality. This appears, at first sight, a plausible theory; but its plausibleness vanishes at once from the presence of thought; and I cannot comprehend how it passed muster with Mr. Combe. It seems to me that his object was not so much to observe the manifestations of the faculty of a sufficient number of people in the same circumstances and conditions, and to note the difference between them both of manifestation and development, as it was to show that Spurzheim's definition was correct, hence the pitiable muddle he made of it.

If the function of individuality is, as Combe says, "To combine the elements furnished by the other knowing faculties into one, and to produce out of them single conceptions of aggregate objects," what would happen to a person whose organ of individuality was so small as to be incapable of combining the quality-forming materials into objects so as to form a complete conception of them? This would happen. He would never see a single object. Though all his other perceptive faculties and their respective organs were vigorous, he would have no perception of the object-world, and therefore no experience of it.

Furthermore, if individuality is the quality-combining and object-forming faculty, its manipulatory capacity will be proportionate to the size of its organs; therefore the same object would appear very different to two or more persons whose

organs of individuality respectively are very unequally developed. Besides, one organ may be at rest while others are active. This is a cardinal phrenological doctrine. Now, individuality might be asleep, and the other perceptives be awake at the same time. In such a case, then, the person would not perceive a single object. Why not? Because individuality, the object-forming faculty, was off duty! Can absurdity be farther stretched?

The idea of the external qualities of objects being received separately by the mind is an extravagant, irrational fancy. Insanity may play such tricks, and fill the mind with distorted imagery; but sanity never. Objects are perceived as wholes. Their qualities, form, size, colour, are inherent in them, and cannot be separated from them by any process, not even by mental abstraction, for this is not real, but suppositious.

Moreover, all we know of objects is their qualities. Let imagination take them away, and what would be left! Nothing. "We have no knowledge," says Mr. Combe, "of substance or essence of any object. We know only its qualities." ("System" Vol. 2, p. 28.) He further remarks, p. 149, that "After form, colouring, and size, have furnished certain elementary conceptions, and individuality has united and conceived them as one, such as man, the faculty of number may be called into action, to give the idea of plurality; and that of order, to furnish the idea of gradations of rank and arrangements. Now, individuality, receiving the intimations of all these separate faculties combines them again, and contemplates the combination as an individual object, and this is an army." But how, I ask, does individuality, which cannot perceive a quality, acquire a conception of objects, seeing that we know only their qualities?

Further, the qualities of an object being inherent in it, and cannot be distinguished apart from the object, and it follows as a logical sequence, that instead of the qualities having to be combined by individuality and thus made into one object, the object itself must first be perceived in order to cognize its qualities. Hence the order of succession is exactly the reverse of that specified by Mr. Combe.

We have in the definition of this faculty a striking instance of how error is propagated. It was defined by Spurzheim, and adopted by Combe, who brought the whole power of his great mind to bear upon it to show that it was accurate; and his followers have taken the truth of the definition as being proved simply because he declared it to be so.

This reminds me of my friend, Mr. Wm. Crispi (Signor Crispi), who has swallowed all Combe's works, having thrown

my book "Phrenology, and How to Use it in Analysing Character," aside, because I had dared to differ, in some essential particulars, with his great and revered master, Mr. Combe. This incident took place in 1871; and he related it to me some years afterwards, as evidence of how strongly Combe had affected his mind and won his esteem; and for the time being had, it would appear, also warped his judgment.

I may here state that no man, not even Signor Crispi, has a higher opinion of the merits of Combe's works than I; and I so revere his memory that, if hero-worship had been in my creed, I should have bowed at his shrine. But I do better: I show my respect for him by following his example in the pursuit of truth; by always keeping my object in view, and making everything give place to truth. Gall, and Spurzheim, and Combe have a great influence over me; but truth has greater still. "Repeat our observations," says Spurzheim, and this is forcibly echoed by Combe; and I ask these worthies why should we do so? and the answer comes—To test their accuracy. They ask not a blind, unthinking acceptance of their observations and opinions. Certainly not. They were too noble minded to make such an ignoble request.

"THE REASONS WHY WE SHOULD STUDY PHRENOLOGY."

(PRIZE ESSAY.)

THE utility of this science is incontestable. It is the only one that gives a complete knowledge of human nature. It is an eminently practical science, one which can and ought to be used in connection with the affairs of every-day life. Taken together with physiology it gives us a thorough knowledge of ourselves, our strong and weak points, mentally and physically. For, be it understood, these two sciences are so closely connected, so bound up in mutual relationship, that to separate them is quite impracticable, as a thorough understanding of phrenology can only be arrived at by the aid of physiology.

Most people will admit that perfection of character is a thing to be desired, but very difficult of attainment. Self-knowledge is an important step in the right direction, and the study of phrenology helps to give a clearer view of the inner workings of the mind than anything else. It points out the weak and strong points of the individual, and tells which to cultivate and which to restrain; for even the most conscientious, clear-sighted man, is apt to overlook faults, and magnify excellences in himself, and so may be rather at sea as to his real character

and defects. As Professor Silliman says, "Phrenology undertakes to accomplish for man what philosophy performs for the external world. It claims to disclose the real state of things, to present nature unveiled and in her true features." That being so, it is a study worthy of our best attention. Horace Mann said, "I declare myself a hundred times more indebted to phrenology than to all the metaphysical works I ever read. It is a guide to philosophy and a handmaid to religion." The Rev. Henry Ward Beecher, in his "Lectures on Preaching," says, "There is no natural system that seems to correspond to human nature as nearly as phrenology does." Many other eminent men might be quoted in support of the utility of phrenology, but let the foregoing suffice, and pass on to the consideration of other reasons why we should study phrenology.

We have seen that it teaches us about ourselves, and gives excellent hints and instructions as to self-culture, self-government, and so on. It also gives us a knowledge of the characteristics and dispositions of others at a glance, which we might not obtain after years of intercourse by any other means. It accounts for many apparent discrepancies in the conduct of those with whom we come in contact, and thus renders them objects of pity rather than blame; gives sympathy in place of criticism, and calls forth that charity which "suffereth long and is kind."

Phrenology not only tells us what we are, but also what we may become. It acknowledges the power of education to develop the talents and faculties which we already possess. Some minds are capable of a high degree of culture, others can never get beyond respectable mediocrity. This being so, it seems to me that schoolmasters especially, and, indeed, all engaged in the training and education of the young, should make themselves acquainted at any rate with the principles of phrenology. They would then be far better able to direct the studies of those under their care, so as to lay a good foundation for them to build upon in after life. It is not possible for every one to learn all the arts and sciences, or get even a smattering of them during the ordinary school curriculum; but how often is this impossible feat attempted in our schools to-day, to the exclusion of proper physical culture (though there is a marked improvement in this respect), and that amount of recreation which is essential to the health and well-being of growing boys and girls. A wise teacher, working on phrenological lines, would be able to distinguish the leading traits of character in each child, and to turn their attention to those studies in which they would excel, and

which would afford them most pleasure. He would also find out the best way of causing them to think for themselves, and thus they would assimilate what was taught them, instead of being merely crammed for the purpose of passing an examination, and forgetting most of the undigested information as soon as the necessity for remembering it be over.

Neither should we be shocked so frequently by hearing of the premature death of children from overstudy; as no one who understood phrenology would be guilty of overtaxing that extremely tender and complex piece of mechanism—the brain of a child. They would be able to tell, without consulting a doctor, whether a child was working above his physical or mental powers, and to reduce his lessons accordingly. What stronger plea in favour of phrenology in the school can we urge than that of making its routine more pleasant for the children? So many learn to look upon lessons as horrible drudgery before they have had a chance to learn to love study for its own sake, which, I take it, is in a great measure owing to the wrong system of tuition. But this is a digression.

Another reason why we should study phrenology is because it is useful in the home, where we find so many different shades of character, that something outside our own instinct and observation is needed to rightly understand and train each individual member. Much friction would be avoided did we thoroughly understand those by whom we are surrounded, for most strained relationships and acts of injustice are the result of misunderstanding.

“Alas! —how light a cause may move
Dissension between hearts that love!”

One writer says—“A difference of taste in jokes is a great strain on the affections;” and so is a difference of tastes in other matters. Phrenology comes to the rescue by giving us a tolerably correct estimate of those with whom we come in contact. By its means we can gauge their tastes and inclinations, even their capacity to appreciate a joke, and thus avoid topics of conversation and other things which would be displeasing to them. That is, generally speaking, of course. The student of phrenology does not profess to be infallible, but this science is to him what the chart and compass are to the mariner, viz., a guide in strange places; and as the present mode of navigation surpasses the ancient and highly uncertain method of trusting to the stars for guidance, so does phrenology outshine the mental philosophies which have preceded it by its accuracy and the fact that it is based on strictly scientific principles.

The advantages of a knowledge of phrenology are thus epitomized by Professor Fowler: "It teaches, firstly, self-knowledge; secondly, how to develop the organization as a whole harmoniously; thirdly, it enables us to govern and educate each faculty, to control the propensities, to cultivate and direct the moral feelings; fourthly, it indicates the particular calling or pursuit by which every one may succeed in life; fifthly, it enables the parent to be more faithful in the discharge of his duties to his children; sixthly, it assists in the choice of servants; seventhly, it is an important aid in the practice of different professions; eighthly, it makes valuable suggestions for the treatment of criminals; ninthly, it gives many important hints with regard to the cure and prevention of insanity; and, lastly, it teaches that moral perfection is the most desirable end to be obtained in this life."

L. F. P.

THE FOWLER INSTITUTE.

THE Fowler Institute monthly meeting for members met on the 8th December. There was a good attendance. Mr. Smith gave a paper on "Life." Mr. Smith impressed on his hearers the importance of starting life well, and becoming thoroughly acquainted with the inner life, so as to know how to live and become more perfect, rather than to begin late in life after having gained a smattering only of the usefulness of life, when the years allotted to man are spent. The lecturer strongly urged the importance of every one being taught a trade or profession in whatever affluent circumstances they may be placed, as many lives that would have been a blessing to mankind, have been completely frittered away, and ended in uselessness on this account. Mr. Smith enlarged upon another important factor in life, which, he said, was self-control, the absence of which has led to many a failure. Self-respect was also a safeguard to honour. Socrates had ever on his lips "Know thyself." Nelson's mother once said he would never be of any good except to be shot at, but we know what he accomplished by earnest application and resolution. Some people are all the time grumbling and fault-finding, which state is a most deplorable one to be placed in. They have never seen the pleasant side of life, and end it with a disappointment which nature never intended for them. At the close a discussion took place, and the examination of a head terminated a very pleasant evening.

Hygienic and Home Department.

OVER-WORKED MOTHERS.

“France needs mothers,” said Napoleon. England and America need mothers, we say; and mothers need time to give to their highest duties of motherhood—the care and education of their children. Can anything be done to secure the great desideratum—more time for mothers? Where there’s a will there’s a way. If the “will” is all right, good and strong, the way is sure to be found. It must be the united will of husband and wife, for in union there is strength. The importance of this matter should be laid before fathers in such clear, forcible terms that they shall decide that mothers must have time to give to the training of their children; that their energies must be conserved, their health preserved, in order that this, their noblest work, may be well done. They will then be more ready to help their wives to make time, save it, buy it, or get it somehow.

Every mechanical contrivance that does work well is a time-maker. No one has greater need of such appliances than mothers. It is true that invention has done less for the home than for the field and the workshop, but this is largely due to the fact that we are slower to avail ourselves of mechanical appliances in the home than anywhere else; we have not yet risen to proper appreciation of the value of mothers’ time. Demand, everywhere, very largely regulates supply. Machinery can never be manufactured without a demand which will ensure an equivalent return in money. This seems the present barrier to its more general introduction into homes. We have not yet learned that a family may pay out many things—health, temper, comfort, mother’s time—ininitely more valuable than money.

Oil and gas stoves are to be counted among the greatest benefactions of the age. They take from the kitchen half its “terrors,” are cheap, economical and convenient. To properly regulate the temperature of an ordinary bake-oven requires no small degree of engineering skill, to be acquired only through a long apprenticeship. The oil or gas stoves will supply a uniform heat for hours without any attention, or the temperature may be raised or lowered instantly by merely turning a little thumb-screw.

With one of these stoves a simple breakfast or tea may be prepared in the time required to merely kindle a fire, and heat to the required temperature, an ordinary coal or wood stove. They are most valuable for summer use, as they heat

the room but little, and may be carried where the breezes favour comfort, or where convenience requires. This quality is especially appreciated by those who know the physical exhaustion that comes from a day's ironing in a hot kitchen.

Wise forethought in planning, building, and arranging the house and its surroundings is a wonderful time-saver to the mother who is to occupy it. If the sum total of the time and energy lost to women in taking unnecessary steps in the preparation of a meal,—of the inconvenience of absent or misplaced closets, and of doors that open the wrong way,—of the vexation of spirit caused by smoky chimneys,—of the nervous and physical exhaustion due to stairs so constructed as to endanger life and limb,—of the impaired vitality, depression of spirits, days lost in sickness, from poorly ventilated and lighted houses,—could be shown to those about to build new dwellings, they would doubtless be startled into a most vigorous effort to avoid the mistakes of their neighbours.

To provide a sheltered place in which to dry the weekly wash in winter or in stormy weather, costs but little more than forethought when the house is building. But this provision is rarely made.

Fixed wash-tubs, supplied with hot and cold water, and properly constructed drains to carry suds, lighten so much the labour of washing that it is surprising they are not more generally used, especially on farms, where "help" is so difficult to secure, and where mothers are most sadly overworked.

Cellar stairs, too, are almost invariably made steep, narrow, dark, and so difficult to descend or climb in safety, that a thoughtful mother hardly ventures to send one of her children, even a half-grown boy or girl, to the cellar on an errand.

Many a mother has permanently injured her health scrubbing an unpainted pine floor. When paint and staining fluid are so cheap and easily applied, it is marvellous that housekeepers do not use the paint brush more, that they may use the scrub brush less.

Children are not so generally utilized for mother-helpers as they ought to be, for their own good as well as for the mothers'. There is a Scylla and Charybdis to steer between here : overwork on the one hand, demoralizing idleness on the other. The larger proportion of mothers err on the latter side. Many are doubtless led to do so through their own sad experience of the evils of overwork. To the mother, whose work is "never done," even a very little leisure would seem so great a boon that she offers herself a willing sacrifice to secure an unlimited measure of this coveted blessing for her children. She does not realize the evils consequent upon such a course

until too late to correct it. No mother can reduce herself to the condition of a manual slave to her half-grown sons and daughters without sacrificing by so doing their respect for her. This seems a sad retribution for well-meant, though mistaken, kindness. Through sharing the mother's responsibilities and work, other things being equal, comes respect both for the work and the worker. In every case where the daughters are brought up to lounge on sofas and read novels, and the sons to go off hunting or fishing, while the weary mother washes the dishes, or irons their clothing, you find children who will never learn the divine commandment, "Honour thy father and mother."

There are others who would excuse the idleness of their children on the plea that they have not time to teach them to work—that it takes longer to teach a child to do a particular thing than to do it oneself. This is a very common complaint. It no doubt contains some truth; but it utterly fails to look beyond the present to the hopeful future, when the little fingers shall have acquired skill, and quite ignores the mother's divinest duty, viz., to teach. One of the most important things to teach children is to do useful work earnestly, patiently, and regularly, no matter what the father's business prospects are, and that the work may be such as is called menial. These lessons of industry should begin very early in life, and much wisdom should be exercised in adapting them to the varying age and strength of the child. Children so taught will not only render aid and comfort to their parents, but will be doubly armed for the exigencies of their own coming lives.

LOUISE ALLEN GREGORY.

TRY TO KNOW.—Boys should never go through life satisfied to be always borrowing other people's brains. There are some things they should find out for themselves. There is always something waiting to be found out. Every boy should think some thought that shall live after him. A farmer's boy should discover for himself what timber will bear the most weight, which is the most elastic, what will last longest in the water, what out of water, what is the best time to cut down trees for firewood. How many kinds of oak grow in your region, and what is each specially good for? How does a bird fly without moving a wing or a feather? How does a snake climb a tree or a brick wall? Is there any difference between a deer's track and a hog's track? What is it? How often does a deer shed his horns, and what becomes of them? In building a chimney, which should be the largest, the throat or the funnel? Should it be wider at the top, or drawn in? The boys see white horses. Did they ever see a

white colt? Do they know how old the twig must be to bear peaches, and how old the vine is when grapes first hang upon it? There is a bird in the forest which never builds a nest, but lays its eggs in the nests of other birds. Can the boys tell what that bird is? Do they know that a hop vine always winds with the sun, but a bean vine always winds the other way? Do they know that when a horse crops grass he eats back toward him; but a cow eats outward from her, because she has no teeth upon her upper jaw and has to gum it?

Correspondence.

To the Editor of the PHRENOLOGICAL MAGAZINE.

SIR,—Since I visited London in September and had a most interesting conversation with Mr. Fowler, I have been a different man. My zest of life has increased, my capacities for usefulness have become enlarged, and the state of my mind generally more fitted for the duties and joys of existence. I have learned to venerate those who labour for the benefit of humanity.

Yours sincerely,
W. H.

Rochdale.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

PROF. J. B. KESWICK, of Scarborough, has just finished a very successful visit to Coventry, where he lectured nightly before large and appreciative audiences in the Corn Exchange. The Professor returns home to Scarborough, for the Christmas holidays, and starts on another lecturing tour early in January.

PROF. R. B. D. WELLS has been kept so busily engaged attending to patients at his Hydropathic Establishment, Scarborough, since June last, that he had to give up the idea of his usual autumn tour of the

provinces. In fact, so great has been his success at the Hydropathic House, that the whole of the available 250 beds were occupied. Should business continue next summer the same as last, the Professor will find that even with the new wing just lately added, he will not have sufficient room to accommodate the whole of the persons desirous of entering. If possible, Professor Wells will start out on a short lecturing tour early in January.

Book Notices.

BINDING CASES for the Phrenological Magazine are now ready, price post free 1s. 2d., from the Fowler Institute.

SEND one stamp for the new and revised catalogue of works on Phrenology, Physiology, Physiognomy, etc., etc., published by the Fowler Institute ; all previous lists cancelled.

WE have received a specimen copy of *The New Model Anatomical Manikin*, published by Fowler & Wells, of New York, and the Fowler Institute, London. It contains more than 100 views of the human body ; the figure is one-half life-size, and in many of the special Manikins of which there are a large number, the parts are greatly magnified. It is chromo-lithographed on cloth-lined material, very strong and durable, and coloured true to nature. It is adapted for the schoolroom, lecture hall, office, or for home study, and is the most complete article of this kind ever devised. It stands about three feet high when open, and when closed it is about 18 × 18 inches. Price, with Manual, only £2 10s. od.

The Hygienic Review is the title of a new monthly illustrated journal of hygiene, dietetics, and social reform. The first number dated January 1st, is now ready and contains, among others the following articles :—“The Diet of the Hindu ;” “A Character Sketch of the Rev. James Clark ;” “A Debate on Densmoreism,” and “Muscular Vegetarianism.” It has also a “Ladies’ Page and Health Column.” The publishers promise it will be the most representative and readable journal of its kind in the market. The subscription is 2s. 6d. per year, post free, or 2½d. per month. Can be had direct from this office monthly.

IN response to many enquiries, and in consequence of the increasing demand for these works, we have made arrangements to supply our wholesale and retail customers with all works written and published by Prof. R. B. D. Wells, Prof. John Thompson, and Prof. J. B. Keswick. The full titles and prices will be published in our new and revised catalogue, ready early in January, and will be sent on receipt of one stamp.

THE fourth year's "Phrenological Annual" has just appeared. It is equal to its predecessors in the amount of matter it contains, and ought to be in the hands of all phrenologists. It contains a useful article by Mr. Webb, president of the British Phrenological Association, and a portrait and biographical sketch of Mr. Samuel Eadon. The price is 6d., and can be had at the office of the PHRENOLOGICAL MAGAZINE.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

A. J. B.—The phrenological and physiological organization of this gentleman indicate a superior type of mind, and his mental capacities are greater in proportion than his bodily powers, yet he has a very elastic constitution and will bear considerable strain before he gives out. Constitutionally he is industrious and active, not merely for the purpose of making money, but to accomplish his various ends. His animal nature, together with his impulses and passions, is not predominant. He can be more severe with his pen than with his fist. Has more will and determination of mind than force or hardness of spirit. He is more cautious and mindful of consequences, than he is cunning and artful. His large causality and cautiousness help him to look far ahead and plan with reference to remote consequences. He possesses an independent spirit, thinks for himself, and is an original character. He has a very lively perception of the absurd, the incongruous and the witty. He sees through a subject at once, and should be known for being very clear-headed; has strong imagination, and knows how to smooth over a complicated affair; is very plausible, quite youthful and bland when he wishes to be so. He has a great amount of sentiment and talent as a writer. He is able to expand and illustrate to a very great extent. He is fond of the sublime and imposing. He is enterprising, hopeful, and well-nigh enthusiastic; he also has quite a love for the mysterious, the new, and that which is difficult to explain or understand. His conscientiousness is just large enough to lead to honesty and consistency if he is not over tempted. He will do as he agrees, only he is very particular what he agrees to do.

EVANGELINE.—Has a strongly-marked character, is vigorous both in body and mind, is executive beyond the ordinary feminine capacity. She generally has her way; if she cannot, she would give up the task rather than submit. She works, or plays in earnest; her jokes hit hard, for she is direct in her style of talking as well as acting; she does not

mince matters, but for the time she acts as though she were going right through fire and water to gain her ends ; but her temper is more on the surface than it is deep and lasting, though she will generally get credit for having more temper than she really has, because she is so tenacious, determined, and persevering. She has a great amount of self-appreciation, pride of character, and willingness to take responsibilities. She appears to have more pride than vanity ; more of a disposition to be a leader than to be led. She is not particularly penitent, she does not see that she has done wrong quite so quick as others do. She speaks and acts from impulse, and shows right out what she is ; at times she does not show sufficient circumspection and consistency, but carries the matter to an extreme. Secretiveness, however, is rather large, and when it is necessary for her to play her part, she knows how to do it. She is not usually found out if she wishes not to be. Her sympathies are regulated very much by her affections ; she will do almost anything for friends, but will let other people look out for themselves. She has a very favourably developed intellect. She has talent for mathematics and arithmetic, also has qualities to systematise and plan ; knows how to tell her own story, and express her ideas. Has an earnest degree of ready wit, with considerable mathematical, artistic, and musical ability ; is capable of exerting more influence in society than most ladies in similar circumstances to herself. She is not a half-and-half sort of an individual. With health she will make her mark in the world.

CHRISTIANIA.—At present has a predominance of brain power, but with more age and physical training, she will appear to a better advantage bodily ; but for a few years she will find it necessary to be quite particular about her health, for she has scarcely enough lung power and vitality to warrant good health, if she is careless of it. If she can manage to keep her constitution in good condition till she is 35 years of age, her chances are favourable to long life. She is quite ardent, thoroughly in earnest, and has a public spirit—is disposed to live for others ; has a strong desire to be useful, and possesses considerable of the feeling of philanthropy. She is naturally a great student, quick of observation, quite original and given to thinking, not particularly forward in conversation. She knows things better than she can tell them, and has very favourable talents to write, teach, plan, and manage a school, or attend to a business. She is exceedingly sensitive, is quite alive to praise and blame, scarcely cheek enough : she shrinks from criticism and position until she is quite sure she is right. She needs more combativeness and ready courage on the spur of the moment, but having large conscientiousness, she will uphold all her convictions and do what she thinks is right. She is generally severe with herself and does not contradict herself. She is cautious and has forethought, but hope is rather active, which sustains her in times of trial ; is quite womanly in her disposition and capable of strong domestic feelings, has a faculty of drawing people to her. She has a pliable, youthful spirit, and will adapt herself to others in a very comfortable manner, and very seldom make enemies.

THE
Phrenological Magazine.

FEBRUARY, 1891.



DR. B. W. RICHARDSON.

DR. B. W. RICHARDSON.

THIS gentleman has a powerful organisation, both with reference to body and mind. He is not easily exhausted, he has an ample amount of stock for action or thought, he has an unusually fully-developed brain, and the executive part of it is specially prominent. Few men have so much force of character as he has; he can endure much, and can go through great fatigue and continue in a certain laborious situation without breaking down longer than most men. His vitality is equal to that of three ordinary men. If he were to devote himself to magnetising others, and thus give his strength, he could do it more successfully and continuously than men usually can. He has a healthy influence over others when he comes in contact with them. The mesmeric power of his organization is superior. He has the qualifications to keep up a good condition of the body: his appetite and digestive power enable him to keep pace with a great amount of exhaustive labour. He is not a prodigal in any sense of the term, for he is disposed to make everything pay in one way or another. He has ingenuity and versatility of talent; he is seldom at a loss for a way to accomplish his ends; he can do a great variety of things equally well where skill is required. As a surgeon he ought to be number one in proportion as he gives his time and attention to it. He has good perceptive powers; he readily acquaints himself with the condition of things around him. He has good judgment of the qualities of things; he can transact a greater amount of business in a short space of time than nine men out of ten, for his mind is soon made up on any subject, even though it may be complicated. He is remarkably intuitive in his sense of character, motives, truths and such like, and he only needs to see or hear the matter stated to form quite a correct opinion on the spur of the moment. He takes broad views of things, comprehends things in their most extended range of application, and he deals in things in a wholesale way, for he cannot do anything in a narrow, contracted manner. He is not afraid to give off his thoughts, for he knows he will not run ashore if he is ever so liberal. He is a man of method and system, and is disposed to finish what he begins, unless he is very much pushed by urgent circumstances.

As a speaker, he would be very free and copious, and, if he acted according to his state of mind, he would make long speeches, for he would have so much to say that he could not

possibly put it into a short speech. He has a mathematical cast of mind ; he figures up and shows ability to understand force and resistance or the relation of one subject to another. He has an artistic mind ; he appreciates nature in all modes and manifestation, but he is equally interested in art. He must have had by nature a passionate desire to travel and visit different countries and varied scenery. His memory for the most part is extraordinary good.

His power seems to be that of a very executive mind joined to rather superior intellectual powers rather than to manifest special piety or attachment to creeds. His religion would be of an everyday-life kind rather than one which is manifested only one day in seven. If he wanted to make sure of heaven, and it was left for him to do that which would seem to be the surest, he would go to work and do something rather than merely say the prayers, believe the creeds, and follow a certain order of the church, for he is about as pious one day as another. The summing up of his character would be, great force and executive power, great grasp of intellect and the power to acquire universal knowledge, and great capacity to communicate what he knows to others.

L. N. FOWLER.

OUR BOYS AND GIRLS.

BY L. N. FOWLER.

PARENTS should select the reading for their children and their company also, so far as it is possible to do so. Right and wrong reading and company are at the foundation of mischief almost beyond redemption. The minds of a great many boys and girls, and even of grown-up people, are addled and biassed by extravagant novels, so that they cannot think straight and clear on any philosophical subject. They let their imagination run rampant, so that they really are of no use when they have to set themselves to work, for they have not disciplined themselves : they have only addled their imagination. Do not read so many extravagant stories. Read something that is of use, or else you had better sit and think.

There is a great deal in weaning children rightly. Many a mother thinks she has weaned the child when she has put it down from the lap and given it a spoon. That is perhaps a beginning, but the end is far ahead. All the way from infancy to maturity and into age, the child needs to be weaned, weaned, weaned. The boy is weaned from his toys when he gets a little older. The young man is being weaned

from his follies and sports until he gets into married life, and then he has to be weaned perhaps from his wife or his child, or weaned from his property—his house is burned down or his horse has died—or he has to be weaned from something he loves nearly and dearly. All along his life a man has to be weaned. He has had splendid health, but he had a leg broken, and could not get along so well, so he had to be weaned from rapid locomotion. He had a splendid appetite, but it is failing him now, and he has to be weaned from the pleasures of the table. He is being weaned from going out of doors, he is confined to his room or to his bed. He is weaned from the light, the curtains are drawn. He has lost his hearing—he is weaned from that, and from all the pleasures that go along with seeing and hearing. And so gradually he is weaned until he draws his last breath. He is being weaned all the way from birth till death ; and my impression is that we are being weaned all the way through the different spheres that we go through in another life. We have got to leave behind all the time, and look forward to something new that we have never seen before. Learn to be weaned, you boys and girls.

Simple and imperfect parents beget children as prone to go astray as ducks are to go to the water. They will do it. Some parents think that christening and baptising their children will make them grow up good. Now baptising won't do much good if nothing else goes along with it. A real, right, straightforward, honest birth, with good blood and good food afterwards and proper training, will do more good than baptism, if you don't do anything but baptise. Pure parentage is what we want to start with, not baptism.

Those faculties which, when perverted, do the most injury, should be cultivated with the greatest care. Have you ever noticed how many kinds of sins men commit ? They commit as many kinds of sins as there are perverted passions and impulses. The number of sins, so far as the kind is concerned, is not so great as we suppose. They come from alimentiveness, destructiveness, combativeness, secretiveness, acquisitiveness, perverted amativeness, pride and vanity and firmness. These are the faculties which, when perverted, cause the great mischiefs that exist in society. A man does not sin with his intellect or his moral brain ; he sins with his passions. We are composed of those qualities which tend to good, and that may tend to evil when they are not properly guided. Hence we are commanded to educate our children to prevent the perversion of their passions. And phrenology will help you more than any other knowledge as to whether your child has

this or that or the other passion that needs particular guiding. Sometimes children and men are bad on the surface and good internally. Sometimes persons are very good externally and very bad internally. We have got two different dresses. Now we are surrounded with civilization and Christianity, O, how good we are ! Just take us away from our civilisation and Christianity, and let there be a war to bring up the spirit of revenge, and see where our goodness is. It has gone down into barbarism and into savagery before we are aware of it. It does not take long to get the coat of civilisation off a man's back when he loses his temper, or his appetites get the better of him.

One way to prevent boys being bad is to give them something to do. Three boys in a school went every winter to turn the master out, and they succeeded ; turned him out and would not let him come back. Finally, they could not get a master to take charge of the school. No one would go there to have those big boys turn him out. So they asked a woman if she would take charge of the school. " O yes, if you will support me in my mode of managing the school." Well, the trustees agreed to do that. When the school was called together, she rang the bell and asked them to take their seats, which they did in a pell-mell way. She said nothing about that, but when they were all seated she looked and addressed them as " Young gentlemen and young ladies." They had never been called " young gentlemen " and " young ladies " before. " What did you come here for ? " They didn't say anything, for they didn't know what to say. " I ask, what did you come here for ? " " Eh ! don't you know ? " " Yes, but I ask you what you came here for." " We came here to be flogged if we don't behave ourselves." She said, " I was not employed to flog you ; I was employed to teach you. John !"—one of the big boys—" stand down here ! William, come here ! Hickerwood, come here ! She got those three boys in front of her. They supposed she was going to flog them to begin with, to settle old scores. She said—" Young gentlemen, I have a proposal to make. We want a splendid school this season, and I think we shall have one ; but I want you to assist me. Are you willing to assist me to have a good school ? " " O yes, yes, we will assist you." " Very well," she said, " I want you three young gentlemen to sit upon the platform with me, and you shall watch the school. You watch here, you watch here, and you watch there, and if the children whisper or do not behave themselves, tell me, will you ? " " O yes." They were put up there to watch the school, and as long as they watched the school the school

behaved, and they were kept out of mischief. The result was they had a first-rate school. Now when you cannot get a man to do a thing, get a woman. The worst prisoner in a prison of six hundred was made the best man in the prison by letting him be a spy upon the rest of them. He was put over the whole prison to watch if others did wrong, and while he was watching them, he was behaving well himself and giving no trouble.

Some parents think they must punish their children, they must whip them, they must beat them with a cane. Mothers have talked to me about beating their children with a cane. It reminds me of barbarism to beat a child with a cane or a big stick. A mother brought five of her children to me. She said, "I want to make fine young men and women of these children of mine, but I find it very difficult; I have had to punish them every day. As sure as the day comes some of them have to be punished. I feel as if I ought to do it, and that I have no right to refuse to do it if they are naughty. I do it as a necessity; but they are getting too big to flog now, and I don't know what to do." "You have come to the right place. I will tell you what to do with them. You never need to strike these children again, not one of them, if you will take my advice. I will tell you how to manage them." I wrote out their characters in detail, and I wrote instructions to the parent how to manage each of the children. I saw her afterwards. She said, "I never had cause to strike those children again. They behave themselves and do just what I want them to do, because they love me." She did not know how to manage her children until I told her: then she found it perfectly easy.

All children begin life in perfect darkness and ignorance. That is true, for ignorance is darkness. They need instruction more than correction. They need to be guided into the right way and shown the right way rather than to be flogged into it and pushed into it. They need to be kept from doing wrong. Now that is one great secret in the management of children. Keep them from doing wrong. Many a parent lets a boy or girl run astray and get off from the path of right, and then they either disown them or give them a severe castigation. Now that is wrong on the part of the parent. They should guide them and keep them from going wrong.

In managing children patience is more needed than authority. How we do love to exercise authority! I believe the bump of tyranny is about as large as any bump in the head. We do love to tyrannise; and if we cannot tyrannise over anything else, we get a big dog to tyrannise over. The master

loves to tyrannise over his servants. The head servants love to tyrannise over those under them. The big boys tyrannise over the younger ones. Just as soon as power is put into the hands of some persons they become tyrants.

Parents transmit tendencies to their children, and then they punish their children for having those tendencies, while the child needs assistance to overcome or to regulate the propensities that their parents have given them.

Many parents have no moral influence over their children and consequently no moral restraint. Said a father, "How shall I manage my boy?" "What is the matter with him?" "O, he is so mischievous." "What do you do when he is mischievous?" "I whip him." "Well, does that get the mischief out of him?" "No, just as bad as ever." "What do you do then?" "I whip him again." "Does that get the mischief out of him?" "No, just as bad as ever." "What do you do then?" "I whip him, but I don't want to kill him." "Do you know how he came by that mischief?" "No, can't imagine." "How were you when you were a boy?" "O, I was a great deal worse than he is." The father had been flogging the boy for the mischievous propensity he had given him, instead of regulating that love of mischief and turning it to account. Parents should consider their own condition first. Many defects are introduced into families through the defects of parents. It is through the parents that children are weakly, or sickly, or diseased, or consumptively inclined, or have tendencies to insanity, blindness, or any other imperfection. It comes through the parent. The child does not give it to himself, but it is in the stock.

Another fact is true. If the course of love does not run smooth with the parents, it does not run smooth with the children, especially with the oldest one. It will get into trouble just as the father did before he got married. You can think of a dozen cases in your neighbourhood where the father and mother had to break off their courtship, and give their presents back, but finally got together again and were married. And the children do the same thing. It is in the stock, this tendency to quarrel before settling their love affairs.

It takes seven years for a child to get out of his infancy and to begin to get a hold on life. If it lives past that age, there is some hope; but if it does not, then all hope is cut off. No mistake about that.

Children should be led and shown a better way. To drive a child is like pushing it into the dark. As far as possible they should be regulated by love, for they require a great

amount of love and light. The older this world grows and the more experience men get, the more they will find that humanity is regulated by love. Take all the love there is in the world out of it and you leave only the hate, and hate is destructive, but love pacifies and saves. If parents love their children and encourage their children to love them in return, there is obedience in that family. There is disobedience only where there is a want of love. It is so in families, and it is so in cities and in nations.

Love for children is as essential to their mental growth as sunshine is for the growth of plants. Miss Macpherson, of London, gets the arab children together. She brings them into her house; she takes off their rags and washes them clean—they had never been washed clean before—and puts new clothing on them. She seats them at the table—they had never been to the table before, but used to snatch their food as best they could—and she gives them a knife and fork to eat with or a spoon. She gives them a nice bed to sleep on, which is what they never had before; and she sets them a lesson to learn or something to do. She goes on educating them for two years, and finally takes them to Canada, sometimes 600 at a time. She told me that ninety-five out of a hundred proved to be good. Now where is the depravity of man? It is not before the age of puberty; it is not while the child is an infant, so to speak; it is after the child has taken on manhood and womanhood that the depravity begins to show itself. We ought to begin there to talk about the depravity of man. Take children who are supposed to be bad and full of evil, feed, clothe, and educate them, and give them something to do, and ninety-five out of a hundred will prove good. It pays in the end to train a child in the way it should go while in this world, and to get through this world. Children should be taught right lessons early and prevented from becoming depraved as much as possible. What! can a child be kept from becoming depraved? Yes. If you surround children with temptations and no restraints, they will grow up bad in nine cases out of ten; but surround children with good influences, and take away the temptations as much as possible, and those children will grow up to be good men and women. So I say, try to keep children as much as possible from becoming depraved. Many parents want to make angels of their children, and they don't know how to do it. A woman sent for me to examine her little girl. I went. I saw the little girl who was all dressed up and seated in a chair, where she could not put her feet to the floor. "Oh," I said, "I see, you want to make an angel of your child." "Yes," she said, "that is what I want."

“ I suppose you don't let the child go out and play with the other children.” “ Oh no, I would not have her play with the other naughty children, I don't let her see them hardly.” “ You probably don't allow your child to go out of doors and play and wear out its shoes and spoil its clothes.” “ Oh no, I try to keep them clean and new.” “ You keep her in the house in winter, I suppose.” “ Yes, I keep her in a warm room till spring.” “ If you keep on like that you will soon make an angel of her. But supposing this child should grow up to be a young lady, you would not object to have her marry, would you ?” “ Oh no.” “ But how is this girl to get into love intelligently when she has never been with the boys at all ?” “ Well, I hadn't thought of that.” “ Now, if you want to make an angel of this child, you will have to let her wear out her shoes and soil her clothes and play with the other children, and mix with the boys so as to know how to get in love and whether with John or William.” She began to take the hint.

The education of children should be such as to overcome wrong hereditary bias, such as the bias to consumption, intemperance, and many other evils that are afloat in society ; for it is in the blood of some children to be consumptive or intemperate, and they need to be educated so as to guard against these evils. Some persons believe in fatality, and say that if the mother died of consumption, the child will, of course. No it won't, of course ; it depends on whether you educate the child properly or not. The child can be educated to not die of consumption. A parent may be insane and the child may become insane if not cared for ; but it can be so cared for as not to become insane. This is what we have to learn—to educate our children against these tendencies.

Corporal punishment should be the last correction resorted to, and not the first. It is the mind and not the body that should be punished.

Children should be employed and paid for their work, then they can buy their own caps and boots, neckties and gloves. Manage so that your boy can earn the money to get the things he wants, and if he buys his own hat, he will take care of it as Sambo did of his. Sambo earned money independent of his master, and bought a hat. It rained one day and Sambo took off his hat and put it under his arm. “ Sambo,” said a passer-by, “ your head will get wet. Why don't you put your hat on ?” Sambo replied, “ My head is my master's, my hat is mine.”

Parents give a powerful bias to evil to their children which it is almost beyond their power to restrain. Parents give a

bias to this or that course of life. When a child is born with a strong bias, the parents ought to take all the more care to guide that child aright.

It depends upon parentage to a very great extent what kind of organisation there is in a child. If your child is very wayward, look back a little and see if you can find it. You will find it somewhere, either in the parent direct, or in the stock somewhere. I am not talking at random now. I have not been lecturing and examining and studying character and families and parents and children for sixty years, and not know what I say.

Healthy parents who are high-toned and are adapted to each other, give a legacy to their children worth having. Some poor souls have a legacy that they are sorry to possess, and which they have to fight against all their life. The obligation is first from the parent to the child, to care for it, to train it, to develop it, to call into action its various powers, to wean it from its childhood and encourage manly qualities and aspirations. Your boy is wanting in self-esteem and in manly feeling; you must encourage it by exciting his self-esteem. He has done something like a baby, and perhaps he is crying. You should say to him, "When you are a man you won't cry. You are showing the baby now. You had better get away from being a baby as soon as you can." A little boy was going to cry. I said, "Wait; don't cry now. You want to be a man, don't you?" "Yes." "Did you ever see your father cry? When you are a man you won't cry; but as long as you cry you will be a baby. If you don't want to be a baby you must stop crying right off and never cry again." A few days afterwards, he wanted to cry. "I won't cry," said he, "I want to be a man." He took the hint. Encourage your boy who is wanting in self-esteem to act like a man. "Is that manly to do so and so? Can you respect yourself if you do so and so?"

All children should learn some employment and be taught to be industrious and economical. The reason why so many young men go to London, Paris, and New York to sow their wild oats, is because their fathers did not know how to take care of them. The children are too proud to work, both boys and girls, because there is so much money in the family. I tell you money is the root of a great deal of evil when there is too much of it, and the owners don't know how to use it. No matter how much money there is in the family, the son should learn a business, and then he will sow his wild oats in business instead of in a life of dissipation.

One idea more. It is, that you had better give your children

moral instruction when they have not done wrong, rather than when they have. The child is guilty ; he has done wrong ; you are now giving him instructions ; he is not in a good condition to listen to it. When you are both in good humour and in love with one another, then give the child a lesson on moral culture and instruction in behaviour.

It is the duty of children to obey their parents, as they will want their children to obey them when they become parents. Children should be subject to their parents as a general rule ; the exception is only when parents are incompetent.

Finally, let love, justice, and judgment be brought to bear upon the education of children, and they can be trained in the way they ought to go. Too much love is relaxing without other powers to go with it. Too much justice is rigid and cold and forbidding ; but let love, justice, and judgment unite and the child can be educated in the way it should go.

THE PSYCHOLOGY OF THE BIBLE.

THE FALLEN PNEUMA OR THE CONSCIENCE OF MAN IN RUINS.—PART III.

WHEN man was first created, he was a perfect being, with intense potentialities towards goodness. All his powers and susceptibilities were in a God-given direction. The three constituent elements of his tripartite nature worked in perfect harmony. The order of action and manifestation was spirit, soul, and body ; now, since the sad mishap in Eden, it is body, soul, and spirit. That which was first is last, and that which was last is first. The soul—the vinculum, the connecting-link of spirit and body—“drunk with the wine of life,” having mainly allied itself with the flesh, and little, very little indeed, with the spirit, the result is what is seen in society throughout its whole wide range of cultured, uncultured, barbaric, and savage life.

Owing to Adam's fall, the God-inbreathed spirit—the pneuma—fell deeper into degradation than the other two elements of man's tripartite nature, viz., soul and body. Lying in ruins, in a semi-dormant state, in all the thoroughfares of life, great and small, this divine faculty became almost powerless to act, and incapable of rising, even in a small degree, towards its pristine dignity and status of position, unless it was quickened by the Holy Spirit, or the Divine Pneuma. Although at its creation, or rather its emanation, this divine faculty had God for its object, and heavenly-mindedness for its function, yet its aspirations for the good, the pure, and the

sacred seemed easily overpowered by the stronger desires of the soul, and the still more fascinating carnal tendencies of the natural man—the “animalis homo.”

Of the relations betwixt soul and body, we have already more than once touched upon; now it behoves us specially to examine and remark upon the grandest and most God-like function in the whole organism of humanity, and see what is meant by the “pneuma,” or the “spirit-consciousness” which Almighty God first breathed into the animal nature.

Theologians, after almost fruitlessly poring over the leaves of the sacred volume for 2,000 years, are only now beginning to find out, that, that fickle chameleon-like something, that quibbling uncertain anything, called conscience, is neither more nor less, and no other either, than the once mighty pneuma in ruins, which God breathed into man in Paradise, when the lifeless body became, in a moment, a living soul or personality. Had it not been for a powerful and unseen enemy, and the weakness of woman—Eve—conscience would never have been in ruins, and God’s precious, and yet deathless, gift to man, the pneuma, would have been eternal life to all for ever and ever. But it was not so, neither was it so to be.

The five, six, or seven senses, whose functions are to convey impressions from the outer world to the inner man by means of certain special organs, as the eye, the ear, &c., and also to the organ of the soul—the brain—either in whole or in part, with its correspondential functions in certain correlated parts of the body, have each and all their pre-ordained and special functions in this life; so the divine pneuma (every faculty having an organ with which to manifest itself) must of necessity have a cerebral organ, atom, or nerve-molecule located somewhere in the organism, to be used as a means of intercommunication, whether its position be known or not. The function of the organ, both in the unregenerate and the regenerate state, is doubtless better known than its anatomical locality—theology having come to aid an enlightened psychology in expounding its originally-intended function as the imperial factor in the tripartite economy of human nature.

Although this God-like organ or faculty lies, so to say, on the road-side of life—a thing “in ruins,” and an object of pity—yet the day will come, as in the olden times of Eden’s happy days, when the pneuma, the vicegerent of God in man, will once more ascend to the seat of power, and take the reins of the chariot of humanity, and drive the two horses—soul and body—as it was wont to do, o’er Eden’s blissful plains. As to the locality of the organ of this divine faculty, we feel to be sailing on an unknown sea, without chart or compass by

day ; and by night the polar star of science, hidden by the clouds of ignorance and uncertainty, gives no light, rendering the surrounding gloom dark as Erebus itself. There is nothing left, then, but sailing on, and throwing out the lines for discovery at haphazard.

Is this organ, or atom of marvel—the pneuma—to be found in, or near, that middle part of the brain, called the thalamus and the striatus ; the one the centre of sensation, the other the centre of motion ; the one receiving the incoming impressions arising from the senses, the other conveying the impulses of motion to the outward muscles ? Will the monad, which received the divine afflatus, be found anywhere amid the molecules of either of these two central cerebral divisions ? This is left for accurate observation—the inductions and deductions of the future to determine ;—not to mention the aid which the spiritual insight gives in exploring the realms of the unknown, which sensitive psychometrists seem to possess.

Besides the parts just referred to, there is a spot below the interior central portion of the brain, termed the centron, containing a collection of nervo-vital cells which form brain-matter, and act on the body, and the body, reciprocally on the brain. Will the pneumatic organ be found in this inaccessible region—inaccessible during life to the scalpel of the anatomist, but not to the keen, searching, spiritual eye of the psychometrist ? Will this monad of wonders be found in these dark regions ? Time will show.

One other suggestion. There is a chain of ganglia not far from the cerebellum, hanging like a lady's chain around the neck, on each side of the spine ; will this organ or atom be found as a central nervo-vital monad, like the star Alcyon was discovered as the central sun of our solar system amid 200 other rolling orbs constituting the Pleiades ? Perhaps a cerebral Alcyon may ultimately be found amid this ganglionic chain ! Whether found or not during the present century, the grand God-inspired pneuma—the organ of the religious consciousness of man—somewhere exists in the human organism, and doubtless some anatomo-psychological Stanley will find his way to this, at present, dark continent of human nature, and bring forth into the light of science a discovery as great, perhaps greater, than even that of the immortal Newton. We must patiently wait on the great teacher, Time, and, in the meantime, God adore !

That there is an organ or nervo-vital atom by which the "spirit" or "pneuma" can, and does manifest itself as the imperial factor in our tripartite nature, is as certain as that "in any right-angled triangle the square which is described

upon the side subtending the right angle is equal to the squares described upon the sides which contain the right angle" (Euclid i. 47th), because no invisible being can make its presence known in a normal condition of body but by means of some nervo-vital material agent.

Well, suppose the nerve-organ of the pneuma cannot be found (it is in the organism somewhere, nevertheless), the advanced phrenologist would be no worse off (better, in fact) than the metaphysicians of the olden time when trying to unfold "the philosophy of the human mind" (so-called), in utter ignorance of the organs which the different faculties make use of in the production of thought, sentiment, and emotion; and since these several faculties of the soul have been brought under educational culture and training without a knowledge of the organs which they make use of, why should not this same condition obtain, in respect of the organ of the pneuma whose function is the sublimest of all others, whether intellectual, moral, emotional, or spiritual, in the whole nervo-vital economy of man?

Since the locality of the organ of the God-consciousness of man has not as yet been discovered in our animal mechanism, let us glance at its functions in the unregenerate and the regenerate as detailed in the Bible, especially in Job, the Psalms, and the writings of the Apostle Paul.

In the first place, there can be no correct theology without a correct psychology; so says Sir William Hamilton. The latter is the solid foundation of the former. Each has to do with man and his relations; the one with man, his fellow-man, and with surrounding objects and their relations to each other; the other in regard to God, heavenly-mindedness and the life everlasting, and with the related aspects of the spirit, the soul, and the body, the three parts which constitute him man—a human personality.

Death may, and can separate body from soul and spirit; but so intimate is the relation of spirit (pneuma) with soul (psyche), that it requires the two-edged Sword of the Spirit not only to pierce but to divide (not to separate) between soul and spirit. The comparison of Justin Martyr is, "that the body is the house of the soul, and the soul, the house of the spirit;" in other words, "that the spirit lies encased within the soul, as the soul lies encased within the body." This trichotomy of man was not as much as even suspected by Plato, Socrates, Aristotle, and other ancient writers. It was the Sword of the Spirit which first developed its functions by its own convincing power, that showed up and proved that man was of a tripartite nature, and possessed of spirit, soul,

and body ; and not merely a bitartrite being, having only a soul and body, as Plato, Socrates, and the scholiasts of Greece taught their disciples to believe.

(To be continued.)

SOME OBJECTIONS TO PHRENOLOGY.

IF—as I have demonstrated before the British Association and the Anthropological Institute — modern experimental researches really confirm the old phrenology ; if recent investigations in physiology and pathology have really established the physiological correlative of psychological actions ; if the muscular centres discovered by modern scientists are really the same as those that are employed by the different faculties located in the same regions by Gall, and by Spurzheim and Combe on an entirely different method : then the objections to phrenology fall to the ground, and the objectors had better hide their criticisms lest they darken their reputation.

The strongest objection that was brought forward at the very outset, and threatened to do away with phrenology, was that a belief in the diversity of mental elements, and plurality of functions of the brain, would lead to fatalism, an objection which is not only illogical, but would apply equally well to modern brain-physiology, whose greatest claim it is to have established, by experiment and pathological observations, the fact that different parts of the brain subserve different functions. The more complex the brain, the more highly cultivated, the freer the individual ; the less balanced the brain, the simpler its organization, the less will there be and the less motive to action.

The fear of fatalism was, however, not the only cause of antagonism. It was the belief in the unity of the brain which caused the doctrines of Gall to be set aside. It was by the experiments of Dr. Flourens, which appeared to prove that there is a single psychical organ in the brain ; inasmuch as, by slicing off the organ, the functions were preserved up to a certain degree, and as soon as one incision had been reached, all the cerebral functions appeared to cease—experiments which, in the present day, are completely contradicted. It is marvellous what an influence Dr. Flourens had. Thus Dr. W. H. Walshe says : “ And as all who, like the writer, ever listened to the earnest pleadings of that enthusiastic dogmatist can testify, it was difficult to resist conviction, while under the spell of his eloquent expositions.”

How many men repeat to this very day the objections raised by Sir Wm. Hamilton. Whereas modern anatomists of reputation have stated that no objection can be raised against phrenology on anatomical grounds. Sir Wm. Hamilton, in George Combe's time, denounced the doctrine as having no anatomical basis, and ordinary medical practitioners of to-day repeat his assertions without thinking. Let us see what that distinguished Scotch philosopher had to say. With reference to the frontal sinus, I take the following passage from his "Lectures on Metaphysics and Logic."

"Now, the phrenologists have fortunately, or unfortunately, concentrated the whole of their very smallest organs over the region of the sinus, which thus, independently of other impediments, renders all phrenological observation more or less uncertain in regard to sixteen of their organs.

"Now the fact is, as I have established by an inspection of several hundred crania, that no skull is without a sinus. This is, indeed, the common doctrine of the anatomists. But I have also proved that the vulgar doctrine of their increasing in extent in proportion as the subject advances in life, is wholly erroneous. The smallest sinus I ever saw was in the cranium of a woman of a hundred years of age.

"Phrenology, if it were true, would have discovered that the apparent amount of development over the sinus was not in harmony with the mental manifestation. But this it never did: it always found the apparent or cranial development over the sinus conformable to the mental manifestation, though this bony development bore no more a proportion to the cerebral brain than if it had been looked for on the great toe. Phrenology is thus shown to be a mere leaden rule, which bends to whatever it is applied, and, therefore, all phrenological observation is poisoned, in regard even to those organs where a similar obstacle did not prevent the discovery of the cerebral development.

"I have heard phrenologists, in relation to the sinus, say: 'Well, we admit that Gall and Spurzheim have been all wrong about the sinus, and we give up the organs above the eyes, but our system is untouched in the others which are situate beyond the reach of that obnoxious cavity.' To such reasoning there was no answer."

However great the fame of Sir Wm. Hamilton may be, with regard to phrenology he was not guided by the principle of truth.

He talks of the frontal sinus covering sixteen organs. In his days, only fourteen intellectual organs were known; Sir William declares thus, in other words, that the frontal sinus

reaches veneration and spirituality. We might take this assertion for a joke were the subject not so serious.

He further says : " In ignorance, however, Gall was totally eclipsed by Spurzheim." This is not the spirit in which scientific men should investigate questionable theories.

He also abuses the phrenologists for their consideration of the temperament. Sir William was not aware of the importance of man's constitution. His theory of the frontal sinus is, for that very reason, of little value, as he never observed the temperament, and we know that the sinus is larger in persons with the motive temperament than in individuals with the vital or mental temperament.

Sir William Hamilton also accuses Gall of having first framed a theory, and then attempted to mould nature to his speculations ; but no accusation could have had less foundation. Gall proceeded upon the Baconian system of observing and noting facts ; he compared the developments of particular parts of the head with the characters of individuals, as displayed in their actions, and he arrived at the conclusion that particular conformations of the head were always concomitant with particular talents, or particular moral or animal dispositions.

Though Prof. Sir Wm. Turner, Prof. Flower, Prof. Humphry, Dr. Benedikt, Prof. Zuckerkandl, and many other anatomists have asserted that the skull grows with the brain, and that the growth of the skull-cap is determined by the direction of the convolutions and that before birth, there are still many writers who argue against phrenology on purely anatomical grounds, such as the varying thickness of the skull in different persons, the presence of the sinuses, variations in the shape of the head due to accident or disease, the external surface of the skull-cap not corresponding to the internal plate, and so on. These gentlemen seem not to read contemporary medical and scientific literature. They certainly can have never heard of criminal anthropology, whose professors claim to recognise the criminal by his organisation. Thus says one of the foremost advocates of this school : " From the formation of the skull, we are able to draw the safest conclusions as to the psychological character of its possessor." Gratiolet, one of the greatest anatomists of the nineteenth century, very accurately observed that the cranium surrounding the brain has the shape of that organ truly engraved, otherwise the original form would be lost when the brain is taken out, as it is only a soft mass, and collapses when the blood ceases to circulate in it. Fortunately, this form, though lost in the brain, exists in the shape of the cranium.

I have dealt in my previous communications to the

PHRENOLOGICAL MAGAZINE with such objectors as Mr. Herbert Spencer and Dr. Maudsley. May I now refer to another great authority, which many medical men will consult. It is the new Dictionary of Medical Sciences (Paris 1887), the best publication of its kind existing in any language. There is a long article in this dictionary on phrenology, which is remarkable for its statement—made by Mr. A. Rist and giving as authority Dr. Edouard Fournier—that phrenology is not original. It was known to the Hindoos and Brahmins. In fact, a long history of the subject is given referring to the phrenological doctrines before Gall. May I ask Mr. Rist—or for that matter other phrenological critics—why they cannot examine the doctrine without bias ; why a Mr. Rist should rely on a Dr. Fournier, and so on ? Why do medical men assert that the subject has no philosophical basis, and why do philosophers say the subject has no physiological or anatomical basis ? I have once before put quotations from such critics side by side : one of Dr. Bastian's and one of George Henry Lewes', showing the absurdity of such criticism and their want of knowledge of the subject.

The German philosophers still charge phrenology with leading to fatalism and the other bugbear — materialism. Take Lange's "History of Materialism" as an instance. I have commenced this communication with a reply to that assertion ; let me add a short explanation for the benefit of those who are not acquainted with the modern theory of brain functions. First of all, before any such charge can be made, the question must be settled, Has phrenology a physiological and anatomical foundation ? My previous quotations show that there are still many men who deny that it has. If it has not, it is certainly paying us too much honour to criticise the utility of our subject before its acceptance. But I am rather inclined to think that these German critics have studied the tendency of modern investigations in the direction of phrenology, and become conscious of the fact that our experimental physiologists deceive the public regarding the merits of our subject, and, as metaphysicians without the faculty of observation, they see only one stumbling-block, and that a big one, in the shape of materialism.

No doubt, according to the development of the brain, so is the character of an individual, so are the capacities of the mind, so are the motives and inclinations. It is also true that the excessive size of an organ indicates an excessive indulgence in the manifestation of the corresponding faculty. The evil actions which result are the effects of disobedience to nature's laws. If a man loses the control over his faculties in conse-

quence of having taken too much drink, you would not call that fatalism.

Daily experience teaches us some men are inclined to be virtuous, while others are inclined to be vicious. The phrenologist only affirms and proves that such tendencies are regulated by the organization. Phrenologists do no more than scientific men: they study the laws of nature, they do not alter nature. Unless our observations accord with actual facts, and are verified by experience, they are worth nothing. Galileo's discovery that the earth goes round the sun did not alter the world; and though his contemporaries made him suffer with his life for holding that opinion, the earth went round the sun all the same; it always has done so, it is doing so now, in spite of the contemporaries of Galileo. If I am able to read your character I do not take away your liberty of action, I am only telling you how much your action is influenced; what is the proportion of force exerted on you by indolence, or activity, by ambition or pride, or envy, by selfishness or sympathy. This proportion is different in each man, yet it varies according to certain laws and only within certain limits. These laws were at work before the discovery of phrenology: they are at work this very moment, and will continue to be so, irrespective of your individual opinion about them. The Pope may burn our works, as Gregory XVI. did in 1837; so-called learned men may treat us with contempt; but if phrenology is true, scientific researches must ultimately prove it to be so, whatever prejudice or superstition may say against it in the present day.

BERNARD HOLLANDER.

LOMBROSO ON EYRAUD AND BOMPARD.

A NEWSPAPER correspondent having had occasion to communicate with Dr. Lombroso, the latter consented to give him a consultation on the subject of the accused Eyraud and Bompard. The correspondent sent the celebrated Italian criminalist documents bearing on the matter, photographs of the two accused, their antecedents, autographs, &c.

Doctor Lombroso, who has published a work of some note on "Criminal Man," classes murderers in two categories: the criminal-born, who, according to him, form about two-fifths of the whole personnel, and the criminals of occasion, or (as it is put in the French language) *criminaloïdes*, those whose crimes are the outcome of folly, alcoholism, passion, or other

occasion. It is in the latter category of criminals that Dr. Lombroso seems to class Eyraud.

The following is what Lombroso has communicated to the journalist, excusing himself for being able only to give some cursory views on the matter:—

“The photograph of Eyraud in no way bears out the verdict of his ill-renown.

“Not that it bears no degenerate character. The long ear, 6 centimetre, 1 mm., is out of the way: the left frontal bosse, or knob is very pronounced. Around the eyes, which are small, there are anomalous wrinkles; the right eye (in your second portrait) appears to be squinting. The lips, especially the nether one, are developed as one is accustomed to see them developed in debauchees. But all these characteristics are neither very accentuated nor very numerous: they fail of that ensemble which, to me, marks the criminal type.

“It is as a matter of fact a physiognomy frequently met with among those in certain circumstances.

“The craniometry gives results not widely differing. The cranial capacity of Eyraud should be equal or superior to the medium: the front is very well developed. Only there is an extreme brachycephalic form often noticed in murderers.

“Another characteristic more observed in criminals than in other men is the predominance of the great *envergure* (length of the two arms stretched out) over the stature. Eyraud's height is 1m. 66; and his *envergure* is 1m. 72, in place of the normal 1m. 66.

“Seeing the insufficiency of the physical characteristics, one would take Eyraud for a criminal *d'occasion*—a ‘criminaloïde’—rather than a ‘criminal-born.’

“But there are here, I repeat, only some traits of the character, or rather of the psychiatric or anthropologic portrait of a criminal man. The whole visual subject must be seen: his tactile sensibility and his resistance to suffering. I am almost certain that he has a perversion of feeling, especially on the right side; and, from a narrowing of the *champ visuel*, that he has perhaps vertigoes, epileptic convulsions. If he has nothing of that kind (and to recognise it a common doctor is sufficient) he is not a ‘criminal-born.’

“Of his organic functions two alone are known to me: the activity of his senses, which is precocious and enormous, as is usual among murderers; and his handwriting, which corresponds in its energetic coarseness—the development of the *t*; and the *r*, the acute verticle stroke of the signature, the elongation of the letters—to the handwriting of the criminal type. It is greatly similar to the signatures of the brigands:

and murderers, *fac-similes* of which I have given in plates in one of my works.

“ But except the *envergures*, the penmanship, and several physiognomic traits, Michel Eyraud does not bear the stamp of the ‘criminal-born.’ The same general contention holds good on turning to the psychological side of the convict.

“ The love of the bad for the bad, a true characteristic of the ‘criminal-born’—above all in deeds of blood—cannot be observed in him, in the epochs neither of his childhood nor of his youth. He had been so far only deserter and swindler—so far as is known. The trial brought out the fact that he was a jovial man, loving to laugh, but at the same time brusque, violent, flying easily into a passion, often working himself into fury without any serious motive, loving women to excess, and capable of anything to satisfy that passion. Woman, woman, woman, was the unique pre-occupation of his life.

“ After his crime he was seen in all sorts of disorderly houses in America.

“ Since his apprehension Eyraud has spoken incessantly of his old amours. It became with him a fixed idea, the possession of all his hours, of all his moments. This folly displayed itself in his cell in acts which the warders had great difficulty in preventing.

“ It was for a woman that he became a deserter ; it was for women that he spent the money which he had put into the leather and distillery trades. It was for one of them at last that, harassed and hunted down, at the end of his pecuniary resources, he became an assassin.

“ He very quickly became *épris* with his accomplice Gabrielle Bompard. The latter, a creature vicious and perverted to the soul, took him *tout entier*. It was for her and through her that the accused committed his crime, for which he was arrested.

“ Then has it not been revealed that since his flight to America, Eyraud had attempted to murder a woman who would not for him abandon her conjugal home ? Thus it is seen that woman has been the unique subject of the workings of the man’s mind.

“ A curious detail is that where Eyraud comes nearest the ‘criminal-born’ is in his levity.

“ He passes with extraordinary rapidity from a gay idea to a sad ; even to the extent of incoherence in his conversation. Give him a good cigar, and one instantly calms his chagrin. His intelligence is markedly developed ; he speaks Italian, English, Portuguese ; he succeeded at first in all his enterprises, but never was he able to fix himself in any. In trade he could

do nothing but trifle. Even in the accomplishment of the crime, although the premeditation was great, his levity asserted itself.

“Those who have followed all the circumstances of the murder and its preparation, will have remarked a great incoherence which struck the presiding magistrates.



This portrait is kindly lent by the *Pall Mall Budget*.

“Eyraud committed inexplicable, naïve imprudences. At Lyons, being alone in a carriage with Gabrielle Bompard, and taking the corpse of Gouffé, he acted like a madman; he threw the corpse out into a much frequented thoroughfare. A number of circumstances have conspired to presuppose that the murderer was an accomplished criminal. He was nothing of the sort.

“ With the ‘ criminal-born ’ he has that moral insensibility—that indifference for human life, that cold cruelty in a crime, which he certainly thought to repeat in America in the person of M. Garanger.

“ In fine we may say we have here a swindler, above all a debauchee—a ‘ criminaloïde,’ become an habitual criminal, dragged into it by his incessant ‘ cult ’ of women. Without Gabrielle Bompard I am thoroughly persuaded that Michel Eyraud would have remained but an ordinary scoundrel.

“ It is thus seen that the physiognomical traits of the accused are parallel with his psychological developments.

“ The absence of all morbid heredity in Eyraud confirms me in my opinion, which cannot however have a basis of absolute certainty, seeing that the functional scrutiny of the accused are wanting in your documents.

“ If the murderer has not a completely criminal physiognomy, such is not the case with his accomplice Gabrielle Bompard.

“ Although convicted women have very rarely the criminal characteristics, yet Gabrielle has them completely.

“ She has tufted hair, great anomalous wrinkles, a livid pallor of visage, an exaggerated lobe of the ear, a short snub nose, an enormous jawbone for a woman, and above all the *asymétrie* of face and the *enrigmatisnic* common to the Mongolian type.

“ All her vaunted beauty resolves itself into the mischievous aureole, which gave her to precocious vice.

“ She has had an astounded precocity and ardour in debauchery. And this character is associated very easily with the sanguinary murdering disposition. Certainly she would be able to lend herself with good grace to the idea of a murder.”

A FEW THOUGHTS ON THE DEVELOPMENT OF THE BRAIN (OR ENCEPHALON) AND SKULL.

(Continued.)

THE medulla oblongata is the principal feature of the after-brain, or metencephalon. It is continuous below, with the spinal cord on a level with the foramen magnum. It is also important, for its nerve supply—the seventh to the twelfth cranial nerves—issue from its side. Its structure is easily traced from several parts of the spinal cord upwards in their continuity with the parts of the medulla.

The cerebellum, the principal part of the hind brain, or epencephalon, exists first as a thin medullary lamina, forming an arch behind the corpora quadrigemina. From the fibres of the cerebellum is formed the pons varolii. From its relation to the cerebella hemispheres, the pons keeps pace with them in its growth, and is important for its fifth and sixth nerve supply.

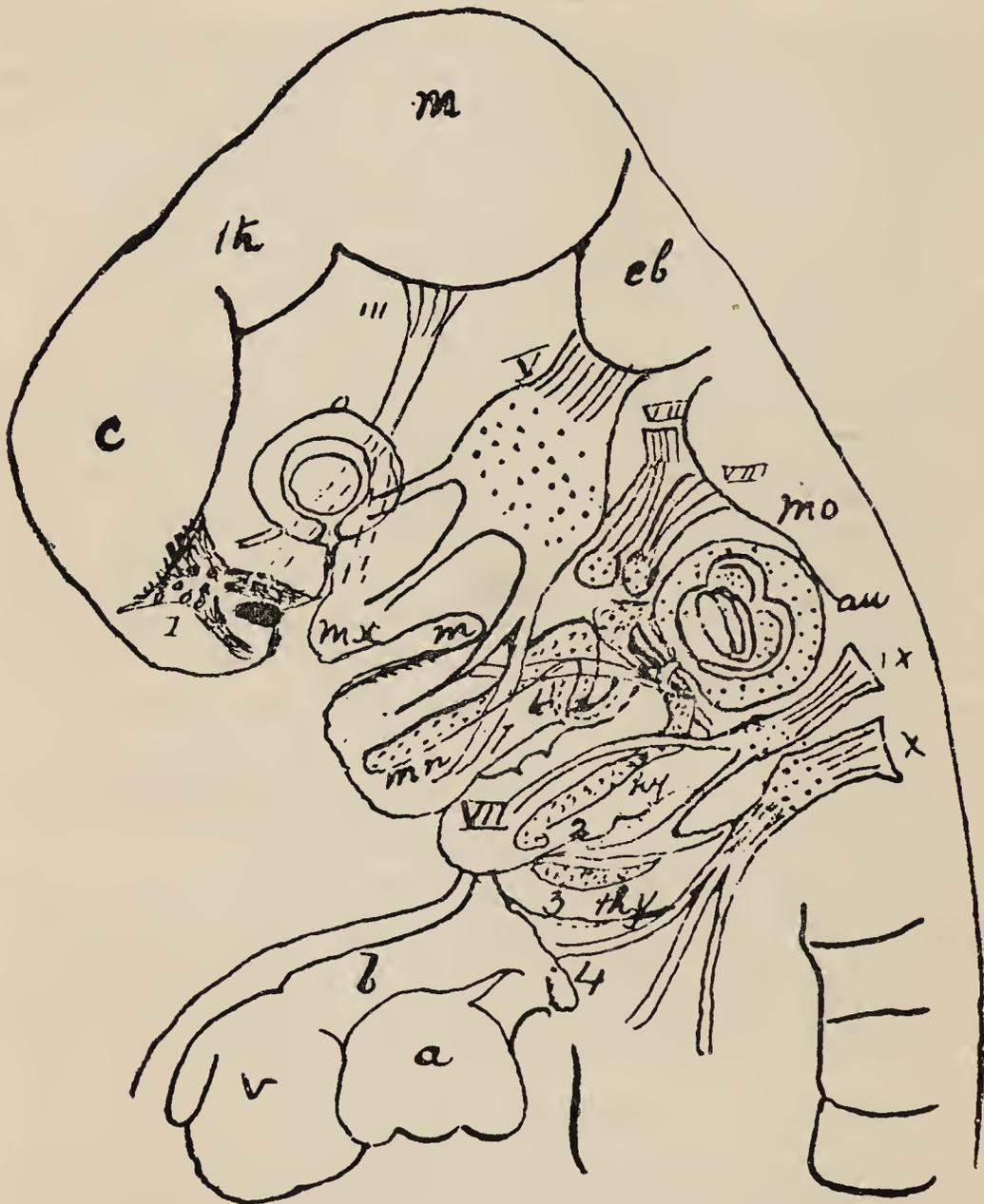


FIG. 6.

Outline of the head of a mammalian embryo, corresponding to the human embryo of eight weeks. (After A. Fraser, A.T.).

c, cerebral hemispheres; TH, thalamen, cephalon, &c.; M, mid-brain; CB, cerebellum; MO, medulla; O, eye; 1., olfactory ganglion; III., third nerve; V., fifth nerve; VII., seventh facial; VIII., eighth nerve (auditory); IX., glossopharyngeal; X., vagus.

The corpora quadrigemina, one of the principal features of the mid-brain (or mesencephalon) are large in their early condition proportionately, for they do not grow so fast as the anterior parts of the brain, and soon become overlaid by the cerebral hemispheres. They are formed by the upper part of

the middle cephalic vesicle ; the hollow in the interior communicates with the anterior and posterior vesicles. As the cerebral hemispheres rapidly increase in size, the cavity in this middle vesicle is filled up, with the exception of the narrow passage, named the Sylvian aqueduct, or the iter a tertio ad quartum ventriculum, a narrow passage as described before, into which the upper end of the fourth ventricle gradually narrows, and which in front expands abruptly into the third ventricle, being rather more than half-an-inch long. It is along the whole length of the ventral part of the aqueduct that the nucleus of the third and fourth nerves extend.

The principal features of the inter-brain (or thalamencephalon) are the thalami optici. We find it is from this part, which at first forms the whole, and afterwards the hinder part, of the anterior primary vesicle, that the optic thalami are developed in the earliest period. They are formed by a thickening of the medullary wall, and from the posterior and outer part of the anterior vesicle, and consists, at first, of a single hollow sac of nervous matter. Soon after an increase of deposit behind, below, and laterally, the thalami become solid, and a cleft, or fissure, appears between them, which penetrates downward into the internal cavity, and continues open at the back part opposite the Sylvian aqueduct. Thus appears the third ventricle.

It is said that the formation of the pineal gland and pituitary body present some of the most interesting phenomena connected with the development of this part of the brain. The former is deeply indented by vascular folds and growths of pia mater. The infundibulum, as is well known, is a prolongation of the medullary wall of the third ventricle.

The principal features of the fore-brain (or prosencephalon) are the cerebral hemispheres, which consist of two parts, one of which, from the interior, the corpus striatum appears, and from the exterior as the Island of Reil, or central lobe ; the other forms an expanded covering of the hemispheres. Between these parts are the lateral ventricles. The corpora striata are formed very differently to the optic thalami, as the former appear as thickenings of the floor of the hemisphere-vesicles, which are side shoots from the original medullary tube. Compare this formation with that of the optic thalami given above, and the difference will be apparent. Reichert considers the brain primarily divisible into the stem, which comprises the whole brain in front to the tænia semicircularis and the hemisphere-vesicles, which include the corpora striata and hemispheres.

By the end of the third month, the hemispheres reach and

extend as far backwards as the thalami ; by the fourth, they reach the corpora quadrigemina ; at the sixth, the great bodies of the cerebellum.

The growth of the brain from infancy to manhood, after it has become fairly launched in life, must not be considered simply as an increase of substance or uniform expansion. It involves the growth of the different parts of the brain, at different periods, and the development of the folds of the grey matter upon the surface, with the depth and complexity of which the mental or thinking and working power is so intimately connected.

Although all brains have in general the same, or nearly the same, form of development at the beginning, later on each brain has its own peculiar growth, as is to be seen in the various shapes and forms of heads ; and on this point the scientist, Sir J. Crichton Browne recently enlarged. He even went so far as to admit that the latter's idea of providing hats to fit everybody within the limit of a dozen sizes was a delusion and a snare.

The maximum growth of brain in man is generally reached between forty and fifty years of age ; and in woman between thirty and forty. This gradual development agrees with what we know of the development of intelligence.

From fifty to sixty years of age there is a slight reduction in brain weight of about half-an-ounce, and from sixty to seventy a further reduction of about half-an-ounce. From seventy to eighty there is a still further decrease, so that in many it has been observed that at eighty there are four ounces less brain weight than at forty-five ; but we must notice here that among the learned and cultured classes, where the brain has been fed and used properly, brains have been found to retain their plumpness and firmness, notwithstanding the wear and tear of a long life.

The life of Mr. Craig, whose portrait is given below, has been a remarkable one. It has covered what in many respects has been the most eventful and important period of English history to the working classes, and, in his varied occupations of public lecturer, school teacher, organiser of social experiments, journalist, scientific explorer and inventor, &c., he has had opportunities which but few men can possibly have had of hearing and seeing a great deal of what has been going on around him.

He was born in Manchester on August 4th, 1804, and his earliest recollections are of the doings of Napoleon Bonaparte abroad, and of the misery and struggles of labour at home. He is still to the forefront in thought and principle with the

most advanced of present day social reformers. Fossilation is out of the question with him ; as time has advanced and conditions have changed, his ideas have also pressed forward and expanded. When health permits, he still writes and speaks.

Many men work with the object of retiring as soon as they are rich enough ; hence, they "make haste to be rich," work hard while they are at it, and delude themselves into the belief that they are doing the best thing for themselves by giving up all mental labour. A large number of proofs are not wanting of men of this class who die of paralysis through the sudden change that the cessation from work of all kinds has brought, while men like Gladstone are better in health through the continuation of intellectual labours into old age.



MR. E. T. CRAIG, aged 86.

I thoroughly agree with Sir J. Crichton Browne and all physiologists who believe that the primary condition of good brain-growth is good bodily growth. We cannot tear up the brain by the roots every now and then to see how it is growing, or watch the convolutions in their formation, or see the mind think, but we can watch the development from the exterior. We can examine the quality of the exterior, and we can watch the development of the girth of the chest and strength of the limbs, and satisfy ourselves as to the height, weight and proportion of the corporeal framework ; and we can encourage or check bodily development, and in so doing can in a measure encourage or check brain growth.

You do sometimes find men with large brains and small bodies, and tall men with small heads ; but when examining facts on a large scale, there is without doubt a relation between the size of the brain and that of the body. Scientists affirm that, notwithstanding the exceptions, it may be reckoned

as a rule that the height of the race in the scale of civilization corresponds with its height in the scale of inches.

If we look into the average height of various nationalities, we shall find some wonderful coincidences. In Australia the colonist has an average height of 5-ft. 8-in.; the Chinese coolies have only 5-ft. 4-in. The progressive Swedes have a height of 5-ft. 7-in.; the stationary Laplander only 5-ft. In brain weights, the Scotch stand at the head, with an average height of 5-ft. $8\frac{3}{4}$ -in., and an average brain weight of 50-oz. The English have an average height of 5-ft. $7\frac{1}{4}$ -in., and a brain weight of 49-oz. The German height is 5-ft. $6\frac{1}{2}$ -in., and brain weight 48·3-oz.; the French height is 5-ft. $6\frac{1}{4}$ -in., and brain weight 47·9-oz. The Hindoo height is only 5-ft. $1\frac{3}{4}$ -in., with an average brain weight of 45-oz.; the aboriginal Australian has a height of 5-ft. $0\frac{1}{4}$ -in., and an average brain weight of 42·8-oz.; the bushman's height is 4-ft. $2\frac{3}{4}$ -in., and brain weight 38-oz. The comparison holds good not only among races, but also among classes of men. It is, however, harder to find the accurate weights of good brains than those of the pauper class, though I have and could give many examples that are on record. But I believe, if we desire to increase brain growth, we must encourage bodily growth. The importance of good food for the foundation of brain growth cannot be over-estimated. In children we find rapid stages of evolution going on in their brains, and food occupies a large proportion of the children's thoughts. Bloodless brains are not healthy brains, and in order to have good, rich, healthy, sustaining blood, we must have good nourishing, sustaining food. The day is coming, I hope, when teachers will be allowed to teach according to the brain capacity and brain development of each child, and not with the ambition to reach a certain school average of work. Another object in studying the development of the brain is, that education may correspond to the individual necessity for ample bodily exercise in relation to the motor centres of the brain, in order to stimulate vigorous thought.

JESSIE A. FOWLER.

THE FOWLER INSTITUTE SOIREE.

A MOST enjoyable evening was spent at the close of the year, on Monday, December 29th, the occasion being a soirée given by Mr. Fowler and his daughters to members of the British Phrenological Association, of the Fowler Institute, and other friends in the Imperial Buildings, Ludgate Circus. All the business rooms were thrown open for the evening, and in their

gala attire were scarcely recognized. Considerable ingenuity, taste, and no small amount of labour must have been bestowed to bring about so pleasing a transformation. Notwithstanding the severity of the weather, there was a hearty response to the invitations, and seventy out of the hundred who accepted were present. The guests were received in the Lecture Room by Miss Fowler and Mrs. Piercy, assisted by Dr. Fowler Breakspear (in the absence of Mr. Fowler).

"Tea and coffee" was the first item of interest on the programme, and banished the last remnants of cold. After that, the guests passed into the library and museum, where there were on view electrical instruments, optical delusions, photographs, casts, skulls, &c.

At eight o'clock, Mr. Breakspear, of Birmingham, gave a short speech, in which he apologised for Mr. Fowler's absence, which was owing to a slight cold. Mr. Breakspear further said they would presently have the pleasure of hearing Mr. Fowler speak through the means of the phonograph. Then followed Mr. Fowler's speech which had been delivered into the phonograph that morning:—

"Dear friends, I regret not being able to meet you in person this evening, but I am glad that, through this new invention, you will be enabled to hear my voice. I hope you are all having a very pleasant time, and will have a Happy New Year.—L. N. Fowler, West View, Grove Park, Dec. 29th, 1890."

It took away in a great measure the disappointment that Mr. Fowler's absence caused, to be able to hear him speak and know that his voice was in their midst—though he was not present in person.

After all had listened to the speech in the phonograph, the musical programme, which was of considerable interest, was commenced. Miss Maud Hayter sang two songs in her rich contralto voice. It was a point for the phrenologists to find out where so much sound and richness came from, as Miss Hayter is tall and slight. Any ordinary person could tell what power to expect from Madame Chambers by her very presence, and were not disappointed at her dramatic powers displayed in the recitations that followed. Mr. J. T. Taylor was in excellent voice. Space will not permit to tell of all the interesting items that were on the programme, Mrs. Ellercamp's pianoforte solos, &c. The phonograph did its share in reproducing voices, bands, songs, &c., and was the feature of the evening.

Miss Jessie A. Fowler's ten minutes' talk on phrenology was to the point. She said: "There has been just lately reported a remarkable astronomical discovery. The report states, that in the group of stars known as the Pleiades, a nebula has been

found, the existence of which no one had ever suspected. Its discovery was not made by the telescope, but by the camera. In taking a photograph of that part of the heavens for the completion of an astronomical map, the plate was accidentally left exposed much longer than was intended. On examining the photograph, a well-defined nebula was perceived in the constellation of the Pleiades. The reason why the nebula appeared in the photograph, though the telescope failed to reveal it, is explained by the fact that the camera can accumulate impressions by a continued exposure and produce an image which would be too faint for a short exposure to give any impression of. This is a power the eye does not possess. You will perhaps wonder why I have mentioned this astronomical fact. It is for this reason: I wish to point out that phrenology is the camera for the scientist, for the student of human character, and the pathologist; phrenology will aid them most in unravelling the mysteries of mind, and the states of mental disease which the telescope has tried to do and failed. The phonograph, which we have heard, receives impressions and reproduces them. Phrenology is a phonograph, because it can tell what impressions have been made by the mind on the brain, what other sciences have been unable to reveal, and receives impressions from the brain direct. For example, a boy came in to be examined the other day, whom I said would make an excellent architect. I had never seen the boy before nor heard him speak of any desire. He looked up and smiled and said, that was what his father and he himself had thought of, but they wanted to know whether phrenologically he had the talent for one. It was phrenology that aided me in taking the phonographical impression of the boy's head. Sometimes the impressions are very faint, the record is true, but indistinct; the character is there, but it has not been called out, and many think the record is false; but when the character is fully tested, it is found correct, and the impression becomes then more distinct. Phrenology is useful in whatever trade or profession a man is in. It comes next to Christianity in importance. You have the study of human character in all, hence the nearest means of understanding it are important to every one. We shall find no sectarianism in heaven, no Congregationalism, no Methodism, no State Church, but there will be a recognition of quality and development of mind, character and spirit. Mind is like a bud that unfolds gradually into the flower, fruit, and seed, and those who are the ripest for understanding the Divine mind must take precedence. Our business here is not to try how much we can accumulate of that which we cannot take away

with us, but to store up that which will be of service to us in eternity—the true discipline of the mind, character, and spirit. The study of phrenology should help us to do this. Gall was a great teacher, and what he said a hundred years ago is being repeated to-day by the aid of the mental phonograph. In 1897, six years hence, I want all who are interested in phrenology to take part in a great Conference to be convened for this special purpose, and which I shall hope to be instrumental in arranging to celebrate the centenary when Gall brought forward his views on mental science. In six years we shall see progressive signs in which phrenology will stand as the coming science of the future. Then all classes will be proud to acknowledge its usefulness, as Prince Consort did to George Combe some years ago. The aim of our Institute is to enlighten and press forward such a hope.”

It was followed by a blind-folded examination of a gentleman present who was a stranger to all. He afterwards confirmed the truth of Miss Fowler’s remarks, and said he had been examined by Mr. Fowler when he was a lad of fifteen, and also had had the pleasure of having a blindfold examination by her uncle, O. S. Fowler, on one of his last lecturing tours in America.

The book room was transformed into a pretty little supper room, where refreshments were served during the evening, but few visited the room until the programme was finished for fear of missing anything that was going on. “God Save the Queen” played by the phonograph brought the most enjoyable evening to a close.

Great thanks are due to Messrs. M. H. Piercy, Baldwin, Sydney Smith, and C. R. King, the M.C’s of the evening, for carrying out the arrangements in so capable a manner. “Success and prosperity to the Fowler Institute” was the New Year wish of all present. A VISITOR.

WHAT IS THE FUNCTION OF “INDIVIDUALITY?”

BY ALGERNON MORGAN.

SOME years ago, on reading “Orthodox Phrenology,” by A. L. Vago, I thought that his criticism of “individuality” was a correct one, that this faculty would evidently monopolise the functions attributed to form, size, weight, colour, &c.; and when I saw Nicholas Morgan’s article on the subject, I was still more confirmed in my idea. “The definition of the functions of several organs” certainly requires much amending.

To perceive an object as an "existence" alone, without recognising its qualities, is evidently an impossibility. We will suppose for instance that individuality perceives a house, what are form, size, weight, colour, &c., doing all the time?

"The parts make the whole"; what else is there to be perceived in observing the house, or any object, besides its form, size, density, colour, and the order and number of its parts? If these are the "sum total" of its attributes, can there be another "sum total" formed by individuality? If so what would be the use of the other organs? Again, if it takes certain attributes to render any object distinguishable, how is it possible to perceive it except by its attributes? If "individuality is the sum of these attributes, their whole"—according to Dr. Donovan—then individuality exists only in name, as "thinking," "being"; is but a term to express the result arrived at by other faculties.

Truly, if individuality performed all the functions attributed to it, there would be little need of any other intellectual faculty, for this one would perceive everything in an object, both general and detail, criticise it, and remember all about it.

Then if individuality has a mental as well as a physical side in observation, I do not know what limit there would be to its province, for we speak of a perception of beauty, the sublime, the wonderful, of truth, justice, talent, causes, the infinite, of time, tune, the incongruous, and so on.

No, we cannot be too exact in our nomenclature and definitions; we must give no organ any function of which we are not absolutely certain; and before adding a new one to the number of the faculties, be very careful to see that the work of the supposed new one is not done by one or more of those already discovered.

Now, I think it will be found that the principal portion of the work supposed to be done by individuality is really done by form. Nelson Sizer says: "A person with but an indifferent development or activity of it (individuality) may look at a brick wall within fifty yards of his point of observation, and to him it is one great mass—it is a wall, and that is all it amounts to. Another, who has individuality large and active, will see the tiers of bricks, and, looking still closer, he will see these tiers are made up of separate blocks of matter; and after awhile, he sees that the wall is made up of fifty thousand individual bricks, laid in tiers in such a manner as to break joints, and thereby give strength to the structure." Now, as to the clearness with which the structure of the wall is seen, is not this rather the function of "form," for must not this organ take cognizance of the "tiers of bricks" and of each separate

brick? Possibly “order” might assist, by discerning the arrangement of the bricks, whether in relation to each other or helter-skelter; and perhaps “number,” by detecting whether the wall is made up of few or many parts; but through whatever faculties the tiers and bricks are distinguished, it is a matter of “perception” not reflection, and cannot possibly “give the capacity to reason and draw sound conclusions.” If such was the case, what is the office of causality and comparison? Mr. Sizer states also, “that printers in whom individuality is small have difficulty in identifying type, but those in whom it is large identify it quickly.” Nicholas Morgan says, in reply to this, “No doubt, if all other conditions were about equal, an extra development of this organ in one would add proportionately to his perceptive capacity; but if he had a less development of the organs of form and size, how would this affect the case? Which of them would possess the most identifying power? I should say that form and size are all that is requisite for identifying type.” Dr. Donovan says, “Individuality analyses, or takes asunder, separates the separable. It synthesizes, or puts together into one, the separate ones, as in the letters of a word, or the words in a sentence.” Is not this more probably the work of form and order, and perhaps comparison? He also says, “If it be active in a person, he can tell what kind of eyes, nose, mouth, skin, hair, distinguishes anyone whom he may have seen.” Is individuality necessary to do this? Cannot form, size, and colour distinguish all this without its aid? Again, the diversified perceptions of different persons in regarding the same object, would I think rather go against the “individuality” theory, for we know that out of several persons regarding an object, one will perceive and recollect little about it except its shape, one little but its size, another little but its colour, &c., which is easily applicable, individuality not in it; but this organ annexed, it becomes a more difficult matter, for if this faculty could perform the functions assigned to all the other perceptive faculties, then with it large, we should perceive and recollect all these attributes equally; while, with it small, we should be unobservant and forgetful of all alike. In short, if individuality possessed the functions and properties of all the perceptive powers (as it would have to do) what would be the result? We should have the anomaly of a person being deficient perhaps in the organs of form, size, weight, colour, &c., and yet be remarkably good in these respects by his large “individuality,” or have these faculties large by their “organs,” but small in their manifestation through their “other organ” individuality! Thus, the “parts” might

amount to more than the "whole," or the whole be more than its parts!

What, then, is the function of this part of the brain? Reasoning by analogy, one would say it formed some element in perception, or was closely connected with it, situated as it is in the very centre of the perceptive organs. A. L. Vago suggested this part, as being the seat of the physiognomic instinct, the faculty of "intuition," alleging the fact of Lavater, so celebrated for his physiognomical system, being unusually prominent in this region, but not so at the part assigned to intuition; also alleging that those dogs so known for their intuitive discernment and perception of character, exhibit the same marked prominence in "individuality," and the same deficiency in "intuition" (though it may not be quite easy to establish a comparative scale on the latter point.)

There are some points certainly concerning the organ of intuition not quite clear; for instance, in the greatest number by far of cases mentioned in the delineations of eminent persons, one reads, "Has a practical cast of mind; has an aptness for knowing men and things, for understanding motives, etc., is intuitive." I have observed that the knowledge of "men" and "things" is almost invariably mentioned together in describing the person; now, if the knowledge of men and motives was resident in that portion known as individuality, and the knowledge of things in the parts around it, they would indeed go together; and certainly it does not seem to me, that if we observe the conformation of the heads of those persons most noted for their grasp of human nature and their intuition, that three-quarters of the number will be as marked in the region of intuition, as in that of individuality; for instance, does Henry Irving show the development of "intuition" in his head equal to that wonderful "intuition," and "power to perceive the state of mind of others," mentioned in his character? though his remarkable "individuality" is at once apparent.

Then, again, if intuition "feels" a conviction or a motive, without any reasoning process, is the position at the summit of the reasoning powers the most natural one for its location? or would a position at the base of the intellectual region such as individuality, be more in keeping with it as an instinct?

However, to return to the subject of individuality again. Combe says, "It enables an artist to give a definite character to his conceptions, and confers on him a capacity for attending to details." Nicholas Morgan, in answer to this, says, "Individuality, probably, has the capacity of inciting the faculties to action that perceive these details, but it cannot

give what it has not got, and, as it does not possess the power of attending to those details itself, it cannot confer it on others." Whether individuality is necessary to incite the faculties to action that perceive these details, is a question.

In conclusion, I must say that several persons I know who are remarkably observant of everything, to the smallest trifle, and very much so in human nature, are all markedly developed in individuality, as they are in nearly all the other perceptive faculties, too. Possibly pathological or hypnotic cases may assist us to determine what the function of this part is, but all we can do, in the meantime, is for every phrenologist to make a study of any one noted for his perception, either of form, size, etc., or for his deficiency in them, and be on the look-out for architects, engineers, artists, mechanics, engravers, sculptors, and others, who must manifest the powers of form, size, and weight, and see what the development of individuality is in each case.

Notes and News of the Month.

SUBSCRIBERS requiring their Magazines bound should forward them to us early. Price for cover and binding 2/6. Back numbers to complete the volumes can still be had, price sixpence each.

"MEN and Women of Our Times" and "Phrenology Proved" are both unavoidably crowded out this month, but will be continued as usual in the March issue.

THE Examination for Certificate and Diploma of the Fowler Institute took place on Thursday and Friday, January the 16th and 17th, in the Lecture Hall of the Fowler Institute. Professor L. N. Fowler, John Allen, Esq., of Kilgrimol School, St. Anne's on the Sea, and Miss J. A. Fowler, were the examiners. Owing to the amount of work and careful attention that is necessary in going over the papers, we are unable to publish the result until next month.

IS INEBRIETY INSANITY?—The Society for the Study of Inebriety, at their last meeting, to consider the psychology and responsibility of drunkenness, came unanimously to the conclusion that, whatever the amount of vice that might be associated with the beginning of drunkenness, confirmed drunkards were not responsible for their actions. Dr. J. A. H. Crespi argued very ably that, if inebriety were akin, as it certainly is, to insanity, the law should enforce control of drunkards. He would propose such a change as would enable magistrates to issue a summons to the friends or relatives of a drunkard, compelling his attendance at intervals, so that if necessary he might be put under proper care. At present the high rate of charge, which had in most instances to be paid in advance for admission to the Inebriate Homes, effectually precluded other than quite wealthy people to use them. There was nothing against the Homes opened under the Inebriate's Act, except that the drunkards could not be got into them; whereas, if the law were changed, the man would have to go whether he would or not. In the case of those whose friends were too poor to pay anything, the County Councils might establish Homes. Various suggestions were made in the discussion which followed Dr. Crespi's address, such as the responsibility of medical men in prescribing alcohol as such, when it might be given (if necessary) free from its usual association of tastes, and unrecognisable by the patient, and the disgrace to our modern civilization that drunkards were again and again sent to prison for a week, instead of being sent somewhere for a term long enough to cure their appetite. The conclusions arrived at, as set forth in a paper by Dr. T. L. Wright, of Ohio, were that not only does drunkenness appear to be insanity, but all kinds of insanity in one, and intensified by several efficient causes operating at once in a common direction; also that it is an insanity unbroken by lucid intervals, there being no relief from the toxic influence of alcohol so long as it remains in the system, and that the reasoning part of the brain cells of a drunken man are so twisted and dwarfed by the action of alcohol as to impair his senses to such an extent that he can neither realise his responsibilities nor control his actions.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

IN an article in the *Congregationalist Monthly* for December, Dr. Mackennal gives some recollections of the late Dr. Hannay. On one occasion he was advised by his doctor to take a stimulant. He did so; trying first claret, then a little whisky, but he soon returned to teetotalism. Dr. Mackennal also tells us that Dr. Hannay was something of a phrenologist.

ON Friday evening, Dec. 12th, Prof. Hubert, Vice-President of the British Phrenological Association, London, held his popular lecture entertainment in the National Schoolroom, Boroughbridge. The lecture, which was illustrated with skulls, busts, portraits, diagrams, &c., proved full of interest and instruction. Several persons were publicly examined. The room was crowded, and great attention was paid the lecturer by the audience, all appearing well satisfied.

ONE of the most interesting meetings of the Doddridge Christian Band was held on Monday evening. Mr. Barratt, town missionary, of Margate, gave a lecture in the Girl's Schoolroom, entitled "Why we Differ," which was of an exceptionally instructive and interesting nature, showing that phrenology was a good and wise science for all Christians to study. The lecture was listened to by a good company of young people, and at the close four—two young men and two young women—went to the front for the phrenologist to try their bumps, which caused considerable laughter. The Rev. J. J. Cooper (the leader of the band) presided. A vote of thanks was accorded Mr. Barratt.—*Northampton Mercury*, Jan. 9th, 1891.

DURING the present week Professor Godfrey, member of the British Phrenological Association, is giving a course of lectures in the Temperance Hall. On Monday evening the Mayor (Councillor Smithson) presided; the subject of the lecture being "What is Phrenology?" On Tuesday evening Mr. D. W. Moss presided, and the subject of the lecture was "Phrenology, proved and applied." Practical illustration is given by the description of the characters of well-known persons. So far the lectures have proved both interesting and instructive. Professor Godfrey's skilful delineations of character have been highly effective and strikingly correct.—*Ripon Gazette*.

THE visit of Mr. E. Morrell, M.P.B.A. (of the Leicester Phrenological Institute), to Oakham this week has been quite successful. The Professor delivered two acceptable lectures on "Phrenology, its origin, principles, and utility," in the Congregational School-room. The chair was occupied by Mr. G. Royce, who fittingly introduced the lecturer. In the course of the evening, Mr. Morrell touched upon the Phrenology of the old students, showed by comparison how that the theories of Dr. Gall quite superseded those of the ancient philosophers, explained the different characters of several Irish Members of Parliament, and pointed out the propensities and especial gifts of Lord Salisbury and Mr. Gladstone. Several persons present at the meeting were selected by the audience for examination, and their characters and capabilities were correctly delineated by the Professor, this feature of the evening causing a great deal of amusement. Votes of thanks to the lecturer and the chairman closed the meeting. Mr. Morrell also addressed the Band of Hope on the same day, and during his visit was interviewed by a large number of persons.—*Grantham Journal*.

"A VETERAN PHRENOLOGIST," was the title of a paper read by Mr. D. Lamont before the Newcastle-on-Tyne Young Men's Christian Association, on December 9th. The essay was well reviewed and favourably criticised. Mr. W. M. Richardson, the General Secretary of the Association, was in the chair, and gave some interesting reminiscences of Mr. Fowler's visit to Newcastle twenty-five or twenty-six years ago. Mr. Thomas Moffett, the Evangelistic Secretary, said he could well understand Mr. Lamont's high estimate of the "Veteran Phrenologist;" he had been examined by Mr.

Fowler ten or twelve years ago, and the reading was so true to what he was aspiring after rather than what he then was, that he started up and asked him if he knew him. Mr. Moffett also referred to the able and stirring lecture which Mr. Fowler had delivered to young men during his last visit to Newcastle a few years ago, at which he had the privilege of taking the chair, and expressed his regret that the veteran Phrenologist had not paid them another visit. Failing a visit and a lecture from the genial old man, they were delighted to hear, as they had heard that night, something about the man and his work. Mr. Lamont was heartily thanked for his paper.

Book Notices.

A New Psychology: An Aim at Universal Science, by the Rev. George Jamieson, D.D., author of "Profound Problems in Philosophy and Theology," and "Discussions on the Atonement," &c. Edinburgh: Andrew Elliot, Prince's Street. Contains chapters on the Philosophy of Substance, the Philosophy of Mind in Conjunction with Matter, the Philosophy of the Conditioned, the Philosophy of Natural Law, &c., &c., &c.

The Comprehensive Cookery, as used in Dr. Allinson's Hygienic Establishment, is the title of the latest cookery book. It contains over one thousand tested recipes, and gives complete directions for making numerous palatable, nutritious, and economical dishes; also for the noted health bread, gem breads, &c., &c. Compiled by Mrs. E. May, teacher of Hygienic Cookery. A good shillingsworth, and should be read carefully by all who wonder what the vegetist has to live upon. Can be had from the Office of this Magazine.

Correspondence.

THE VALUE OF A PHRENOLOGICAL EXAMINATION.

To the Editor of the PHRENOLOGICAL MAGAZINE.

Blackhill, October 30th, 1890.

DEAR SIR,—It is with the greatest gratitude to you that I now write this letter. I consider you a very great benefactor to me and my sons for examining phrenologically our heads, and giving us written charts on them. By acting on your advice I have been able to start my sons in the right track. I regard phrenology as a very important science, when portrayed by a phrenologist like you.

In March 1881 you examined my head and those of my two eldest sons. The correctness with which you described our several characters was, on the whole, marvellous. My eldest son, then a little over 18 years old, was serving his time to be an engineer. Before knowing this you said that he was greatly adapted for an engineer. Men were very much needed who could build bridges and other public works so that the wind could not blow them down, and you said he would be able to do that. On hearing that he intended to be an engineer, you advised him to stick to it, and he has done so. At the age of 21 he went to Australia, and eventually settled down in Sydney, a stranger amongst strangers. He obtained a responsible position in the Government Architect's Office, and has now held that post for between five and six years, and has become a civil engineer.

My second son was 14½ years old when you examined his head. You said he would make a great engineer, or a good professor and consulting doctor, and advised him to study medicine, as he would become a doctor of superior ability, able to take his place by the side of the best. It was then decided that he should go in for medicine, and I am happy to inform you that he has more than realised your prophecies. He has now four university degrees, and although only 24, has done an enormous amount of practical work, and now holds an important post as medical officer in a lunatic asylum. I am honestly convinced that no two young men were ever started in any profession, trade or business more suited to their abilities than my two eldest sons, and I must thank you with all my heart.

You examined my three younger sons' heads in 1883. My third son was then 11½ years old. You recommended him to study for the Church, and accordingly I sent him to Durham University two years ago, and I have every reason to believe that he is in his right place.

My fourth son was ten years old, and you gave what has proved a very accurate account of his character.

My youngest boy was five years old, and you also described most correctly his characteristics.

You told me then that you would be very glad to hear of the success of my sons. I think I have been rather remiss in not writing to you before now. I have waited to see what results I should have to report to you. I have just now been reading all our charts, which you gave us, and I am bound to say they are as true as life on the whole. I have over and over again said that the money I paid you was the best spent money I ever expended. I would recommend all those who have sons, to get their heads examined by a man that understands phrenology. You have made me an enthusiastic believer in the science, and it would be most ungrateful on my part not to acknowledge my obligation to you. You may make what use you like of this letter. With grateful thanks to you,

I am, dear Sir, yours faithfully,

Professor L. N. Fowler.

WILLIAM RAW.

To the Editor of the PHRENOLOGICAL MAGAZINE.

DEAR SIR,—At the monthly meeting of the “British Phrenological Association,” held at Imperial Buildings on the 6th January, a very instructive and interesting lecture was given by Miss Jessie Fowler on “Brain Dissection,” illustrated by models, microscope, lantern views, and a human brain; and it was my intention to furnish a notice of it for the columns of the MAGAZINE. I sincerely regret that, having been suddenly called upon to take up some heavy legal duties in connection with the death of a friend, I have been quite unable to spare a few minutes to look over my notes. There was a good attendance

of members, and a discussion followed. Miss Fowler concluded a very enjoyable evening by conversational explanations of her collection.

Yours truly,

G. Cox.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

STOCKTON.—This lady has a very ardent, earnest, sincere cast of mind, as well as possessing a very high degree of activity. She is intense in all her mental operations, and throws her whole soul into everything that she does, cannot be a half and half sort of person. The danger is that she is liable to go beyond her strength and overdoing; but she is not of a sickly type, is actually quite well qualified to resist disease and overcome impediments that would be too much for others. Her brain power is rather too great for her body, hence she needs to restrain mental action, take time to live and to enjoy life; but she has so much aspiration, sees so much she wants to do, and needs to be done, that she is liable to take more labour upon herself than is necessary. If she becomes sickly, or proves to be short lived, it will come from living more than three hundred and sixty-five days in a year, or overdoing. The most important thing to be taken into account in her case is self-government, presence of mind; must learn to wait, to be patient, and let things come to her rather than she go after them. She looks as if she might be delicate, but my impression

is that there is very little tendency to disease, and with care she can spin out her life to be in the neighbourhood of eighty before she closes her eyes finally. She has great will-power and determination of mind, and would live where others could not go through half. She can resist diseases better than many can. She has a high degree of energy and force of mind, is strong in her likes and dislikes, is a devoted friend, and if she has any enemies they may just as well be out of her company as in it, for she has a superior faculty of being sarcastic when she wants to.

J. O. (Bolton).—You will be safe in putting a high value on yourself, and in selecting a sphere of life that requires an extra elevated tone of mind. You inherited somewhere back in your ancestry superior qualities of organisation, and with culture and a proper sphere for action, you will exert a superior influence. You are favourably balanced both in body and mind, and you must strive to make the best of your organisation. You have regular features, a uniform development of brain, and a favourable balance of power in the physical direction. You may not be specially strong and robust, yet I see no reason why you should not be uniformly healthy and equal to any ordinary task. It is a matter of considerable importance who you marry, if you marry at all, and what kind of a life you live. You are not at all adapted to an ordinary life, a rough sphere of labour, or to cope with uncultivated people. You are adapted as a wife to a gentleman of superior qualities, well educated, and from a superior family. You are so fairly balanced in your mind that you will be able to live quite a uniform life. You have good powers to entertain, a high degree of self-appreciation, and a very strong devoted love nature.

G. P. (Ulverston).—You have in your constitution, good stock, long life and health. You are capable of a high degree of improvement. You must consider yourself a student as long as you live and continually work away and develop, discipline, and expand your mind as much as possible. Mix up with intellectual and practical men; learn to put into practice your own ideas; cultivate close, definite observation and memory of details. You have an abundance of capacity to think and have plenty of ideas of your own. You had better cultivate the speaking talent, for you could excel in argument. You are not wanting in ingenuity, have considerable versatility of

talent, and can adapt yourself to a variety of circumstances. You are more intellectual and moral than you are social or forcible. You will not be so much characterised for having a warm, genial, social influence as you will for strength of intellect and a high moral tone of mind. You probably will live to be a very old man.

J. A. S. (South Shields).—You are naturally industrious and a hard worker, are one of the “sledge hammer” kind. You do everything up strong. Are forcible, active, critical, discriminating, given to argument, and are very positive in your opinions, determined in your course, and you will have your own way whether or no. You are very persevering, and particularly intuitive and critical in your discernment of character and motives. You would make a metaphysician if you gave your mind to it. All your thoughts and conversation come to a point, for you delight to say things that tell on the feelings of others. If you became a preacher you would be a special revivalist in whatever sphere of life you filled; you would go into the merits of the thing and get as much out of it as possible. You have good perceptive powers, excellent capacities to analyse and criticise, and have great presence of mind in times of danger.

W. K. (Dumfries).—This child has at present a high degree of vital power and animal life, and if circumstances are favourable she will grow into a strong, executive, forcible woman. She is rather wonderful now for her memory of people, faces, and the forms of things, will pick out her letters herself, and knows people when she sees them the second time. You cannot please her better than to give her pencil and paper to draw and make things. She will be extravagantly fond of experiments, and want to see how everything is done, will remember any amount of conversation, and will take instructions easily by seeing the performance. She is ingenious, will succeed in arithmetic, will show quite a disposition to keep house and tidy up things. She appears to have a strong moral brain, is very teachable, and has a strong will and a great deal of ambition. Already she wants to know all about where the angels live and who God is.

THE
Phrenological Magazine.

MARCH, 1891.



MR. RIDER HAGGARD.

MR. RIDER HAGGARD has a strongly-marked character, without eccentricity. His features are well formed ; he has a prominent nose and chin ; there is harmony between the face and the head, and, so far as can be observed, between the head and the body. His organisation indicates more mind and reflective power than bodily strength or desire to be employed in a physical way. If, however, circumstances should call him into action on the battlefield, he would be one of the most determined and executive of soldiers. The development of his brain indicates great power of observation, and capacity to make him acquainted with the external world, the use of things, and the capacity to take advantage of circumstances. He is quite wide awake to all that is going on around him. He is particularly interested in all kinds of experiments and active

operations. He should be very fond of history, and exhibit a great memory of events, stories, and experiments. He loses sight of nothing, and should have extra ability to describe, explain, and compare one thing with another. He has a good mechanical or artistic eye, sees things accurately, and judges well of proportions, and can describe places correctly. Comparison is one of his largest intellectual faculties; hence he is able to illustrate, to say things in the most appropriate and fitting way, to adapt his knowledge to the circumstances, and to illustrate human nature accurately. He is ingenious, and readily contrives ways and means to accomplish his ends, more especially in a literary way. He has order, which is manifested more in a mental than in a physical direction. Language is rather large, giving him a good verbal memory and ability to explain himself fully and clearly. His head is particularly high in the upper back part. He is self-possessed; has great will power; is very persevering and tenacious, and quite anxious to carry out his idea to the letter. He is not much restrained by fear, and has confidence in himself in times of emergency. He has more pride than vanity, and has more appreciation of himself than he has of the good opinions of others. He prefers to take responsibilities, and to act and think as though the responsibility were on him. He is disposed to speak and act in a straightforward manner: there is not much of the tendency to evade and run round a question. He is not much governed by fear, and has not a timid and suspicious cast of mind; but cautiousness being large, would dispose him to keep his mind to himself, and to avoid all unnecessary exposures. His moral brain is developed so as to indicate sentiment, emotion, and consciousness of the material and spiritual. He is not a rigid theologian; is not a fault-finder, nor particularly given to criticising the motives and conduct of others, but his sympathies are wide awake, and he is much interested in what is going on around him. "Live and let live" is his motto. As a thinker, speaker, and writer, he is disposed to keep to the point and talk in a direct, if not a personal manner; for the central brain, from the root of the nose over the head, is large, which favours his distinct individuality of mind, and would aid to give settledness of ability and oneness of mind and character. He will wear well; and the more he is tested and tried the better he will appear, for he has not the organization to show off to the best advantage at first.

L. N. FOWLER.

A. R. WALLACE'S "DARWINISM."

PHRENOLOGISTS, who flatter themselves that their doctrine is making progress, must look with regret at Mr. A. R. Wallace's latest work—"Darwinism." The book, on the whole, appeals to naturalists only, with the exception of the last chapter, which should be read by every psychologist. I intend to give an analysis of this chapter, which the author describes as "A new argument as to the nature and origin of the moral and intellectual faculties of man."

He argues that, "Because man's physical structure has been developed from an animal form by natural selection, it does not necessarily follow that his mental nature, even though developed *pari passu* with it, has been developed by the same causes only." He fully accepts Darwin's conclusions as to the essential identity of man's bodily structure with that of the higher mammalia, and his descent from some ancestral form common to man and the anthropoid apes. The laws of variation and natural selection, acting through the struggle for existence, and the continual need of more perfect adaptation to the physical and biological environments, may have brought about ; first, that perfection of bodily structure in which he is so far above all other animals, and in co-ordination with it, the larger and more developed brain ; but, it is not therefore to be assumed against independent evidence, that the later stages of an apparently continuous development are necessarily due to the same causes only as the earlier stages. Certain definite portions of it could not have been developed by variation and natural selection alone, and therefore some other influence, law or agency, is required to account for them. If this can be clearly shown for any one or more of the special faculties of intellectual man, we shall be justified in assuming that the same unknown cause or power may have had a much wider influence, and may have profoundly influenced the whole course of his development. Of these "specially developed faculties of civilised man" (p. 470), he selects three for illustration—the mathematical, the musical, and the artistic.

What may be termed the mathematical faculty, is either absent, or if present, quite unexercised in all the lower races of man. From the fact that so many of the existing savage races can only count to four or five, Sir John Lubbock thinks it improbable that our earliest ancestors could have counted as high as ten. But, may I ask Mr. Wallace, is it a fact that some savage races can only count to five? Does such a savage mother not know whether she has six or seven children? That

there is no word for five is not sufficient evidence that they cannot count to five. The savage says 'four and one' for five, just as we say ten and one for eleven, and eight and ten for eighteen, as everyone knows who has studied the origin of our numerals.

Mr. Wallace asks, by what means has this faculty been so rapidly developed in all civilised races, and how has this rudimentary faculty become rapidly developed into that of a Newton, a Laplace, a Gauss, or a Cayley? We will admit that there is every possible gradation between these extremes, and that there has been perfect continuity in the development of the faculty, but, we ask, what motive power caused its development? We ask, what relation the successive stages of improvement of the mathematical faculty had to the life and death of its possessor, to the struggles of tribe with tribe or nation with nation, or to the ultimate survival of one race and extinction of another? If it cannot possibly have had any such effects, then it cannot have been produced by natural selection.

We conclude then (p. 467), that the present gigantic development of the mathematical faculty is wholly unexplained by the theory of natural selection, and must be due to some altogether distinct cause.

Of the musical and artistic faculties, he says, that these distinctively human faculties follow very closely the lines of the mathematical faculty in their progressive development, and serve to enforce the same argument. As with the mathematical so with the musical faculty: it is impossible to trace any connection between its possession and survival in the struggle for existence. It seems to have arisen as a result of social and intellectual advancement, not as a cause.

The artistic faculty has run a somewhat different though analogous course. Most savages exhibit some rudiments of it, but the glorious arts of Greece did not prevent the nation from falling under the sway of the less advanced Roman.

Besides, there is an "independent proof that the mathematical, musical, and artistic faculties have not been developed under the law of natural selection." These specially developed faculties of civilised man, which we have been considering, exist only in a small proportion of individuals; while the difference of capacity between these favoured individuals and the mass of mankind is enormous. According to the estimate of two mathematical masters in a public school, probably fewer than one in a hundred boys really possess the mathematical faculty, and the artistic faculty appears to agree pretty closely with the mathematical in its rate of occurrence; while, as to

the musical faculty, though undoubtedly in its lower form less uncommon than either of the preceding, a music master in a large school states that only about one per cent. have real or decided musical talent—corresponding curiously with the estimate of the mathematician. It appears then that, both on account of the limited number of persons gifted with the mathematical, the artistic, and the musical faculties, as well as from the enormous variations in its development, these mental powers differ widely from those which are essential to man and are for the most part common to him and the lower animals, and that they could not therefore possibly have been developed in him by means of the law of natural selection.

And, besides the three specially referred to, there are others which evidently belong to the same class, such as the metaphysical faculty, which enables us to form abstract conceptions of a kind the most remote from all practical application; to discuss the ultimate causes of things, the nature and qualities of matter, motion and force, of space and time, of cause and effect, of will and conscience. Speculations on these abstract and difficult questions are impossible to savages, who seem to have no mental faculty to grasp the essential ideas or conceptions; yet, whenever any race attains to civilisation and comprises a body of people who, whether as priests or philosophers, are relieved from the necessity of labour, the metaphysical faculty appears to spring suddenly into existence.

The interpretation of the facts now set forth is, that they prove the existence of a number of mental faculties which either do not exist at all, or exist in a very rudimentary condition in savages, but appear almost suddenly and in perfect development in the higher civilised races. Each of these characteristics is totally inconsistent with any of the laws of natural selection, and the facts taken in their entirety compel us to recognise some origin for them wholly distinct from that which has served to account for the animal characteristics, whether bodily or mental, of man.

The special faculties clearly point to the existence in man of something which he has not derived from his animal progenitors, of a spiritual essence or nature which we may best refer to as being capable of progressive development under favourable circumstances. On the hypothesis of this spiritual nature superadded to the animal nature of man, we are able to understand much that is otherwise mysterious or unintelligible in regard to him: The devotion of the soldier; the unselfishness of the philanthropist; the delight in beauty; the thrill of exultation with which we hear of any act of courageous self-sacrifice, &c. These are the workings within us of a higher

nature, which has not been developed by means of the struggle for material existence.

It will no doubt be urged that the continuity of man's progress does not admit of the introduction of new causes, but the fallacy as to new causes involving any breach of continuity, or any sudden or abrupt change in the effects has already been shown, as in the instance of glaciation.

In summing up, the author bases his arguments upon three stages in the development of the organic world, when some new cause or power must have necessarily come into action. Hitherto he has only argued upon the one stage of the more specialised mental faculties of man ; it is therefore necessary to recapitulate the two preceding lower stages.

The first stage is the change from inorganic to organic, when the earliest vegetable cell, or the living protoplasm out of which it arose, first appeared.

The next stage is the introduction of sensation or consciousness, the fundamental distinction between the animal and vegetable kingdom.

The third stage is " the existence in man of a number of his most characteristic and noblest faculties, those which raise him furthest above the brutes, and open up possibilities of almost indefinite advancement.

These three distinct stages of progress point clearly to an unseen universe, to a world of spirit, to which the world of matter is altogether subordinate. To this spiritual world we may refer the marvellously complex forces, which we know as gravitation, cohesion, chemical force, radiant force, and electricity, without which the material universe could not exist for a moment in its present form, and perhaps not at all.

In conclusion, those who admit the interpretation of the evidence now adduced, will be able to accept the spiritual nature of man as not in any way inconsistent with the theory of evolution, but as dependent on those fundamental laws and causes which furnish the very materials for evolution to work with.

We, who accept the existence of a spiritual world, can look upon the universe as a grand consistent whole, adapted in all its parts to the development of spiritual beings, capable of indefinite life and perfectibility.

To us, the whole purpose, the only *raison d'être* of the world, was the development of the human spirit in association with the human body. Beings thus trained and strengthened by their surroundings, and possessing latent faculties capable of such noble development, are surely destined for a higher and more permanent existence.

No doubt, those who still hold the 'orthodox views of the soul and of immortality, will be delighted with this chapter of Mr. Wallace's "Darwinism," but those who have been studying psychology from a physiological point of view, will deplore the error into which he has fallen. Had this wonderfully observant and acute scientific man—as Mr. Wallace undoubtedly is—had even a rudimentary knowledge of the principles of phrenology—or physiological psychology—he could not have written such nonsense as this: that the possession of the musical faculty and of the faculty for numbers distinguished man from animals, and imparted to man a distinction and an impetus sufficient to separate him from all his fellow partakers of animate life, and to lift him out of his and then known physical surroundings into an unknown and spiritual world. The musical faculty is dependent in the first instance on the appreciation of sound and the appreciation of time; and these two elements are certainly to be found in those animals, particularly birds, which can be trained to learn tunes. I have seen animals which can count; and, while I admit that in civilised man these faculties have reached a high stage of development, I assert also, that both in savages and animals their rudiments are to be found, and that the possession of these faculties is no distinction whatever between man and animals, between the organic and the spiritual world.

No wonder, if our most distinguished scientists continue to speculate regarding the manifestations of mind; if the futility of metaphysics is not demonstrated even at the close of the nineteenth century; phrenology can neither be understood nor appreciated.

BERNARD HOLLANDER.

THE ORGAN OF THE PNEUMA.

IN a well-considered article contained in the August number of the PHRENOLOGICAL MAGAZINE, from the pen of Samuel Eadon, M.A., and entitled, "Bible Psychology and the Phrenology of the Future," occurs as a wind-up these words: "Will some member of the British Phrenological Association carry out a still more advanced phrenology and point out the organ of the pneuma, its functions, and its bearings on pneumataë, and the theology of modern times?" Although located at the Antipodes, so far as locality is concerned, and so likely to be forestalled with reference to the answering of the important query suggested, I nevertheless feel called upon to do what in me lies to meet the demand which has thus arisen.

Quite two years ago, I was impelled to write something which I entitled, "Phrenology Outlined Spiritually." The title I gave to the manuscript correctly indicates its contents. After some delay, I succeeded in obtaining a publisher for it, and was informed more than a year ago that it was being set in type. Events of an embarrassing character have since brought the little book to a dead stand, or it might ere this have been before the world, meeting its fate, as all new ideas have to do. In that small work is clearly shown, by many plain scriptures—almost entirely from the lips of the Nazarene—that every organ of the brain, without exception, is capable of employment in two widely different directions; that when employed in one direction it is enslaved by material things, is of the earth earthy, and leads its possessor into all that is degrading and corrupting, thus agreeing with the thought expressed by the Apostle Paul:—"He that soweth to the flesh, shall of the flesh reap corruption;" and when employed in the opposite direction, it is led by the spirit to have and to deal with purely spiritual things, it has become of heaven, heavenly, and so leads its possessor into all that is elevating and life-perpetuating, so agreeing with the thought expressed by Paul:—"He that soweth to the spirit, shall of the spirit reap life age-lasting."

I heartily agree with Samuel Eadon that "there are powers and faculties in the soul (the psyche) undreamed of as yet; and the pneuma (the God-consciousness (? consciousness) in man, the Divine breathed-in spirit) is yet hardly known even by name, its organ having not been pointed out, and consequently its culture and training are as yet one of the impossibles. The small work above referred to is a first attempt at outlining the important subject mentioned, and in reply to S. E., I will herein give a brief synopsis of what is therein quite imperfectly outlined. When—well awakened or resurrected from its living tomb, there is in every man and woman this God-consciousness I have above referred to. An era, or epoch, is dawning upon, growing into, or evolving from the world's history which will chase away the thick darkness which has up till now entirely swamped and obscured the world's theology; and the same "God-consciousness" that possessed the Nazarene, and by means of which his eventful life history was made up, will again become wrought into the experience of those who have developed in the right direction sufficiently, and then nothing will be wanting to permit the expansion of humanity in the heavenly or spiritual direction of great exaltation and glorification for which it is predestined by the eternal purpose of God.

How hard soever it may appear to many to realise that everything material is illusory, it is nevertheless a very essential truth even now in the act of being distinctly realised by the select few. Taking that fundamental fact into account, it is comparatively easy to proceed in our investigation ; without it we are bound to be helplessly at fault. When the Nazarene said, " Lay not up for yourselves treasures on earth, where moth and rust do corrupt, and where thieves break through and steal ; but lay up for yourselves treasures in heaven," etc., what organ save that called " acquisitiveness " was he appealing to ? Employing it to lay up treasures on earth, what is that save " sowing to the flesh ? " Using it to lay up treasures in heaven can only be then " sowing to the spirit ! " The Nazarene said again : " I receive not honour from men." What faculty save that of " approbateness " was then expressing itself ? The same in the following :— " How can ye believe who receive honour one from another, and seek not the honour which cometh from God only ? " While approbateness clamours for its reward from man of an earthly character it is sowing to the flesh, and must then as a certain consequence from and with that flesh realise corruption ; when, however, nothing less than a pure divine reward and acknowledgment will or can satisfy it, sowing to the spirit is expressed by it, and the certain consequence then is life age-lasting.

Sowing to the flesh again exhibits the domestic faculties satisfied with the utterly illusory ties of domestic life ; but the Nazarene, filled with his God-consciousness, said, " Who are my mother and my brethren ? " Then, promptly replying, he affirmed from the real, substantial, truthful side of his inner nature, " Those doing the will of my Father who is in heaven, the same is my brother, and sister, and mother." Domesticity, as it now satisfies and holds the many, is therefore " sowing to the flesh ; the Nazarene's way of putting it and viewing it, grasped only by the very few, is clearly therefore " sowing to the spirit." The organ of destructiveness—or, to use a colourless term in designating the true function of the said faculty—executiveness, sows to the flesh, while it executes the purpose of the external self-nature, or of the customs and ways of man in the world at large ; but it as certainly sows to the spirit while it executes the pure will of God when it has clearly before it what that will is. One further illustration, and I will not weary my readers any more at present. The Nazarene, acting from his God-consciousness, lived the life of a perfectly-developed spiritual man. He illustrates, therefore, the true spiritual function of

amativeness. Say it is love in all its height, depth, breadth and fulness. But it did not take from or find expression with him in any limited, personal, or self-gratifying manner; it went out for humanity as a whole, quite regardless of sex or nationality. Realising this, he answered the materialistic Sadducees, who tried to entangle him on the resurrection question, by stating, "Ye do err, not knowing the Scripture nor the power of God. For the children of this age marry and are given in marriage; but those who shall be accounted worthy to attain that age, and the standing up again from amongst the dead, neither marry nor are given in marriage, but are angel-like, being the children of God, neither can they die any more." Well might the Nazarene, with such thoughts as these living and dominating his entire being as the outcome of the God-consciousness referred to, have said to the defective people of his time, in full view of all he had yet to make clear to man's spirit-consciousness when it fully awakened, "I have many things to say unto you, but ye cannot bear them now; howbeit, when the spirit of truth has come, he shall guide you into all truth." That spirit is now in the act of coming more fully than ever it could or did before, because while the centuries have been passing, man has been developing more capacity for reception, and is now approaching the time when his very innermost will awaken, and then he will rise into a new life, and will show a plenitude of power and privilege to which he is as a sower to the beggarly flesh a perfect stranger. Hoping that this barely outlined thought will prove to be the thin end of the wedge for the introduction of the mightiest of subjects, I now leave it to do its fuller work suggestively.

THEODORE WRIGHT.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

9.—ACQUISITIVENESS.

Propensity to acquire substance, and to appropriate it to one's self—love of property—desire to amass wealth, lay up, own, possess, keep, &c

This faculty loves money as an end, and not as a means; money for its own sake, and not for what it will purchase; gives ideas of exclusive right, and personal ownership and possession; creates that feeling of *meum et tuum*, or that impression that certain things are our own, and that other things belong to others, which is so universally

manifested among men, and upon which the law, and, indeed, all our claims to property, are founded, &c.

This faculty, in its operation, brings within our reach most of the necessities, and all the comforts and luxuries, of life ; is the great nerve of commerce, manufactures, inventions, and business in all its multifarious forms ; and is the great moving cause of husbandry, trade, the arts, and the improvements with which mankind are blessed. We little realize how much we owe to this faculty. The making of books, and apparel, and houses, the cultivation of farms, the building of villages, and cities, and stores, and canals, and the possession of nearly all that prevents life from being one dreary waste, may be traced, through the helps afforded by the other faculties, directly to the influence of this love of money. Without this faculty, man, like those beasts which are destitute of it, when he had satiated his hunger, and slaked his thirst, would wander on till again overtaken by these cravings of his nature ; would not provide, in health and the vigour of life, for sickness and old age, but, like the savage of our western wilderness, in whom it is generally small, would live "from hand to mouth," providing nothing for a rainy day, and idling away his life.

That this feeling exists, and even manifests itself in bold relief in the human character, every observer of human nature will at once admit ; and that, while, in some, it amounts to a ruling passion, in others, it is scarcely perceptible. Here, then, we have a distinct, a *sui generis*, and a homogeneous class of functions ; and we must hence conclude, that there exists a distinct power of the mind which performs it.

VERY LARGE.—One having *acquis.* very large, makes money his idol ; taxes, to the utmost, all his powers to amass wealth ; makes every sacrifice, and endures every hardship to secure this object, and allows nothing to divert him from it ; spends money grudgingly, and is so penurious and close-fisted as to deprive himself of many of the comforts and of all the luxuries of life ; is covetous and miserly, unless *benev.* and *conscien.* are equally large, and can never be satisfied with adding field to field, house to house, &c.

One having *acquis.* very large, with *combat.* and *destruct.* also large, and *benev.* and *conscien.* only moderate or full, will "grind the face of the poor," practise extortion, take every advantage of his fellow men, make all the money he can both by fair and foul means, and is light-fingered.

LARGE.—One having *acquis.* large, is stimulated by his love of money to use arduous and self-denying efforts in order to acquire wealth ; takes delight in accumulating property of every description ; spends his money reluctantly for things to be consumed ; cannot endure to see waste ; enters upon his money-making plans in good earnest, or, perhaps, makes them his main object of pursuit ; unless he is accustomed to handling large sums of money, has a watchful and eager eye upon the small change, both in making and in spending money ; thinks much of becoming rich ; seems to place his heart upon

what property he may possess ; and seeks with avidity to obtain all that belongs to him.

One having acquis. large, with self-e. only moderate, and conscien. and caus. only full, will occasionally discover a penuriousness, littleness, and closeness in his dealings, and also banter for trifles ; with hope large not only has strong desires to accumulate property, but also views every project of acquiring it, through the magnifying medium of hope, and thus exaggerates every prospect for making money ; and, with firm. and self-e. also large, is eminently enterprising with the perceptive organs also large is a first-rate judge of property ; prone to trade and speculate ; and, with secret. also large, will excel in negotiating, and in conducting a trade ; is seldom taken in, and generally gets the best of the bargain : with hope very large, cautious. only moderate, and consent small, will be disposed to enter so largely



Large Acquisitiveness.

into business as to endanger an entire failure ; to speculate too largely ; and, with large combat. and destruc. in addition, will be likely to prosecute his money-making operations with great vigour and energy ; and with firm. also large to drive them through all opposing difficulties, and either to "make or break ;" will be subject to reverses of fortune, and sometimes lose by imprudence what he has gained by enterprise ; but, with combat., cautious., self-e., hope, and the reasoning organs large, and the perceptive at least full, will combine uncommon energy ; with uncommon prudence ; may enter largely into business ; yet will be so careful and judicious as generally to secure himself against losses and accidents ; but with hope moderate, and cautious. large, will desire to enter largely into business, yet fear to do so ; and deliberate so long before he decides what to do, as to lose the most favourable time for action ; yet will sustain fewer losses, and, in what he does undertake, will be more sure of success ; will not invest his money unless he can foresee the necessary result of the undertaking ; to acquire property ; saves rather than speculates ; and prefers an income

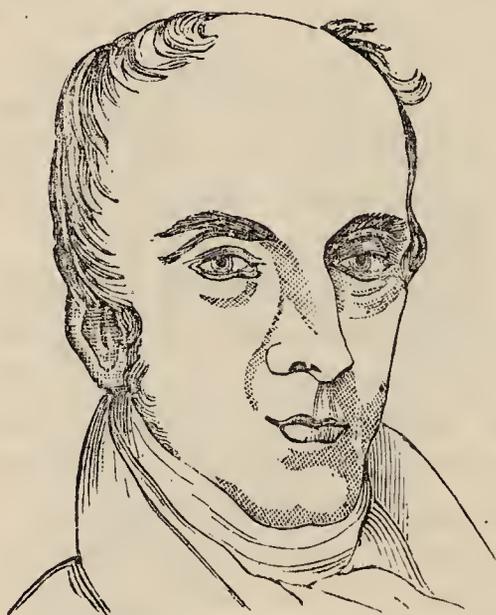
that is more sure, though it may be more slow, to one that is more promising, yet more precarious; takes all available security against losses by fire, by accidents, by dishonesty, or in any other way; will never be satisfied to "let well enough alone," nor to pursue one steady occupation long enough to reap much profit; with firm large, and hope less than firm., will be likely to pursue one steady business and plan of operation through life, unless literally compelled to change it by duty, judgment, friendship, or some other powerful motive: with cautious. large, will labour under the greatest anxiety about his property; and, with hope small, in the midst of wealth, friends, plenty, and the fairest prospects, may really apprehend poverty and even starvation: with compar. and caus. large, intuitively perceives what property will be likely to increase in value; lays judicious plans; makes shrewd calculations as to what will be; and, with cautious. also large, so calculates as generally to succeed, &c.: with conscient. large, though he may be very eager in his desire for money, and tax all his powers to accumulate property, yet will acquire it only by honest means; despise the "tricks of trade," and can be safely relied upon; with large intellectual organs, will prefer to make money by some intellectual, scientific, or literary pursuit, &c.

One having acquis. large, for example, with philopro. also large, will desire property both for its own sake, and also on account of children, or, with all the domestic faculties, be energetic for his family, and will spend it freely for their sake; with approbat. large, will seek money both to lay up, and also to obtain approbation by dress, equipage, elegant furniture, &c., and expend it freely for these purposes, yet may show penuriousness in other respects; with benev., will love money, yet give it freely to relieve suffering, and also to do good to his fellow men; with large moral and religious organs, will be likely to "be diligent in his business," economical, and perhaps close in money matters, yet will give freely to benevolent, missionary, and religious objects, and for the purpose of converting men to Christianity; with ideal. and ven., will be likely to lay up ancient coins, paintings, books, &c., and be an antiquarian; with the selfish faculties strong and vigorous, will lay up such things as will gratify his various selfish passions; and with ideal., books that are elegantly bound and embossed, minerals, curious specimens of nature and art, &c. Hence this universal scrambling for the "root of all evil," which is the bane of human happiness and moral virtue.

Phrenology shows us not only how strong the love of money is in every man, but also the character of this love, and the ultimate ends sought to be reached by it.

FULL.—One having acquis. full, will be likely to be industrious, frugal, anxious to acquire possessions, both from love of money, and also to secure the comforts of life; will be zealous, if not quite eager, in all his money-making pursuits; and unwilling to spend his money except when his stronger faculties demand it for their gratification; will be neither prodigal nor penurious, unless made so by circumstances; will be likely to save enough to live comfortably, but live

well upon what he has, yet, as a general thing, will find it very difficult to keep money by him, and seem to be extravagant. One having *acquis. full*, with *approbat.* and *ideal.* &c., large, will be industrious in making money, and quite anxious to become rich, yet will spend it too freely for fashionable and ornamental articles of convenience, dress, equipage, &c., or to make a show; with *ideal.* and *local.* very large, in travelling; with *adhes.* and *benev.* large, for the purpose of assisting his friends; with the religious organs very large, in promoting the cause of religion and advancing the benevolent objects of the day, and will take much more delight in spending his money in this way, than in laying it up; with large intellectual organs, in such things as will gratify these faculties; with *amat.*, in supplying the wants and pleasures of the other sex, &c.



Small Acquisitiveness.

MODERATE.—One having *acquis. moderate*, desires money more as a means than as an end, more for its uses than to lay up; will pay too little attention to small sums, spend his money too freely, so that he can hardly account for the amount spent; does not grudge what he spends, or gives, or sees given; though he may be industrious, will not be sufficiently economical; will as soon purchase things to consume as to keep; and prefers to take the good of his money as he goes along, instead of laying it up.

One having *acquis. moderate*, with the domestic organs large, will be likely to spend his money for the present, rather than reserve it for the future, wants of his family; with the selfish faculties strong, and the moral and reasoning deficient, will spend his money upon the gratification of his passions, and seldom accumulate property: with *approbat.* and *ideal.* large, and *caus.* only full, will be extravagant; likely to run into debt for the purpose of dashing out; and will be foppish: with *combat.*, *destruct.*, *self-e.*, and *firm.* large, will almost throw away money to gratify his will: with *ideal.* and *self-e.* large, never purchases a poor article, and pleases his fancy, comparatively regardless of its cost; and, with *hope* also large, will be too apt to

run into debt ; spend money in anticipation of future income ; and be too prodigal. Hence, the amount of one's acquis. can seldom be determined, either by the eagerness with which he seeks it, or the manner of his spending it ; and hence, also, some appear to be spendthrifts at one period of their lives, and misers at another.

SMALL.—One having acquis. small, holds money loosely, and often without receiving its full value ; is thoughtless how his money goes, and, with hope large, will live on, enjoying the present, thinking that the future will provide for itself ; will spend his last shilling as freely as his first ; does not save the fragments ; and, with approbat. and ideal large, and caus. only full, will be a spendthrift ; lay out his money to very little advantage ; run into debt without making a provision for payment, &c.

VERY SMALL.—One having acquis. very small, neither knows nor considers the value of money ; cares not how it goes, nor how expensive things are, provided they take his fancy : will have no idea of laying up property and, with ideal. and approbat. very large, will spend all he can command ; every thing pertaining to money being determined by his other faculties.

In women this faculty is generally weaker than in men, while ideal. and approbat. are generally much larger, which accounts for the fact, that they spend money so much more freely than men, especially, for ornamental purposes.

The sons of rich parents generally possess a small development of the faculty, having an abundance of money at command, they have had nothing to stimulate this faculty, so that, from want of exercise, it becomes weak and feeble. This likewise accounts for the fact, that the children of men who have made themselves rich, generally make a very poor use of their fathers' earnings, and often fall into dissipated habits, which is the cause of their ruin.

Thus it is, that full acquis. is an important inducement to industry and, therefore, highly promotive of virtue and moral worth ; whilst a deficiency of this faculty leaves open the floodgates of temptation and dissipation. If this is so, the lesson thus taught mankind, by phrenology, is invaluable. We are thus taught the importance of a proper cultivation of acquis., and, also, what that proper education is. This faculty certainly needs to be educated no less than caus., event., calcu., or any other faculty of the mind.

The perverted manifestations of acquis. are theft, cheating, extortion ; with construct. and imitat. large, forgery, counterfeiting, burglary ; penuriousness, meanness, a miserly, sordid, money-loving, covetous feeling, &c.

Acquisitiveness has three divisions : the front part gives power to acquire ; the middle part, saving ; the posterior division, hoarding.

LOCATION.—This organ is located in the ascending frontal convolution in front of secret. and above aliment. ; or, upon the sides of the head, and a little farther forward than the fore part of the ears ; or, in the middle of a line connecting the organs of cautious. and calcu. It seldom causes a protuberance, but when it is large, the

thickness of the head just in front, and a little above the tops of the ears, will be conspicuous, even to the eye.

Dr. Spurzheim marked this organ across the Sylvian fissure, taking in part of the inferior frontal convolution and part of the superior temporal convolution.

We refer our readers to Dr. Ferrier's book, "The Functions of the Brain," (see page 242), where the muscular action of this region of the brain is enlarged upon.

10.—SECRETIVENESS.

Propensity and ability to secrete, to conceal, and to suppress the expression of the other mental operations.

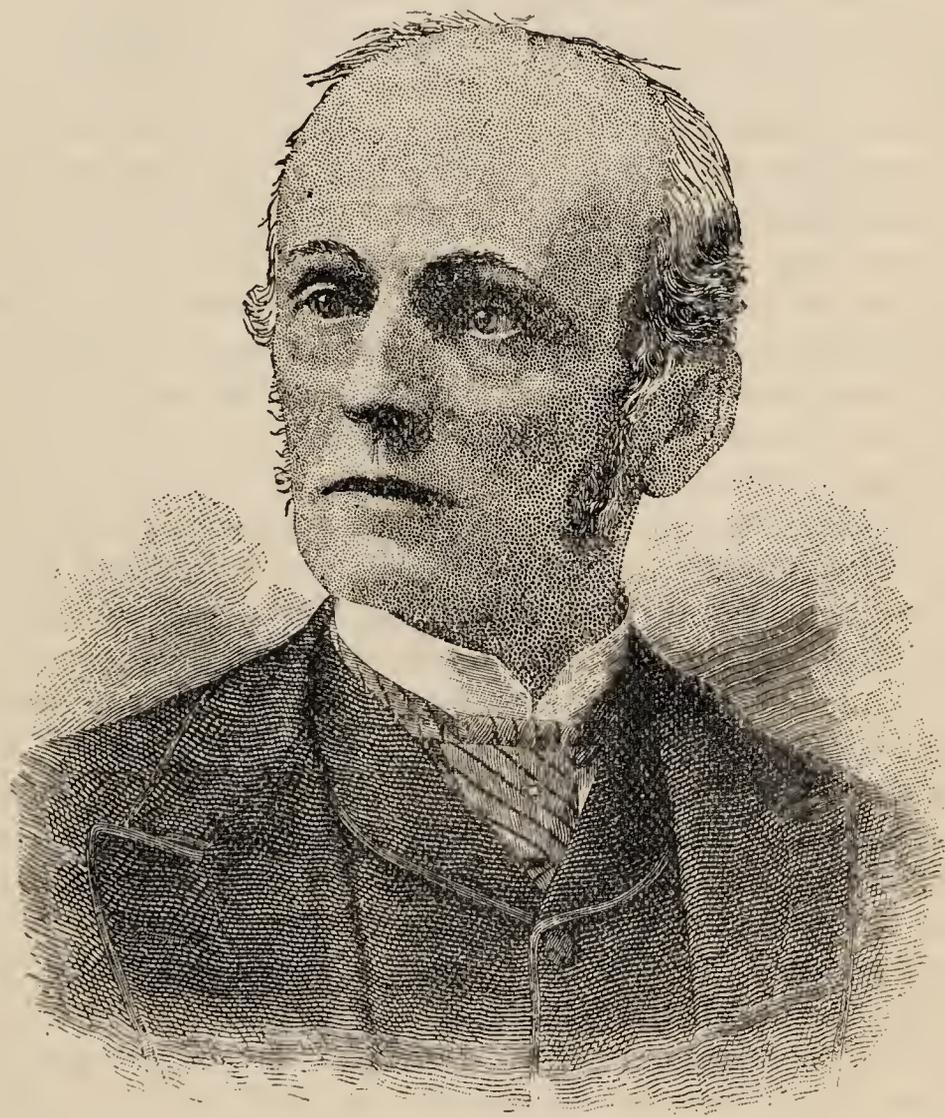
We often think and feel what it would be very improper for us to express. Hence the necessity of some faculty, the office of which is to suppress the open manifestation of the various mental operations, until the reasoning faculties, conscien., benev., &c., have decided upon the propriety and the utility of their expression. The legitimate office of this organ is not, as has generally been supposed, to keep the secrets intrusted to the individual, but to enable him successfully to keep his own secrets and plans from general observation. It is even unfavourable to keeping the secrets of others, because it creates an anxiety, not only to ascertain the secrets of others, but also to reveal them as secrets, but with the injunction of secrecy.

A good endowment of this organ is essential to prudence of character, particularly in speaking of and exposing one's business, &c., and also to etiquette and modern politeness. It removes the blunt, unpolished edge from the manner of expression, appearance, &c.; assists in covering many weak points of character, and prevents exposures, not to physical dangers (for this is the office of cautious.), but to the impositions of the envious and the crafty, and the false constructions of all.

VERY LARGE.—One having secret. very large, will be very apt to keep every thing pertaining to himself wrapped up in profound secrecy, and disclose his feelings to no one; be generally dark, secret, and mysterious in his movements; seldom accomplish his purposes, except in an indirect and intriguing manner; and be so crafty, reserved, and mysterious, that no one will know much of his real character; and, with combat., destruct.; and the selfish faculties generally large, the moral and reflective only full, and conscien. only moderate, will be "a snake in the grass;" practice art, cunning, and deception; with ailment large, will steal cakes and sweetmeats: with acquis. large, will take and conceal money, property, clothing, with approbat. and destruct. large, and conscien. only moderate, will lie in ambush, plot and execute his plans of injuring his rival in secret; and yet appear to be his friend.

LARGE—One having secret. large, will generally keep all thoughts, feelings, business, plans, opinions, &c., chiefly to himself, except when they are drawn from him; will effect his purposes indirectly

and without detection ; will govern his feelings, and restrain the open manifestation of anger, joy, grief, &c. ; can banish from his countenance and appearance the indications of his real feelings, and, with imitat. large, seem to feel as he does not : with firm., and self-e., and destruct. also large, will suffer pain and sickness without showing or complaining much of it ; is prudent about speaking ; careful in what he says ; reserved ; slow to communicate, form attachments, make acquaintances, &c. ; does not make the first advances to strangers ; is



Large Secretiveness.

not free in expressing his feelings, but does it equivocally, and [by piecemeal ; with conscien. moderate, is suspicious of the intentions of others ; wary, and always on the alert ; generally answers questions, expresses opinions, &c., in an evasive or indefinite manner, which will bear different interpretations, so that he seldom commits himself ; hesitates, and re-commences his sentences as though afraid to speak out plainly just what he thinks ; can employ cunning, art, management, and manœuvre, and act the double part ; says but little, yet thinks the more ; pries into the secrets of others, yet keeps his own to himself, or, at least, sounds others closely ; generally judges correctly of character, especially if individ., intuition., caus., and compar.

are large, and so successfully conceals his own character and purposes, that but little is generally known of him except by a long and intimate acquaintance.

One having large secret. and adhes., may sometimes communicate his feelings freely to his nearest friends, yet will seldom do this, and exercise more attachment than he expresses, with amat. also large, may love strongly, but will express his love in a somewhat doubtful manner: with combat. and destruct. large, unless the excitement is very sudden, and his temperament very irritable, may restrain, for a long time, the expression of anger, yet, when he does give vent to it, will blaze forth in good earnest: with self-e., or approbat., or both, large, caus. only full, and conscien. moderate, will be inclined to employ cunning and deception in advancing his reputation; operate indirectly, and through the agency of others: be given to eye-service, and will do many things merely for effect and "to be seen of men:" with cautious. large, will be very careful, not only about what he says, but also about what he does; and, with the reasoning organs large, be pre-eminently discreet and judicious, and never venture an opinion, unless he is very certain that it is perfectly correct, and then generally with a but, an if, or a perhaps; and will drop no word, and give no clue, by means of which he can be detected: with conscien. only moderate, and self-e. and caus. only full, and approbat. large, will be deceitful, and inclined to employ cunning and artifice in accomplishing his plans; contrive to throw the ignominy of his evil deeds upon others; be very apt to say one thing in your presence, and quite another in your absence; cannot be confided in as a friend: and, with adhes. only full, and imitat. large, can carry on his malicious designs under the garb of friendship: with combat., destruct., self-e., and approbat. large, benev., firm., and caus. only full, and conscien. only moderate or small, will be obsequious to superiors, and domineering to inferiors: with acquis. large, and conscien. only moderate or full, will practice the "tricks of trade;" and make a good bargain whenever he can, even though he is obliged to use some misrepresentations: with destruct., self-e., and firm. large, will possess great fortitude, and endure severe, corporeal suffering without flinching or complaining: with conscien. large, may sometimes equivocate, in which his interest demands secrecy, but will never knowingly deceive others to their injury, especially if his duty requires him to tell the whole truth: with adhes., benev., and conscien. large, and self-e. full, will be frank and candid in telling a friend his faults, yet will never reprove, unless his sense of duty compels him to do so: with firm. and self-e. large, will seem to yield, yet will do so only in appearance; will say but little, and make very little ado about the matter, yet, in acting, will be immovable and inflexible, &c.

FULL.—One having secret. full, will be able to keep his thoughts, feelings, and business to himself when occasion really demands it, yet will commonly express them without reserve; unless somewhat excited, will not be rash or blunt in the expression of his feelings, yet, when any of the faculties that are more energetic than secret, or when

those that are not, become suddenly excited, will give a strong expression to them, because, although secret. may be sufficiently active to hold even the larger organs in check when they are but little excited, it will not be powerful enough to do so when they are roused to more energetic action; is not hypocritical, nor yet remarkable for saying all he thinks; is somewhat reserved, especially upon a first acquaintance; will know well how to keep dark upon points which he may wish to conceal, and also know how to ascertain the intentions and the secrets of others; and will be reserved to strangers and partial acquaintances, yet frank and open among his intimate friends.

One having secret. full, with conscien. large, will never knowingly practice deception to the injury of another, yet may practice it in self-preservation, and in doing business, especially when urged to it by other selfish faculties, and when it is unrestrained by the moral and intellectual faculties: with acquis. large, and conscien. moderate, will bear, and even need, to be watched; sometimes give a false colouring to things in order to make a good bargain; and occasionally take the advantage.

MODERATE.—One having secret. moderate, is generally frank, candid, and openhearted in his disposition and intercourse with men, and so ingenuous and undisguised as often to expose himself to imposition and deception; chooses a direct manner of expressing his thoughts; has few secrets of his own which he wishes to keep, and cares little about learning the secrets of others, and, when things are told him with the injunction “not to tell,” he scarcely thinks of them again; and generally despises secrecy wherever he finds it.

One having secret. moderate, with combat. and destruct. large, tells others just what he thinks of them; is often understood as saying more than he really intended to say; and frequently expresses his anger in a harsh, blunt, and offensive manner; but, with conscien. equally large, and concent. moderate, soon recovers his wonted serenity of temper, and, if he is conscious that he has said or done anything wrong, is soon very sorry for it, and ready to make any reasonable reparation asked: with conscien. at least, full, firm., self-e., benev., and caus. large, will take an open, fair, honest, honourable, dignified, and high-minded course, and heartily despise everything like low cunning or management; employ none but fair means; and do nothing behind the curtain: with self-e. only moderate, benev., ven., and adhes., large, is naturally upright and honest himself, and open and fair in his dealings, and thinks others equally so; is too ready to trust others, and especially those who call him their friend; presumes too much upon the integrity and honesty of others, and relies too implicitly upon their word, so that he is extremely liable to be deceived and imposed upon: with self-e. or approbat., or both, and hope large, is given to egotism; apt to talk too much of himself; becomes enthusiastic in telling what he has done or can do; is often the hero of his own tale; and too forward to display himself: with cautious. large, manifests great care and deliberation in his business, yet is very incautious in his manner of speaking; is judicious in lay-

ing his plans, and providing against a time of need, and very deliberate and prudent in making all his arrangements, yet is very imprudent in the expression of his feelings.

SMALL.—One having secret. small acts just as he feels, speaks just what he thinks, is so direct in his manner of expression as often to give needless offence ; speaks out his whole mind without due regard to time, circumstances, or manner, and prefers natural and forcible to elegant expressions ; is natural and open in his manners ; and, with lang. full, generally ready to enter into conversation with his friends, and even with strangers, and to communicate to them his business, history, opinions, feelings, &c.



Small Secretiveness.

One having secret. small, with conscien., benev., and the reasoning organs large, will be incapable of deception, censure hypocrisy, concealment ; keeps nothing back ; gives away almost entirely to his feelings unless they are checked by his other faculties ; and has a window in his breast, through which all that is passing in his heart, can be plainly seen.

VERY SMALL.—One in whom this organ is very small, is a total stranger to the function and the influence of this faculty.

A deficiency of this faculty, by exposing at once whatever excesses or defects of character one may possess, is apt to leave, at first, a very

unfavourable impression of a person upon the minds of others, yet, if it exposes the more disagreeable traits of character, it equally reveals the virtues; so that, if the agreeable traits of character greatly predominate over the more disagreeable, the individual will appear still more amiable in consequence of this deficiency; and, *vice versa*.

This faculty, in its perverted exercise, produces lying, deceit, hypocrisy, the chief object of which is to create false appearances, and also the innumerable arts and make-believes which enter into society as it now is. From this faculty also, with large approbat., self-e., destruct., and combat., unrestrained by the moral or intellectual organs, arises that tattling which does such immense mischief.

In the American head this organ is generally large: hence, that reserve in communicating things about themselves, and that tact in prying into the affairs of others, for which they are so noted; but in the Southern head it is small, which produces that frankness and openness which characterize Southern gentlemen.

Secret. is divided into three parts: the front part gives reserve, the middle part gives policy and tact, the back part gives evasion.

LOCATION.—Secret. is located in the superior temporo sphenoidal convolution. It is in the infero parietal area of the skull, just above the organ of destruct., and runs nearly parallel with it, the centre of it being about an inch above the top of the ears. Or thus: let a person standing behind one that is seated place the third finger horizontally upon the head, so that the lower side of it will just touch the tip of the ear, and it will rest upon destruct; then let the second or middle finger be separated from it about three-eighths of an inch, and it will rest upon secret.; or, if the organ be small, fall into a depression: then let the first finger be separated from the second about five-eighths of an inch, and it will rest upon cautious., which, however, will be a little farther back than secret. When it is large or very large, with cautious. and destruct. also equally large, there will be no prominence, but all of the side-head above the ear will be full, rounded, and thick.

GENUS II.—MORAL, RELIGIOUS, AND HUMAN SENTIMENTS.

The character of the sentiments is much higher, more elevated, and more humanizing than that of the propensities. A very correct idea of the nature and character of these sentiments may be derived from a comparison of civilized man with savages and barbarians, or of man with the brute creation.

SPECIES I.—SELFISH SENTIMENTS.

These seem to be intermediate between the propensities and the moral sentiments, partake, in part, of the nature of both, taking their direction, and the character of their manifestation, from the propensities when they predominate, and from the moral sentiments, in case they are the more energetic. Like the propensities, they greatly increase the propelling power, and the efficiency of the character; yet they terminate upon self, being designed to secure selfish interests.

MEN AND WOMEN OF OUR TIMES.

IN the death of MR. BRADLAUGH, England has lost a strong, able, and vigorous supporter of the Liberal party. Though only in his fifty-eighth year, he crowded into his comparatively short life more hard, earnest work than can be said of many men who have lived twenty years longer. A singular prediction was made of him by L. N. Fowler, in 1864.

When making an examination of his head, without knowing who he was, Mr. Fowler said :—"Your brain is over large, and your bodily energies are a little inferior. You have scarcely enough vitality, even with prudence, to live to old age ; but, if you are imprudent, and give yourself up to mental exercises, to late hours, and severe labours of the brain, you will probably shorten your days very materially."

Some further remarks made at the same period are interesting from a phrenological stand-point, which prove unmistakably that mental variation impresses itself upon the skull. Mr. Fowler continued, "Your brain is very remarkable for its foundation, some of its organs being decidedly large, while others are only moderate, hence you have not a good balance of character. You have a general inclination for thinking, are decidedly original, quite quick to see the bearings of a subject, and specially analogical and critical, as well as discriminative in your mode of reasoning. You are very forcible and executive ; you take hold in good earnest, and work with all your might at whatever you do. You are liable to spend almost too much energy in the gratification of your various desires. Your destructiveness is large enough to give the elements of great indignation, and you feel at times as though you wanted to demolish something. Another feature of your mind is independence, self-reliance, confidence in yourself, desire to maintain your own individuality, and carry out your plans and purposes. You are also characterized by your will, determination, positiveness of purpose, and power to decide definitely what you will do, and what you will not. You have almost excessive benevolence ; your sympathies and feelings are both comprehensive and strong. You have rather large combativeness, which gives the spirit of opposition and the disposition to resist all encroachments ; this, combined with your self-esteem, tends to self-defence ; and you are urged to go where there is opposition rather than to avoid it. You would prefer to be the medium through which opposition should be manifested rather than to be a silent looker on." These last named faculties : benevolence, combativeness, and self-

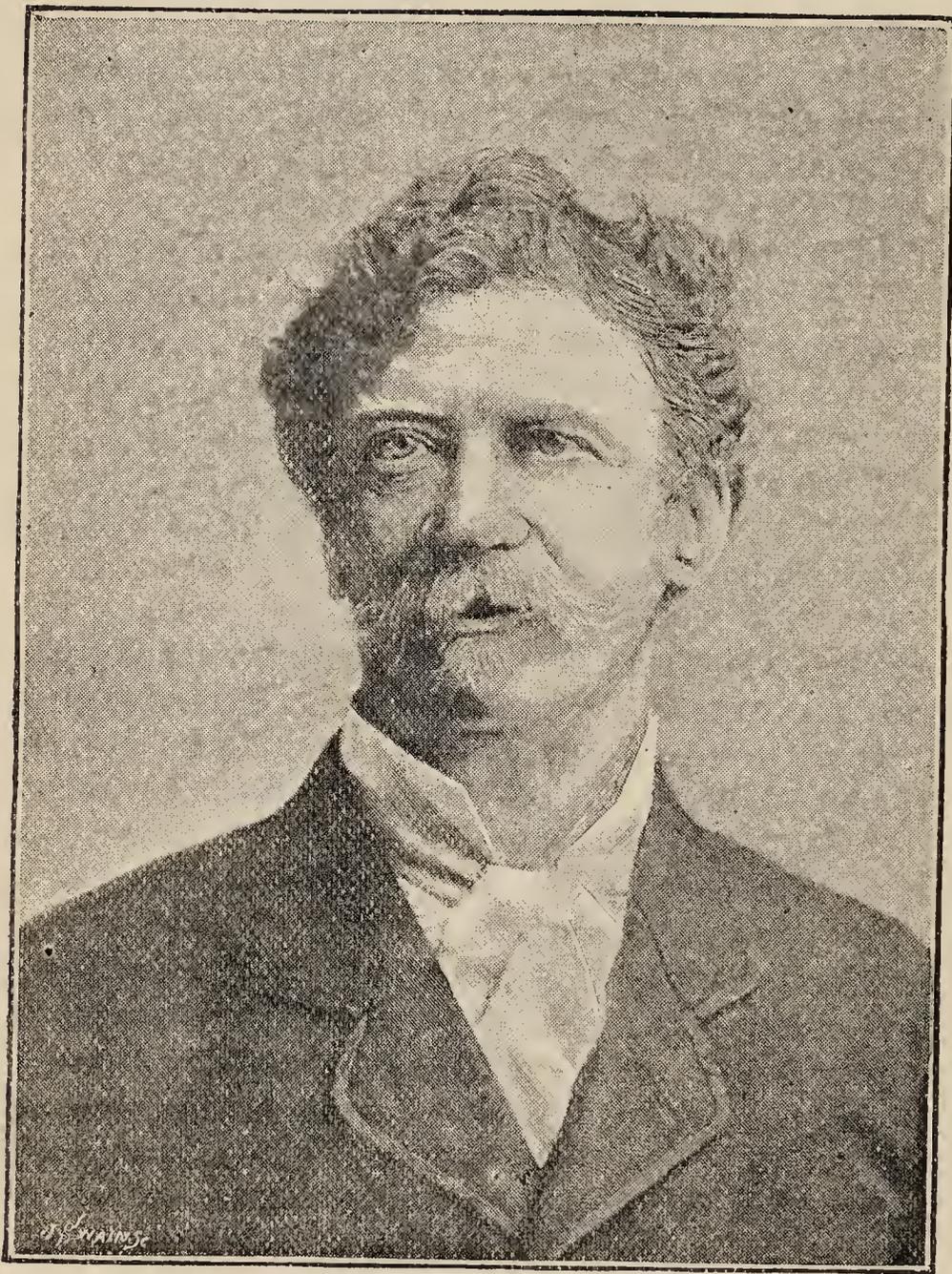
esteem, being large, account for his genial, kindly nature, as well as his stern unbending rectitude as a good citizen and a true patriot.

Examining his moral faculties Mr. Fowler said : " You have not much veneration ; the feeling of adoration, dependence, and respect is defective. Your spiritual nature is not so strongly represented as your love of the extravagant. Your hopes of the future are not particularly great. Your sense of guilt is not strong ; you do not feel like condemning yourself as much as most persons do." Of Mr. Bradlaugh's intellectual abilities he said, " You are adapted to a variety of pursuits. You could succeed in literature as a teacher in the sciences, in the law, as a speaker, a politician, or a statesman."

Mr. Bradlaugh had a chequered career from his earliest boyhood. He always threw his large heart, his strong sympathies, and indomitable courage into a cause that he considered needed defending, upholding, and supporting ; and few men have shown more power in resisting unpopularity than he, or have fought so confidently until the end has been secured. He will be missed for many a day in the ranks of freedom and progress.

SIR JAMES CRICHTON BROWNE began his studies of mental disease at an unusually early period. His childhood was spent in the Crichton Institution, Dumfries, of which his father, the late Dr. Browne, afterwards First Commissioner in Lunacy for Scotland, was medical superintendent. A correspondent of *The Daily News* tells a curious story of the late Dr. McVicar of Moffat visiting the Crichton Institution, taking with him Sir James Crichton Browne, then a child of four years old. As they entered the refractory male ward a man of colossal stature, in a paroxysm of furious mania, came rushing from the far end of it towards them. Dr. McVicar involuntarily stepped back towards the door, while the keepers formed a cordon around him. But to his horror, the next moment it was observed that the boy had let go his hand and slipped between the attendants and was advancing towards the maniac. A terrible tragedy seemed imminent, but happily when the child, unconscious of danger, held out his hand, the mad man stopped abruptly, gazed at him intently for a moment, then knelt down, took him in his arms, and fondled him with all a woman's tenderness. It has not been given to every eminent practitioner to commence his acquaintance with the characteristics of insanity either at so tender an age or under conditions so exciting.

THE LATE SIR EDGAR BOEHM.—The organisation of this gentleman indicates unusual force, energy, and spirit ; he was organised for a sphere of life requiring a great amount of courage ; he was not easily checked in his efforts. Few men were more bent on accomplishing their object than he. He was in every way a soldier, especially in times of danger, when he would be as cool and self-possessed as at any other time. He



THE LATE SIR EDGAR BOEHM Sculptor to Her Majesty the Queen.)

had ingenuity and versatility of talent. His mind acted with great promptness. The weakest point in his character would seem to be a want of prudence and proper restraint. He had great power of speech, was forcible in his language, and could wake up an audience. He had a very positive will, and a determined cast of mind, must have shown great magnetic power, and had a great influence over his audience. His talent for system and arrangement was very distinctly repre-

sented, he was inclined to method in everything ; had talent for mathematics, and should have been a great musical critic. His mechanical power also was equal to almost any demand ; he not only possessed ordinary mechanical capacity to use tools, but with his quality of brain, and strong imagination, he could show superior artistic ability. He had a good mechanical eye, and could judge accurately of proportions. He was such an independent thinker that he had everything in his own way, and did nothing by halves ; was quite original in everything he attempted, but the speciality of his mechanical or artistic ability should have been in his methodical way of working, for he was disposed to finish his work as he went along. He had brilliant imagination, a very correct mechanical and artistic eye, and was very intuitive in his perceptions of the best way to do everything.

MR. WILKIE COLLINS.—This gentleman has a high degree of the vital temperament and enjoys every minute of his



MR. WILKIE COLLINS.

existence. He will manifest a great amount of feeling and emotion as the occasion may require. He is many-sided and has great versatility of talent, he accumulates knowledge with remarkable rapidity, retains knowledge very easily, and has a great thirst for information. His perceptive powers are so large that it takes him only about half the time of ordinary minds to become acquainted with a subject, and he has a remarkable power to retain information when gained. Com-

parison being large it must aid greatly in a literary way ; besides, he has an intuitive mind, and can decide on a subject or answer questions very promptly. He is a critic, and easily notices discrepancies, inconsistencies, and mistakes. He is very precise and particular about arranging and systematising his plans and ideas. Is very easy and copious in conversation, and has the elements of an orator. He is remarkably kind, genial, and tender in his feelings. Is decidedly social, and possesses all the qualities necessary to enjoy family and home life. He is a good entertainer and well qualified to make himself agreeable ; is not proud, haughty, or over dignified. He is naturally social, rather easy in his manners, mindful of the presence of others, and is respectful. He has power of application, is able to give close attention to a subject for the time being, and appears to have all the force that is necessary for the occasion. He is not antagonistic or given to raising questions that require discussion, except that he criticises rather closely.

MISS MENE MURIEL DOWIE.—This lady possesses a remarkable combination of mental and physical powers—or rather motive and mental temperaments. She inherits many of these from her grandfather, Robert Chambers, as well as from her remarkable mother, who, with womanly tact and wisdom, has allowed her daughter the advantages of a broad and liberal education, which has not been trammelled by conventional ideas. To her roving disposition, climbing the Scottish hills with nature's own stockings, riding through Devonshire on a spirited pony, or living among the Polish peasants, has given a practical and healthy stimulus to her mental gifts. It was with much interest that I found the following phrenological characteristics, when I put my fingers through her mass of golden hair. Her forehead, which is invariably covered (every inch of it) is broad and fully developed, giving her uncommon intelligence, quick perceptions, a ready wit, and a keen understanding of character. She has great enthusiasm, power of expression, and artistic taste, which should show in her appreciation of the romantic or in scenery and fiction, ability to clothe her thoughts in appropriate and taking language, and artistic sense of all kinds of beauty. She possesses great ambition and energy to put into execution her strongest desires. She could not be happy with an idle life—having no special object in view. She is suited to a life of action, and as a speaker or worker in any line she would always desire the freedom of all her powers. She cannot be a sectarian, or be in any way contracted in her conceptions of things—neither could such

a development of faculties be very orthodox. She has great power to acquire knowledge and remember it. She has dramatic gifts and knows how to draw upon the sympathies and interests of others. This characteristic is a singular anomaly to her strong love of "nature unadorned." She has an independent spirit, can become quite indignant over the inconsistencies of people, and fearless and vigorous



MISS MENE MURIEL DOWIE.

in argument. Her small cautiousness gives her but little fear of danger, or prudence in thinking of the future. She is not easily daunted by opposition, and should be able to fight her own battles. She is plain and direct when expressing her ideas and criticisms. She makes few compromises, and asks for none. In a word, she combines in her personality the characteristics of a woman of nature and art. Her ardour, ambition, and enthusiasm after higher flights of attainment, and her

naïve assurance, joined to a sensitiveness of mind, make her one in a hundred. She could succeed as a descriptive or novel writer, reporter, explorer, actress, speaker, or correspondent.

THE PSYCHOLOGY OF PHRENOLOGY.—No. III.

BY NICHOLAS MORGAN.

THE FUNCTION OF INDIVIDUALITY.

HAVING in my two previous articles conclusively proved that the function of individuality is not what Spurzheim, Combe, Donovan, Sizer, and others suppose it to be, I purpose now to examine it with the view of ascertaining what its sphere of operation and duty really are.

The question for solution is not whether the cerebral mass designated individuality is an intellectual organ, for there is enough evidence to prove its existence. Notwithstanding, Bain, on the contrary, says it is "A redundance in the scheme of phrenology;" and he contends that "all the effects attributed to it would arise out of the other observing organs," or that they would do all the work and leave nothing for individuality to do. Now, Bain, though not a phrenologist, is an eminent physico-psychologist and logician. He is also a fair and honourable critic. Besides, he has closely viewed the subject from his own standpoint, and thereby laid phrenologists under an obligation to consider the conclusion at which he has arrived. Let us, then, pay due respect to him, and not only to him but also to truth, by examining whether his conclusion will bear the search-light of fact and logic.

Question: Do the other observing organs give rise to all the effects attributed to individuality? I answer emphatically No. Still, I am not surprised at Bain saying they do; for, at the time he said so, his knowledge of phrenology was not got from observing cranial form and comparing it with mental manifestation, but from reading Spurzheim and Combe's description of it, and a few contributions of other writers. Nevertheless his criticism is both fair and able. He, however, overlooks the fact that Combe, in his definition of the function of individuality, says, "It gives a desire to know objects," and "it prompts to observation." Here Combe stands on firm ground, and had he not wandered from it, his definition would have withstood the assaults of criticism. That this organ does, in some way peculiar to itself, give rise to a desire for knowledge, and also incites to observation is certain, and does not

admit of a doubt ; but the evidence cannot be clearly shown on paper. It has to be seen in cranial form and character ; and this requires acute observation, nicety of discrimination, and critical analysis, which comparatively few people possess. Moreover, those who have these necessary qualities should use them, not to prop up a theory, or a foregone conclusion, but with the sole aim of arriving at the truth.

There is a great difference of the observing capacity between one person and another in the same social position, who have been similarly trained and educated ; and the only assignable reason for this is, that the more observant have the larger development of individuality.

Some thoughtful phrenologists attribute to this organ the function of prompter on the stage of existence, or in the councils of mind. They suppose its duty is to stimulate the other observing faculties to activity ; and this, at first sight, seems plausible, but there are weighty reasons against the supposition. It assumes that one faculty has a kind of mastery over others, which is contrary to fact. The faculties however are united by a bond of sympathy, and the activity of one tends, through the law of diffusiveness, to incite adjacent organs to action ; and in this way individuality, when in energetic action, is likely to exert a powerful influence over its fellow perceptives ; but this is a general principle ; and not a single individual mental function.

Spurzheim erred greatly in naming this organ individuality, and attributing to it a function as an individual organ, which is not simple but compound, and which arises out of the activity of several, if not the whole, of the perceptive faculties. Even his division of the intellectual faculties into two varieties—perceptive and reflective—is misleading, for all of them both perceive and reflect. As, for example, the faculty called form, in the first instance, perceives the shape of a concrete thing, and afterwards, in trying to remember it, reflects, rolls back as it were upon itself, to recall the ideal image of it by reproducing a similar molecular action in its cerebral organ as that which was originally caused by the sight of the object itself. Thus, in a like manner, all the perceptive faculties reflect ; and those called the reflective, viz., comparison and causality, first perceive, then reflect, just as those named perceptive do. Example : Two ideas are brought before the mind, and comparison is said to perceive and compare them, and discriminate whether they have any resemblance to each other. In what sense then can these mental acts be said to be reflective ? In this, and in this only—namely, that they draw inferences, reason, and form judgments. Wherein then

do these operations differ from the following?—You show a person an uncommon object ; for instance, a fowl's egg of unusually large size ; and subsequently show him another, and declare that, to the best of your judgment, it is exactly like the former in both form and size. No, says he, it is not. It may be as large, but the other was sharper at one end, and he convinces you of having made a mistake. Here we have mental reflection manifested in the act of remembering the shape and dimension of the former egg, and also by comparing this ideal image with the actual objective presence of the latter egg, and in judging of their resemblance and difference. Question : What organs were engaged in these operations ? Obviously form and size were the principal operators. Without the activity of these, neither the conscious ideal of the one, nor the observation of the real presence of the other, could have taken place. What part, then, would comparison and individuality play in the case ?

This is an important question ; and for the present I shall leave it open for discussion, and merely note in passing, that all that comparison could do was to induce a desire to compare, because it can neither perceive size nor form, and therefore could not compare these qualities. As regards individuality, it is difficult to point to what part it would take in the transaction, for it is also incapable of perceiving form and size, and therefore could not see either the subjective presence of the one egg, or the objective presence of the other. This being the case, what more could individuality do than exert an indirect influence over the intellect through the desire to know objects to which it gives rise ?

Although each of the two orders of the intellectual faculties both perceive and reflect, there is still a distinct difference between their respective functions. The prime tendency of the so-called perceptive is to observation, and that of the reflective, to thought ; and there is yet another marked feature by which the one may be distinguished from the other, but which, through misconception, has apparently escaped the observation of phrenologists. It is this : the function of the perceptive in the aggregate is to individualise ; and that of the reflective is to generalise. Instead of the individualising property being the function of one organ only, it is the function of the whole. In other words, to individualise and generalise are functions of the intellect ; and each of the intellectual faculties contributes its share to the common result in accordance with its constitution. In fact, the attributing of the function of individualisation to one organ, was, as I have already said, a great error, which has caused

much confusion of thought amongst friends, and called forth hostile criticism from foes.

The organ of individuality, so-named, probably plays an important part in the individualising process, but it cannot by itself perceive, much less individualise a single thing. What then is its actual function? This question is not easily answered. Indeed, except in general, it is at present unanswerable. There is enough evidence to establish it as a primitive property of the mind, and to distinguish what its function is in general—namely, that a desire to know springs from it—to acquire a kind of knowledge that is outside of the sphere of the activity of all the other perceptive faculties, and consequently is beyond their cognizance. Hence, this faculty brings us into relation with a class of phenomena, or facts, that are peculiar to its perceptions alone.

I shall conclude with a quotation from my work, “Phrenology, and how to use it,” which has been out of print seventeen years, and will be new to many of the readers of the MAGAZINE :—

“The primitive aim of this faculty is to know the natural history of individual things. A large development of the organ gives a desire to study the natural history of man and animals, and the whole of animated nature—the strata of the earth, the mineral and vegetable kingdoms, the properties of the air, and the inhabitants of the ocean.

“The desire of some people is limited to observation of the external qualities of form, size, and colour; but some have a more extensive range of desire. They long to know the nativity, development, constituent properties, durability, and use of things. The former possess a moderate-sized organ of individuality, the latter a large development of it. A loaf of bread, for example, may please the eye and palate, yet leave a sense of dissatisfaction because some of its constituent elements are hid from view. Dominant individuality would incite* to an inquiry into the composition of the loaf—how grain is produced, gathered, dried, stacked, thrashed, and winnowed; how it is ground, dressed, and manufactured into flour and bread; and the chemistry of fermentation, distillation, caloric, and the changes they produce, would probably not suffice to satisfy the craving of the faculty. It is not sufficient for such people to feel the cheering sensations of a winter’s fire, but they must know the history of coal—where it is found, how procured, what it consists of, and may be converted into. These questions may suggest another set of inquiries

* In my revision of this sentence, I say would *probably* incite to, etc.

into the substance of coal, the time of its formation, the period which has elapsed since ; and a thousand other suggestive thoughts may be started in the mind by predominant activity of individuality."

Hygienic and Home Department.

HOW TO GROW OLD GRACEFULLY.

"OH, I never want to live to be old," said a bright, beautiful young girl to me some years ago. So intense was her feeling on this subject, that with soulfull earnestness she repeated the sentiment over and over.

She, in common with the major part of mankind, had been educated to regard mental senility as the natural and inevitable concomitant of physical senility ; and to her, as to every one, the spectacle of an individual in his second childhood or dotage, was most pitiable, as well as revolting. That it is the natural sequence of human life to grow old in the true and broad acceptation of that term, is not only false, but pernicious, and demoralizing in its influence.

According to the rule laid down by our ablest scientists—a rule which appeals to logical perception and common sense—"If one fact is comparatively inconsistent with a theory, it is as powerful in negating it, as five hundred." This theory, that all must grow old—lose their strong mental grasp—their buoyancy of spirit—their enthusiastic interest in the activities of life—their aspiration for intellectual and æsthetic culture, is successfully disproved by the lives of many of both sexes. Mrs. Somerville at the age of ninety-two, solved problems in Euclid with as much ease as she did at forty. The late John Ericson, at eighty-five was using his inventive genius with as great force as he did a quarter of a century ago. David Dudley Field, at eighty-three, has an intellect as clear, quick and penetrative as in the heyday of physical life ; nor has his vivacity lessened, nor his freshness diminished. Dr. A. Wilford Hall, at the age of seventy-two, possesses a genius as keen in its perceptions, an intellect as incisive in its logical power, and wields a pen as trenchant as he did at fifty. In fact, he has not even approached the Rubicon of his intellectual prime—that is, taking the accepted theory that there is necessarily a period of intellectual prime. Such a transitional crisis, however, is not the fiat of nature ; but the result of violated physical and mental law.

We could refer to the lives of hundreds to disprove the

theory that it is the order of nature to grow old. Nor is it alone, the intellectual giants and geniuses of the world, that have been able to preserve perpetual youth. Many ordinary mortals have kept the machinery of mind bright, shining and in complete order until life closes.

The fact that so many have lived much longer than the allotted time, "three score and ten," without being old, demonstrates the possibility within the reach of all humanity—the normal condition of the race; and, being the normal condition, it is the duty incumbent upon all to strive to attain it. Yes more; it is a positive sin to grow old; a sin against self and mankind. The primal ultimate object of life is to grow,—to grow constantly, healthfully and vigorously; and through this growth to round out the individual man, and radiate a substantial mental force that will stimulate soul growth in others.

Surely it is a rational and legitimate deduction, that growth of soul, year after year continued, will add strength and fullness to the mentality, developing keener perceptions, more acute and refined penetrative power, more subtle inspirations, and a firmer grasp on life's sublime divinities. Or, in the language of St. Paul, "While the outward man perishes, the inward man is renewed day by day."

To be old, in the true significance of that term, is to be a moss-grown ruin, a decayed and barnacled hulk, an animated mummy, a broken and useless vessel; and therefore an infliction to himself and to all who come within his radius. People lose their freshness and vigour of mind through transgression of the laws of physical and mental life and health.

The physical and mental are correlated in their influence. A cheery, sunshiny soul, an energetic mental force, imparts a stimulus to the whole organic economy, eliminates the elements of decrepitude that tend to lodge in the joints, sinews and fibres, and gives a glow and sparkle to the animal life which pulsates through the veins; while a gloomy, inactive mind depresses the vital force and causes derangement of physical functions.

A healthful play of all the bodily functions communicates an elastic impulse to the mind, while a diseased and morbid condition darkens the soul with clouds and fogs, clogs up the machinery of mind, and eats out its energies. Keeping the body in healthy, harmonious action, will not only prolong life, but also tends to keep the mind bright and keen, and charged with dynamic energy.

Still, while there is this reciprocal action, this correspondence between body and mind—mind can, to a great degree, transcend the decline of physical vigour that comes with

advancing years. If the vital force continues healthful and harmonious in its action, mind force can act through the medium of the brain with undimmed vigour. As has been shown, growth, constant and healthful, is the law of mind ; but growth is necessarily the result of action. And in this one word action is embodied the true philosophy of life, the secret of perennial freshness. Just because individuals cease to take an active interest in the world of thought, because they cease to keep step with the march of mind, to join energetically and enthusiastically in life's great work and duty, do they glide in mental senility—become old.

Examine the record of those who have lived to advanced age with the mind's power, clear, bright and forceful, and you will find that their lives were one of healthful activity, a never ceasing enthusiasm and delight in their chosen avocation.

As people advance in years they gradually give up one duty, one activity, one pleasure after another ; not because they have lost desire for such, but simply because the calendar tells them they are "growing old," and custom commands that all their youthful proclivities must be checked, all avocations in which youthfulness of spirit and fervour of soul delight, must be abandoned ; only the stern, stately, solemn and regulation set of activities which this regal authority has laid down as proper for old age must he indulge in or cultivate. Why should any one on account of age be prohibited from participating in any amusement, occupation, or mental and physical activity ? Or why should any healthful, buoyant impulse be suppressed ?

There is no requisite for such prohibition, either in natural or moral law. On the contrary, it is our imperative moral duty to foster by every normal means in human power the rapturous, glowing impulses of youth, the warmth of its imaginative force, its enthusiastic enjoyment of nature, ever present, limitless beauties, for through such means the health of body is improved, and every element of mind quickened into a stronger, purer energy ; and as a necessary corollary, a higher, keener enjoyment in mental life.

The silly edict of the Czar-fashion, that there must be evinced a great gulf between the feelings, pleasures, avocations of youth and age, has cursed the human race quite long enough. By its edict the colour and cut of the garment must be such as to proclaim to the world the individual is far on the road to senility. Sombre black and brown and gray must be the hue that marks the mile-stone on life's downward slope. Surely if anyone needs the inspiration of bright, cheery colours, it is the old in years. Youth with its bounding animal life,

it exuberance of feeling, can better by far carry the subdued and sombre colours.

Thanks to the teaching of hygiene the world is advancing into the light of freedom and moral independence. Year by year it is snapping the links rivetted by superstition and hoary-headed custom ; thus paving the way for the coming man and woman, who walk down life's declining path with regal step, every lineament of the face bespeaking vigour of intellect and freshness of soul.

M. S. ORGAN, M.D.

MRS. ALICE B. STOCKHAM, who is a lady doctor, writes on "The Talent of Motherhood." "I come back," she says, "to the incontrovertible axiom, 'Motherhood is the true test of womanhood.' That education and training, therefore, which best fit her for this function are for her true development. The best mother is the best woman."

OREGON has produced a musical phenomenon in Uda Waldrop. He is only six years old, and never received any instruction in music. Yet he can play the organ, keeping perfect time, and repeat upon it any tune he once hears. When he plays he does not look at the keys, but has a dreamy, far-away look, as if the soul of music had taken possession of him, and he plays just as well, if not better, when he is blindfolded. His transpositions are truly wonderful, for he can play any tune in any key. His musical talents are diversified, he can play various instruments and he sings very sweetly. The father says the boy's talent is the result of following the advice of the celebrated Prof. Fowler, the phrenologist, on pre-natal culture. There are three younger children born under the observance of the same law, and all of them are equally talented in the things it was intended they should be.

Notes and News of the Month.

THE spring class in phrenology, etc., in connection with the Fowler Institute, is now being held weekly. Any desirous of joining will please communicate with the secretary at once.

QUESTIONED as to the truth of the statement that Professor Hyrtl has the skull of Mozart in his keeping, Madame Augusta Hyrtl, a Vienna correspondent says, has stated that the skull stands in the Professor's study, and that it has been bequeathed to the Mozart Museum in Salzburg in his will.

A MURDERER'S SKULL.—In the Medical Weekly of Vienna Prof. Benedikt publishes the result of the examination of the skull and

brain of Hugo Schenk, the man who murdered six girls and was hanged eight years ago. The two parts of the brain, instead of being connected by a bridge, are separated by a deep fissure, a fact which is absolutely abnormal. Besides this, different parts of the brain are not developed in an equal measure, so that there cannot have been an equilibrium of different qualities. The skull is even more abnormal.

At the monthly meeting of the British Phrenological Association, held at the Imperial Buildings, Ludgate Circus, on the 3rd February, after the reading of a portion of a paper on "The Fundamental Principles of Phrenology," contributed by Mr. Gilbey, of New South Wales, two short papers, contributed by Mr. J. F. Hubert and Mr. Cox, were read, on "What are the reasons why Phrenology is not more generally accepted." There was a good attendance of members, and a hearty discussion, in which Dr. Renner, Messrs. Warren, Webb, Morrell, Owensmith, Hall, A. Hubert, J. F. Hubert and others took part. Mr. Donovan was in the chair.

In the article on "The Physical Development of Women," which Dr. D. A. Sargent, of Harvard College, contributes to Scribner, he says: "At the present time women as a class have more leisure than men for self-improvement, and we must look to them to help on the higher evolution of mind and body, not only in perfecting themselves, but in helping to perfect others. Already three-fourths of the school teaching force in the United States is composed of women, and they will soon be in the majority as instructors in physical training. The gospel of fresh air and physical improvement is being slowly imbibed by our best families, and the stock of fine specimens of physical womanhood is slowly and steadily improving."

THE monthly meeting of members of the Fowler Institute was held on February 9th, in the Imperial Buildings, Ludgate Circus, when Mr. Baldwin read a highly interesting paper, entitled, "Fatalism." There was an animated discussion at the close, in which Mr. Fowler, Mr. Coleman, Mr. Samuel, Miss J. A. Fowler, Mr. Ramsay, Mr. Smith, Mr. Barnard and others took part. The speaker endeavoured to show how we were fated to a certain extent by laws; but also how we could modify, and almost turn aside those laws by the right understanding of them, and right living, motives and actions. He did not believe in fatalism in the old-fashioned sense of that term, and the majority of the audience were in sympathy with the views of the speaker.

THE annual examination of students and other candidates, in connection with the Fowler Institute, was held on the 15th and 16th of January last in the Imperial Buildings, Ludgate Circus, under the personal direction of Mr. John Allen, who has been appointed examiner to the Institute. There were nine candidates, one being pre-

vented at the last moment from coming to London. The result has just been announced by the examiner, and is as follows: Only one pupil, Mr. William Brown, gained the requisite number of marks to secure the diploma of the Institute; five other pupils, Mr. Baldwin, Miss Maxwell, Miss Crow, Madame Patenall and Mr. Ashby, gained the certificates, while two failed to satisfy the examiner, more particularly in the theoretical part.

THE BRITISH PHRENOLOGICAL ASSOCIATION.—The Fifth Annual Meeting of the Association will be held at the Imperial Buildings, on Tuesday, 3rd March, at 7.30, and it is hoped that there will be a good attendance. The business of the meeting will be the election of officers under the ballot, introduced this year for the first time. The new rules were completed after a great amount of labour and attention, and passed at a special general meeting held on the 16th December, 1890, and should now be in the hands of all the members. The nomination papers were delayed until the rules were complete, and were rather late in reaching members, consequently the replies were not very numerous, many members being under the impression that they would not be in time to nominate. The voting papers have been drawn up by a sub-committee, and it is hoped that every member will take advantage of the opportunity to vote. The Council have prepared a list from the nominations received, and have marked on the voting papers the names of those members who, having worked for the Association, and taken an interest in it in the past, are willing to be elected, and endeavour to make it stronger and more efficient than ever. It is the wish of the Council that every member should vote as he likes, but for the benefit of country members, and those who have not the opportunity of knowing who would best serve the Association, this method has been adopted. It would be well if all members would notify any change of address.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

HILGAY WESLEYAN CHAPEL.—Recently Mr. J. W. Taylor gave an interesting lecture in the chapel on “Alcohol, and why it affects some people more than others.” There was a good attendance. A satisfactory collection was taken in aid of the Band of Hope fund.

IT may be interesting to some of the readers of the “PHRENOLOGICAL MAGAZINE” to know that Canon Beechy, of Hilgay, at the

age of 22 years, was Dr. Spurzheim's principal demonstrator. He is now 86 years of age, and is still a great believer in the science of phrenology. Canon Beechy presided at one of the lectures given by Mr. J. W. Taylor, at Hilgay, and gave some very interesting remarks upon the visit of Dr. Spurzheim to Cambridge, &c.

THE other evening Miss Jessie A. Fowler delivered her special lecture on "The Effects of Alcohol on the Brain and Character," before the members of the Y.A.U., at the residence of Mr. W. S. Caine, Clapham Common, when models and diagrams were shown and explained, much to the interest of the members.—*B. W. T. A. Bulletin.*

METHODIST NEW CONNECTION MUTUAL IMPROVEMENT SOCIETY, OLDHAM.—A Public Lecture was given in the above place on Thursday, January 29th, entitled, "Music and Phrenology." Mr. Brierley dealt with some of the leading musicians of the day, pointing out their phrenological powers and giving quotations of their compositions. The lecture was illustrated with some capital crayon portraits. At the close of the lecture several heads were examined, which were highly spoken of for their correctness. Mr. Brierley is an energetic phrenologist, and has met many opponents with their own arguments, in this town of Oldham.

THE HARLOW MUTUAL IMPROVEMENT SOCIETY.—Miss Jessie A. Fowler recently gave here an interesting lecture on "Heads and Faces." Her remarks on phrenology and physiognomy were illustrated with lantern slides. Those showing the anatomy of the brain and internal and external eye, ear and nose, and the popular examples (in colours) of Gladstone, Huxley, Grace Darling, Queen Victoria, called forth special applause. Two gentlemen well known in Harlow, stepped on to the platform at the close for phrenological examinations, and were highly satisfied with the truth and power of the science through the practical and illustrated examples and demonstrations they had listened to that evening. One gentleman the next morning sent the secretary some marked verifications of the truth of the statements made in the delineation.

PHRENOLOGY IN NORWICH.—The interest in the above science, doubtless evoked by the presence of Mr. S. H. Jolley, who for years past has given numbers of free lectures in aid of various religious and temperance bodies, has lately culminated in the birth of a society for its study. During the last four months weekly meetings have been held at St. Giles' Restaurant, and lectures and essays have been given by Mr. S. H. Jolley on phrenology, and Mr. A. T. Wiseman on animal physiology. Under the auspices of the society two public lectures have been given. One was on the 24th November—subject "Practical Phrenology," which was well received, the audience verifying the statements made by the Professor relating to the persons publicly examined. The second was on January 26th, and was on "Love

and Lovers.” Both lectures were well attended, especially the latter ; the Higher Grade School, acquired for the occasion, being densely crowded, and hundreds unable to gain admission. Both lectures were a financial success, and have helped greatly to put the society on a firm basis ; the number is steadily increasing.

Temperance Notes.

WHEN Mrs. Carlile was persuading the school children of Leeds to sign the pledge, she plainly saw that her work would not be worth much unless they could be gathered together from time to time, and encouraged to *keep* the pledge. The Band of Hope was therefore formed, and has proved a wonderful power for good. Let us take a lesson from a party of monkeys, who were attacked one day by a huge boa-constrictor. After crushing and swallowing one of the little monkeys, the serpent lay down under the shadow of a rock to sleep and digest his meal. Soon afterwards, the monkeys were seen on top of the rock, pushing away with all their might at a large stone, until it began to roll, when with an extra push from all together, it fell—crash—upon the serpent below, and crushed him to death. The moral is plain to all. Strong drink has robbed us of many a relative and friend ; let us all make up our minds to treat it as an enemy, to sign the pledge of total abstinence ; to work with earnestness, intelligence, and obedience, and by being united in our efforts, with the blessing of God, we shall some day succeed in giving the death blow to the poisonous serpent—Strong Drink.

MR. W. S. CAINE ON TEMPERANCE.—At a conference of the British Temperance League, at Sleaford, Lincolnshire, Mr. Caine remarked that something had been said about expensive lectures, but in the Colonies and the United States well-rooted temperance societies thought nothing of giving 10 or 20 guineas for a lecture very inferior to what the agents of their league were able to give. He once offered to give two temperance lectures himself for a guinea, out of which he had to pay 19s. 4d. expenses—(laughter), but the society declined his offer. In the British Army in India they had 15,000 teetotallers, and General Sir Frederick Roberts had told him that his friend Gregson had added two battalions of effective men to the British army in India by his temperance work. Sir F. Roberts had added, “You give me a teetotal army of British soldiers, and I will take them anywhere and do anything with them.” Some people abused the publicans, but they had no right to do so. The publicans were a very respectable class of men, but their customers were to blame in furthering and assisting the drink traffic. Whole States in America managed admirably without alcoholic beverages, and at the banquets at the White House at Washington there were no alcoholic beverages at all. He had started a Band of Hope in his own family, of which he was president—(laughter)—his wife vice-president, and

his five children members, and he advised all his hearers to form similar bands of hope in their own homes.

PROFESSOR SIMPSON'S TESTIMONY.—Lately, when the graduates of the Edinburgh University assembled to take their degrees, Professor Simpson addressed them thus:—"Some of you have the wisdom, and I would add the courage, to be members of the Total Abstinence Society. You have found in your own experience that alcohol is not an indispensable element in the daily diet of a healthy man. You will not be long in practice before you will prove five things. First, that alcohol, habitually used, can of itself produce disease from which the abstainer remains exempt. Second, that it will aggravate the diseases to which all are liable. Third, that it renders those who habitually use it more open to attacks of various forms of illness. Fourth, that the alcoholic has a worse chance of recovery from a fever or an injury than an abstainer. And lastly, that in the crisis of disease the alcoholic gets less benefit from the medical use of stimulants than the abstainer." These are mighty words, and true words, which those who study disease clinically, with their eyes open, and their mind unprejudiced, will readily testify. Some twelve months ago, I asked one of our leading physicians in this city if he would recommend the use of wine or spirits in the convalescent stage of fever, and what was his answer? He said, "Not if you want them speedily well." I said, "But is it not generally recommended?" He replied, "In private practice, yes; but where there is nothing to be gained by it, I should never give it; such as in public institutions." The fact is, private patients often like to have port wine, or some other stimulant prescribed, and it suits "the profession" to prescribe it, lest the patient in some cases should too quickly recover. So that it suits the palate of the one, and the pocket of the other, and both are satisfied.

Correspondence.

"THE FUNCTION OF INDIVIDUALITY."

To the Editor of the PHRENOLOGICAL MAGAZINE.

DEAR SIR,—For the last eleven years I have been wholly engaged in phrenological work, and have industriously observed the habits and characters of a wide circle of friends and acquaintances during the whole of that time. This is the apology I have to offer you for addressing you, and attempting to trespass on the space of your interesting and valuable Magazine. I have read the late articles in the PHRENOLOGICAL MAGAZINE, on "The Function of Individuality," with considerable interest, but have been somewhat surprised and disappointed to see an almost entire absence of personal opinion in them. I think that in an educational periodical like yours, from which hundreds of people expect to receive instruction, your con-

tributors should strive to give as much light as possible on the topics with which they deal. Mr. Nicholas Morgan, I am sure, might have given us the results of his extensive observations and experience. His criticisms are good, and useful too ; but some practical teaching would be better. We younger men are always thankful to know the opinions of the veterans in the phrenological profession. I agree with Messrs. Nicholas and Algernon Morgan in the main, but not in all. It is quite evident that much has been said about "individuality" by men we are always disposed to look up to for guidance, that is not perfectly in accordance with the independence of each mental faculty. And Mr. A. Morgan, your last contributor on this subject, is, in my opinion, wrong when he says:—"To perceive an object as an 'existence' alone, without recognising its qualities, is evidently an impossibility." In speaking of individuality observing a house, he asks what form, size, weight, colour, &c., would be doing the while. It might occur that they would be doing nothing. I claim that it often happens that a person sees a house—after seeing it knows that it is there, but cannot tell what shape or colour it is ; cannot tell how many chimneys or windows it has ; does not even know whether it is built of brick or stone. He has a consciousness that there is a house—individuality noted that fact—but he knows nothing else about it. Form, size, colour, and the other faculties failed to take cognizance of the particulars it is their province to observe. Individuality isolates objects, keeping them distinct one from another ; but it has nothing to do with shape or any other quality. A wall with a picture hung on it is, to form, merely a complex outline. Colour will take cognizance of and remember the tints and shades of both the wall and the picture, but cannot divide the objects. Size will measure all the lines, but will not distinguish the picture from the wall. And so it is with the other intellectual powers. They, therefore, need the help of individuality to separate the objects, and even the different or individual parts of each object. There would be entire mental confusion but for the function of individuality. It individualises, and keeps one thing distinct from another. Referring to the quotation from Nelson Sizer, given on page 76, it is not possible for form to do any part of the work of individuality. Form cannot see the wall as an object or "existence" ; it sees only the shape of the object after it has been selected for observation.

Some people see more objects than others do at a given place and during a given time. I have observed that children are, as a rule, relatively larger in the part of the forehead where we locate the organ of individuality than adults, and accordingly they are more remarkable for their ability to note a great number of things. I think they are much more minute in their observations than the average adult person. With reference to the subject of "intuition," I think we cannot, for a moment, suppose that individuality does the work ascribed to human nature. I have found many people, who were large in individuality, who were sadly deficient in power to read character and motive. On the other hand, most of our great advocates and lawyers, who are

noted for their power to penetrate character, have very high foreheads that stand out prominently in the region of human nature. Attention to minute details may be very helpful in judging character ; but it is human nature that penetrates to motives. I have known many business men who were very successful in reading character intuitively ; yet they had but an average development at the top of the nose between the eyebrows. There are other points in the article to which I should like to refer, and there are many other ways by which I should like to show that individuality has a distinct function ; but I fear I have already said too much for the space you may be disposed to allow me. I am afraid to ask you to insert this in your next issue, but if it is not too much I shall feel obliged if you will kindly do so. I have not written for the sake of starting a controversy on the subject, but should like to see some opinions from the experienced in the profession.

I am, dear sir, faithfully yours,

JOHN THOMPSON.

Book Notices.

IN response to many enquiries, we have decided to issue in pamphlet form Mr. L. N. Fowler's important lecture on "Our Boys and Girls" (which appeared in the January and February issues of this MAGAZINE). Price, post free from this Office, three half-pence.

OUR new revised and enlarged Catalogue, containing all the best works on Phrenology, Physiology, Physiognomy, Mesmerism, Health, and Hygiene, is now ready. Send one stamp for a copy, you are certain to find something in it to interest you.

WE beg to call our readers' attention to the advertisement in this issue of "Prof. Dowd's Health Exerciser," acknowledged to be the best apparatus for physical culture ever devised ; it occupies but very little space, is easily adjusted, and by its means one can strengthen any part of the body at will. This has had a great sale in New York, but up to the present very little is known of it in this country. We intend to keep a number in stock, and should advise all persons of sedentary habits to become possessed of one.

READY March 1st, 1891, a Handsome Coloured Symbolical Head from new and special drawings. The pictorial illustrations show the location of each of the phrenological organs. It will help to readily locate the faculties, and at the same time give a correct idea of their functions. The Head is about 15 inches wide, handsomely lithographed in colours, and on heavy plate paper, size about 30 by 20 inches, ready for framing. 2s., packing 6d. extra.

FOWLER & WELLS Co., New York ; L. N. Fowler, London, have just issued two more numbers of the "Human Nature Library" Series, edited by Prof. Nelson Sizer and H. S. Drayton, M.D. No. 15 contains a very important article by Prof. N. Sizer on "Resemblance to Parents" and how to judge it, with forty illustrations ; and No. 16 is by H. S. Drayton, M.D., on "Self-study essential to Mental Improvement and Development and to Personal Success," illustrated. The first fourteen numbers (most of which have had to be reprinted) can still be had direct from this Office at sevenpence each, post free ; or the complete set 6s. 6d., post free.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs ; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent ; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

SPOONER (Gentleman), Grantham.—Your natural gifts are in a literary or philosophical line. You have always craved an education, and would prefer to have a profession. You are ready in ideas, and have an easy flow of conversation, but have about as much to say when you have closed your speech as when you started. You love beauty, perfection, style, oratory, and everything that indicates style and refinement ; you prefer the society of ladies and professional gentlemen rather than to mix up with men of the world generally. You have sense of fun and merriment, and have also good sense of arrangement ; are cautious, watchful, economical, and rather conservative. It is not so easy for you to show continued firmness in any one direction, for you have so much versatility of mind that you want to do and enjoy in a great variety of ways. You are rather easily excited with prospects of success ahead, and are quite imaginative and comprehensive in the working of your mind.

LADY.—You are particularly sagacious, knowing, intuitive, and apt in your judgment. You are very apt in giving advice, and can easily learn to do what you never did before. You are fair in power of speech, not particularly imaginative ; are very practical and decidedly steady, persevering, tenacious, and industrious. You are a woman of one love, and can easily devote yourself to one ; even if you were occupied as a missionary, nurse, or doctor, you could give your entire energies in that capacity without longing so much for family life. You are a great student of nature, would delight to study physiology, phrenology and medicine, and would have made a very good doctor. You are particular in selecting friends ; you do not go out into company for the sake of keeping up the tattle of the neighbourhood,

or to tell what you know. You could sustain yourself in a public sphere of life, and be a doctor, a preacher, or an editor.

CHILD.—This Miss is a great talker, a great observer, knows much for a child of her age, picks up information easily, and retains knowledge readily and correctly; she is naturally orderly and neat; can be educated to be a capital teacher—which she ought to be. She is full of life, has a strong will, considerable self confidence, and is not afraid to go forward and do what she can do. She may be a little too hasty sometimes, requiring somebody to wind up her watch for her, to show her the way to act; but she has special qualities, and only needs proper guidance to take rather an elevated and useful sphere in life. As a child, she will be known for her observation, memory, and abilities as a scholar. She needs to be restrained, rather than to be stimulated as a student, and encouraged in physical labour and outdoor exercises.

W. J. (Hull).—You have a warm, earnest, and rather impulsive state of mind, are always in earnest, go right at what you have to do. You love work of a certain kind, and are of an industrious type. You have practical talent; you learn from experience, and from what is going on around you. You are alive to all that is going on, and you pick up knowledge rather easily. You have a scientific turn of mind, could succeed as a dentist, chemist, practical mechanic, or as a business man. You prefer to have something definite and tangible to occupy your mind about, rather than to devote yourself to theories; but you are ingenious and can do almost anything you try to do. You are a fair talker, an earnest speaker, and would exert quite a distinct influence before an audience. You have none too much circumspection, are liable to overdo and use more forcible and strong language than is really necessary as a speaker; you are somewhat ambitious.

CHARLOTTE E.—Has a very sensitive organisation, a very susceptible mind, and is capable of appreciating great refinement. She appears to have more than ordinary artistic ability, can decorate, arrange, and plan work with great taste and ability. She has a very inquiring mind, wants to know everything that is going on around her, and will be eager for fresh knowledge. She is fairly practical, and wants to know the use of a thing before she undertakes to do it. Her power of criticism is very keen; she easily recognises where there is a fault or mistake; is quick to compare materials, and if she were a teacher she would understand how to present her ideas to her scholars. She is very ambitious, quite desirous of creating a good opinion, and of doing her best; she will not want to admit a thing unless she is quite sure of success. She is forcible and energetic when the occasion requires pluck and energy, but her sensitiveness will keep her back considerably; she is exceedingly sympathetic, would be quick to notice what was necessary in a sick room, and her feelings are easily acted upon.

THE
Phrenological Magazine.

APRIL, 1891.



BISHOP HAWKINS.

YOU possess a very positive character, and a great amount of presence of mind. If you were on a boat, and with the likelihood of everyone being drowned, you would be cool as on land. Are quite independent, and prefer to carry your own carpet bag, than to wait for someone else to do it. Are very fond of display, and almost as vain as a woman. One very prominent feature of your mind is your ambition : it has stimulated you all through your life. You have always wanted to do a little better than anyone else ; as a little boy you wanted to out-strip all your mates.

Another marked point in your character is your distinct sense of right and wrong. You told the truth if you got a

flogging for it. You bear hard on the sinner when you try. You have a strong development of hope : the darkest day has its streak of light. Your hope of the future is distinct. Your veneration is large : you have always looked up to your superiors, and venerated a God. You are sometimes impressed with a thought that you did not seek. You are nearer the spiritual world than many. Your dreams are more about heaven than anything else. You have a lot of fun in you. You pray to be delivered from it, but you won't be while you are alive. You laugh at your own thoughts sometimes. Your thoughts spread when you get up to speak. You love poetry, oratory, and works of art, as much as anyone else. You could write poetry if you tried. You have the faculty of doing things by rule, in arranging your work and speeches.

You have a superior memory of transactions and stories ; could remember things that occurred when you were three or four years old ; can remember whatever you have done, or where you have been, and whatever you have seen. You are a great observer of men. If a man were to get up in a meeting and ask something, you would always be equal to the occasion, and hit the nail on the head every time. You understand the people you have to speak to. You have many times made up your mind what speech to make, or what sermon to preach, but when you have seen your audience you have entirely changed your programme, and given quite a different address. You are very fond of travelling ; could enjoy going round the world. You have a strong sense of time, and would know if anyone were singing out of time with you ; can make up your music as you go along. You have a strong ability to argue, but a still stronger one to compare, embellish, and enlarge. You can tell a good story when you get at it. Are rather cautious. You never get caught in the same trap twice ; you keep on the look-out. One thing you never did like to see, and that was cruelty. You have no hate in you, but you can fight in a good cause with some spirit. You are very fond of children. Though you are fond of travelling, you treasure a very tender memory for your old homestead, and remember it as clearly as though you had just left it. You value money for its practical value. If you are taking up a collection, you don't mind if it is a big one, but you don't care for the money except for what good it can do. You let your wife take care of it. You have an angel round you most of the time, for your mind is open to spiritual impressions. You are quick to take a hint, to see the chances around you, and make the most of circumstances.

L. N. FOWLER.

Bishop Hawkins, of the British Methodist Episcopal Church of Canada, has just arrived in England on a mission to plead the cause of his coloured co-religionists in Canada, in order, if possible, to raise funds for the building of more churches for them. The bishop is in his eightieth year, but, though his hair is grey, he carries his years well. He is quite black, small and spare in figure, and though so old, is still full of life and vigour. He is accompanied by his wife, whom he married in 1842, a few years after his escape from slavery. His first impressions of England, when he arrived in Liverpool, were, that he was in a fresh atmosphere, where everything appeared so bright, and every hour since, he says, it has been growing brighter.

Bishop Hawkins' home and church are at Chatham, Ontario. This is the centre of the negro population of Canada, which numbers altogether about 23,000, two-thirds of which are in Ontario.

With regard to his own escape from slavery, the Bishop said that his father, after serving the same master for forty years, was offered the privilege of buying himself for £72, because he had become too weak to be profitable. He managed to get the money and so secured his freedom. His five children were still left in slavery. The eldest ran away, another died, a third fell and hurt himself, so that he was unprofitable to keep, and was sent as a free gift to his father. The future Bishop and his sister were left. The former was then sold to a dealer, and was about to be sent South in a chain gang. This caused him to run away. He got into Washington, only two miles from his master's plantation, and was there kept in hiding by two free negro friends for several weeks. He was pursued by bloodhounds, and his likeness and description were posted all over the country; but he was not discovered. His final escape was, in the main, due to the fact his running away was made so public. It put the "Underground Railroad" people on the watch for him, and they found him when his enemies could not. When he finally got to Philadelphia—aided in this by two "brown girls," who had obtained nine days' permission to go South in search of him, and found him the last day as they were about to return. They were agents of the "Underground," and helped him at the risk of their lives.

He was licensed to preach while in New Bedford. Shortly after settling in Canada, he was ordained, and devoted himself entirely to the preaching of the Gospel among his own people. He led an arduous life, and suffered much, chiefly from poverty; but he never wavered or lost his trust in God.

Bishop Hawkins strikes all who meet him by his earnestness and sincerity. These are the qualities that impress in his speaking. He is a master of humour and pathos, and is capable of moving his hearers deeply both by his preaching and his singing.

THE PSYCHOLOGY OF PHRENOLOGY.—No. IV.

BY NICHOLAS MORGAN.

THE FUNCTION OF INDIVIDUALITY.

MY object in writing the articles on the psychology of phrenology is manifold : one part of it being to stimulate thought ; and I perceive that my efforts in this respect have not been futile. The seeds sown have germinated, and already show signs of becoming healthy fruit-bearing plants.

Among those that have begun to think is John Thompson ; and, happily, he has not kept his thoughts to himself, but has made them known through the medium of the *Phrenological Magazine*. However, they are not great thoughts, nor are they new thoughts. They are simply old, misleading thoughts presented in Thompsonian costume ; and as such command my attention. He writes :—“ I have read the late articles on the function of individuality with considerable interest, but have been somewhat surprised and disappointed to see an almost entire absence of personal opinion in them.” So Mr. Thompson sees in my criticisms an entire absence of personal opinion. This statement does not surprise me ; but it strikingly indicates the absence of thought as to the meaning of the word “ opinion,” which is defined as being “ a conviction on probable evidence : judgment.” Now, according to this definition, my articles, instead of containing almost no personal opinion, are, on the contrary, pregnant with it. They are embodiments of conviction that is founded, not only on probable evidence, but on absolute truth.

He continues —“ I think your contributors should give as much light as possible on the topics with which they deal.” Granted ; and probably he was guided by this thought in composing the contribution now under notice. Notwithstanding, the light cast upon the subject by him shineth not—it is little and dim.

He says my “ criticisms are good, and useful too, but some practical teaching would be better.” This reminds me of the musical instructor and his juvenile pupil. His object was to cultivate freedom of finger, delicacy of touch, and a sensitive

ear to tone and time ; but the ambition of the pupil was to play a tune ; and seeing that she could not get her own way, she became restive and fault-finding. Mr. Thompson further thinks I “ might have given the results ” of my “ observations and experience ”—that is, in the first and second articles. But what does he mean by observation and experience ? What are those articles else but my observations and experiences compounded with fact and logic ?

He continues, “ I claim that it often happens that a person sees a house ; after seeing it knows that it is there, but cannot tell what shape or colour it is ; ” and then he makes the astounding assertion that the person “ has a consciousness that there is a house—individuality noted that fact—but he knows nothing else about it.”

How does he know that individuality noted that fact ? Where is the evidence ? It is conspicuously absent ; and ever shall be, for it exists not, except in vivacious, yet beclouded and distorted fancies.

Mr. Thompson, in giving expression to his thoughts on the function of individuality was evidently in earnest, and wishful to do good ; but he missed his mark. Nevertheless, his contribution is not worthless. It is valuable as an illustrative example of the injurious effects of erroneous teaching on the minds of people that lean upon authority ; and who, if they think at all, think not so much how to ascertain the truth for themselves by an appeal to nature, as to prop up the theories of their masters, and advocate their opinions as rules of faith and guidance.

Let us now give a glance at Mr. Thompson’s very remarkable claim ; namely, “ that a person sees a house,” and afterwards “ has a consciousness that there is a house—individuality noted that fact—but he knows nothing else about it. Form, size, colour, and the other faculties failed to take cognizance of the particulars it is their province to observe.”

Here again, we observe the entire absence of evidence, which shows that Mr. Thompson finds it easier to make an assertion than to give a reason. Moreover, his method of treatment of this important subject further shows a striking predominance of the *Ego* ; and an equally marked deficiency of observation, analysis, and discrimination.

Individuality, we are told, noted that fact—that is, the house ; but form, size, colour, and the other observant faculties failed to take cognizance of it. Now, a house is an object standing on a limited portion of ground, which is of a particular size and form ; and therefore, if the faculty—individuality—by itself observed the house, it performed the function both

of form and size, and colour,—a perfectly impossible feat. In truth, Mr. Thompson would have expressed himself just as wisely if he had said the person saw the house not by means of the eye, but by the ear!

He says: "Individuality isolates objects; keeps them distinct one from another; it individualises, &c." These extraordinary statements are not offsprings from Mr. Thompson's brain, but old acquaintances, whose parentage has already been specified in my previous articles. Those who are conversant with the works of Donovan and Sizer will know their origin. Mr. Thompson also remarks: "There are other ways by which I should like to show that individuality has a distinct function." Then let us wait the revelation with patience and hopeful anticipation.

WHAT MR. JAMES COATES SAYS.

It is not my intention to review Mr. Coates' criticism, which is in the November (1890) number of the *MAGAZINE*; but I think it ought not to pass unnoticed.

He says:—"We suffer from the care and exactness of the earlier phrenologists. . . . That the difficulty lies in the erroneous supposition that the particular cerebral area defined as the organ of individuality is the organ of one faculty of the mind. . . . That it can scarcely be one organ having one function. . . . It is quite conceivable that individuality is primarily the organ for conscious perception of physical objects. . . . That we see individuality to be the window of the perceptives, the avenue of conscious perception."

I remark that, to be too exact and careful in defining the functions of the phrenological organs is simply impossible. It is want of care, combined with a great deal of slipshod writing, that has brought phrenology into disrepute.

As to the organ of individuality being not simply one organ, but a number, I leave this to the speculative fancies of Mr. Coates and others.

No doubt it is possible to conceive that individuality is the organ of conscious perception of physical objects, just as it is possible to conceive that the moon is made of green cheese. What is conscious perception? It is the perception of every kind of feeling, and of every degree of intensity, of which the mind is capable. I feel the sense of hunger, and am conscious that I require food. I am in love, and feel conscious that the object of my affections will give me satisfaction. I feel cold or warm, pained or pleased, &c., all of which are conscious perceptions; and a thousand more mental and physical states might be noted under the same head.

Just fancy, then, the idea of any one conceiving that one single small cerebral area is the organ of all these particular states! How such an idea ever got into the head of an intelligent man it puzzles me to understand.

My friend Coates charges me with saying that Gall, Spurzheim, Combe, Donovan, Fowler and Sizer, were not able to clearly define what they meant, or, worse still, had no definite ideas to define, and, he adds, "The indictment is serious." I have simply to state that this is a mistake. In fact, it is the very opposite of what I have said. I have never, in any instance whatever, given the slightest hint that any of these worthies were incapable of clearly expressing their own thoughts.

SOCIALISM VIEWED FROM A PHRENOLOGICAL STANDPOINT.

AT a meeting of the British Phrenological Association, in the Memorial Hall, Farringdon Street, on the first Tuesday in October, Mr. H. C. Donovan read a paper with the above title. He commenced by reading from an article by Mr. William Hawkes-Smith, *Phrenological Journal* of 1840, in which the study of socialism was recommended to students of phrenology.

He then proceeded to define the phrenological meaning of the term "Faculty," and said in general discourse "Faculty" means any capability, acquirement, accomplishment, talent, &c. Interpreted in this way, the use of this term has led to much misconception both by friends and foes of phrenology.

He gave several quotations, especially from socialist writings, in which this word "Faculty" was wrongly applied; one writer spoke of reading as a "Faculty," whilst another writer spoke of reason as being one "Faculty." In phrenology, "Faculty," like element in chemistry, has but one meaning; namely, an internal command of nature, in obedience to which certain irresistible volitions must arise in the brain so as to produce definite action having some ultimate object. An individual may be generally competent, though practically devoid of certain mental faculties; but if any one of them could be extracted from the mental system, the mental nature of man would be altogether disorganized and deflected from its present condition.

The mental faculties are the same in all men, just as are the various organs and kinds of matter that compose the human body. Nevertheless, minds differ from each other in animal

and moral feelings, and intellectual capacity, quite as much as human bodies differ in size, height, activity, and strength. Consciousness informs us only of sensations. It affords us no information as to the source of such sensations. A close analogy can be traced between the bodily and mental constitutions. Consciousness will inform us, to a certain extent, of bodily disease; but it gives us no information concerning the structure and functions of bodily organs, or of the causes of our ailments. In like manner, we become conscious of certain states of mind—of excitement, of a particular feeling, of anger, love, desire of society, of inclination to certain kinds of knowledge, of capacity or incapacity for music, drawing, &c.; but consciousness gives us no aid in tracing such states of mind to their sources, any more than hunger informs us of the organization within us whose office it is to originate hunger. Consciousness, then, could no more guide to the knowledge of our mental anatomy and physiology, than it could to the knowledge of our bodily anatomy and physiology. The consciousness of A and B must suggest to each a different theory of mind and morals. One would describe man as “the glory of the world; the paragon of animals.” The other, as all weakness, corruption, and wickedness. Consciousness, then, cannot be sufficient for the scientific knowledge of man. He said he would show later on that socialists fall into the same error as the metaphysicians have done in this respect, which accounts for the fact that few of them agree as to the conditions of society under socialism.

Phrenology, then, has taken the study of the mind of man out of the hands of a kind of enquirers who never could gain scientific knowledge of a subject still more complex than ordinary matter. And when we consider how long it took a succession of both speculative and experimental enquiries to arrive at anything like a clear conception of the elements of the visible and tangible things which are capable of being dealt with by tests of every sort, it cannot be cause of surprise that the elementary components and attributes of the mental system have been a mystery and puzzle to all but the few who have taken up the mode of Dr. Gall, and pursued, like him, a course of patient observation and comparison, in place of the wondering and guessing practice, by which knowledge of the universe of mind (like that of matter) has so long been sought for in vain.

Phrenologists who wish to carry their science beyond the mere art of character reading—who wish, in fact, to study mankind, must ever bear in mind that society, as it is now

constituted, is contrary to justice ; and it is becoming every day more and more difficult for a man to live in ease and comfort without in some way injuring his fellow man. We are living now in a state of the most complete monopoly that has ever existed in the history of the human race. Almost everything which is essential for the happiness and comfort of mankind is private property. The land, and all the means of production, the modes of transport, are private property, and cannot be used without an arbitrary rent being paid by the user to the owner.

Mr. Donovan strongly recommended phrenologists to study the economic condition of our present society, and advised the reading of some of the socialist literature which can now be had at very low prices. He mentioned first of all Karl Marx's manifesto, issued in 1847, and also that great work by the same author, "Critical Analysis of Capitalist Production." He further recommended the short lectures and essays written by William Morris ; and whenever any phrenologist had an opportunity, by all means to hear that most esteemed man lecture, and at the same time take due note of his forehead—a phrenological treat in itself. He further recommended some of the essays and leaflets issued by the Fabian Society. Until the phrenologist understands our present economic system, he will, notwithstanding his phrenological skill, be entirely unable to account for most of the evil that he sees about him. The lecturer ventured to assert that the formation of the head would not in itself account for the wicked deeds which are committed by the rich and the poor. A man who is fairly organized will not be a thief under ordinary circumstances, but there are conditions under which he would be prompted to thieve.

It is quite true what William Morris and other socialists assert : that the present system of society degrades both those who are supposed to enjoy the so-called pleasures of wealth, and those who have to endure the pain of the struggle for existence and all the attendant hardships of poverty. The incongruity and inhumanity of our system of life have for a long time set many brains athinking ; and ever since the first attempt at practical socialism by Robert Owen, the desire for a better system of life has gradually been making headway amongst those who are so organized that they see the need of something more than individual comfort to themselves ; for truly, comfort, in the broad sense of the term, is impossible in the midst of misery and degradation. The only way now to enjoy wealth, is to completely isolate oneself from the poor, and live in a false state of society, and call it refinement and culture.

It must be borne in mind that our upper classes, who have it in their power, despite all franchise, to keep in their own hands the machinery of the State, live to a great extent on rent, and on the profits derived from the over-working and under-paying the working classes.

It is now evident to all, be they socialists or not, that the growing demands of labour will make it impossible in a very short time for those who carry on industrial undertakings to pay dividends and rent to the mere idle owner of parchment deeds and share certificates.

If labour is going to succeed in the coming struggle, the wealthy classes, and all those who revolve round them, will gradually disappear. Many far-seeing men argue that the present State will ever be ready to throw in its lot with the rent and dividend class ; that in the struggle that is only just commencing, the State will be compelled to assume the aggressive in the defence of the monopolists, when an open war will commence between the State and the labouring classes. In this struggle there are only two events that can happen—defeat and slavery for the workers, or a defeat of the State, which will mean that the organization which now maintains the rights of the monopolists will cease to exist. The socialists of the present day want a new State and Government to spring up from the ruins of the property state, when government, with its law courts, its police, and its prisons, will still go on, only on another basis, the basis being that land and capital be made common property. In that case, government and law, as we know it, must cease to exist.

There is a growing body, rapidly increasing in strength and influence, who are called Anarchists. They assert that, when this present State dies from its own inherent incompetency, no form of government with any chance of stability will arise from its ashes. They maintain that Governments are useless ; that mankind is so constituted that artificial laws are not necessary for the happiness and welfare of the human race. In this respect their position seems logical. For when phrenologists consider that every man, if unhampered, would simply follow the dictates of his "Faculties" ; when we take the elementary principles of action, which we call "Faculties," and study their action on our fellowmen, they would simply desire to exercise these "Faculties" without incurring blame from others, or a loss of dignity or independence to themselves.

Without Acts of Parliament, &c., men and women would love and be loved, would fondle and cherish their children,

would take a pleasure in giving, in becoming attached to place or pursuit, in friendship both for individuals and communities, and in protecting wife or husband, children, home, friends and communities. Mankind is gifted with such "Faculties" as would make them aggressive, defensive, secretive, acquisitive and constructive. Man, moreover, is firm, conscientious, hopeful, trustful, venerative, sympathetic, imitative and imaginative. In being all these, his intellectual "Faculties" are used as servants to the natural desires. Now, as all these "Faculties" which are implanted in the brain work naturally, it is not necessary to hinder man in his natural actions. Acts of Parliament can only maintain an abnormal condition of society. It is in virtue of Acts of Parliament, the Law Courts and the police, that one man can take unto himself 300,000 acres and turn them into a deer forest, in order that he may, for a few days in the year, enjoy the pleasure of sport right in the midst of land scarcity for the workers. Without the protection of the police, such a position could not be maintained.

Socialists and anarchists consider that the best study for them is economics. In this they are wrong. First of all, they should have some scientific knowledge of man—not from the examination of their own selves, but from a system of observation of others.

The remarkable want in most socialists of anything like a sound basis of mind and of man, is most marked when they attempt to give the world the benefit of what they think society will be like in the time of socialism or anarchy.

Many have attempted this simple task ; all have failed. Why? Because these talented men, from their ignorance of phrenology, have made the same mistake that the metaphysicians have made—that is, they study themselves ; they turn to themselves for their knowledge of mankind. They examine their own consciousness, and people the world with themselves. This they do unconsciously, for all the time they are under the impression that they are studying the human race, a phrenologist looks upon himself only as a specimen.

These remarks, the lecturer said, bore with some severity on socialists. He had many things to say to phrenologists, but time would not permit. All he could say now, was, that if socialists want to make any headway in social science, they must study phrenology ; and to phrenologists he would say, unless they seriously study the present economic conditions of society, they will never be able to account for the dreadful amount of crime and misery that they must see around them.

Phrenologists have much to learn from socialists, but far more have socialists to learn from phrenologists.

A good discussion followed, but space is too limited to report it.

HUMANISING THE CRIMINAL.*

THIS little volume of 172 pages will be useful long after many more pretentious works are forgotten. The book, though certainly not void, is, like primeval chaos, without form ; and its literary style might, with advantage, have been improved. But it is, as Mr. Havelock Ellis observes in his preface, "the most comprehensive account yet published of what is probably the most fruitful and interesting experiment in the treatment of criminals which the world has yet seen." The criminal has been treated in all manner of ways from the beginning of history. He has been degraded, tortured, mutilated, whipped, starved, isolated, preached at, patronised, petted, and experimented on, and all these methods have failed to prevent the growth of a criminal class and its steady persistence all over the world. Crime is not only not dying out, it is not even diminishing. In the United States, for instance, while in 1850 there was but one prisoner to 3,448 inhabitants, in 1880 there was one to every 855. Now, at Elmira they believe that the great thing to do is to reform and humanise the criminal, and to restore him sound and whole to society. This is the principle now recognised as right by penologists all the world over ; but Elmira is the one penal institution where this idea is thoroughly and systematically put in action with the most admirable results. They try at Elmira, in the spirit and words of Walt Whitman, to "embody all presences outlaw'd or suffering, see myself in prison shaped like another man, and feel the dull, unintermitted pain." But it must not be supposed that discipline is not as strict and severe at Elmira as in any other prison. Severity is part of the necessary discipline, but it is like the severity of Nature, which, as Herbert Spencer says, is a little cruel in order that she may be very kind. The criminal, in short, is regarded as a human being with infinite possibilities and unbounded capacities ; and the end deliberately set forth in the mind of the officials is his reformation and culture. You think the "culture" of the criminal class Utopian, dreamy sentiment, perhaps. Well, *solvitur ambulando*, the thing is

* "The New York State Reformatory in Elmira," by Alexander Winter, F.S.S. (London : Swan Sonnenschein and Co.)

proved not to be a mere dream, but a solid fact. Elmira reforms and educates criminals, and makes them into as good and useful men as the virtuous Levites who pass by on the other side. There is no doubt about it, no possibility of refuting or ignoring the results achieved.

Elmira Reformatory is in the central part of New York State, not far from the Pennsylvania border. Beginning in 1876 with 184 inmates, it now contains over 1,000. There are fifteen acres of buildings, costing more than 1,885,000 dols., standing in 280 acres of grounds. It is "limited to males of 16 to 30 years of age, who have fallen for the first time under the penal code," although, in exceptional cases, relapsed criminals are admitted. The prisoners are not packed off at a given moment when the terms of the sentences have elapsed, but are kept until cured, subject to the rule that detention shall not exceed the longest term of imprisonment provided by law for the case in question. The place, in short, is a moral sanatorium, an ethical hospital where diseases of mind and soul are treated as bodily ailments are treated in an ordinary dispensary.

"The founder and present administrator of the Elmira Institution," we are told, "would say the three chief factors of reform—work, conduct, and education—if arranged in order of the importance and the power of the influence which they exercise on the man—would stand as education, conduct, and work, because the schoolroom is alone qualified to bring an individual to a full self-consciousness." We therefore find the chapter on "School" the longest and most important in the book. "School" is twofold—moral and intellectual. "The experience in Elmira leads to the full conviction that compulsory education is actually one of the hardest punishments for the criminal," because he hates "any physical or mental occupation which leads and forces him into a better and nobler vein of thought;" therefore the inert, sluggish, mean, dull nature must be aroused and a soul must be created "under the ribs of death." There is a class of practical ethics at Elmira, conducted partly on the Socratic method of discussion—partly by addresses—always re-inforced by the moral discipline of the place. Professor Collin, who took charge of this class, writes thus of the effect produced by a certain Sunday discourse by a visitor:—"As I looked into the faces of those two or three hundred young men, with the sympathy which cannot but come from working side by side in the same pursuits, and saw their brightness and moistened eyes, and watched the lights and shadows play over their uplifted countenances, with their quick apprehension of fine intellectual distinction and

solemn spiritual truths—condemned felons every one, yet men whom I have learned to love—I said to myself, ‘Here must be the substance of things hoped for; this is the evidence of things not seen.’” So strong is the influence produced that Mr. Winter says, “that in the institution many letters arrive from the parents of discharged prisoners, greatly expressing their astonishment that the son who formerly wandered about the streets of an evening after work now hastens home and takes his pleasure in books.” The personal moral influence of Mr. Brockway, the general superintendent, a man of moral genius who believes in individual intercourse with each criminal, counts for much. “The prisoner need only make known his wish to speak with the general superintendent to be admitted without further questioning at the following hour of audience.” The relations existing between Mr. Brockway and the men may be inferred from this notice in the *Summary* (a journal produced in the prison):—“The general superintendent herewith publicly expresses his acknowledgment of the hearty Christmas congratulations which he has received from a great number of men through the letter-box.” This is due to the fact that each criminal is made to feel his own manhood, and is encouraged to act as a man, with resolution, honesty, and energy. None are degraded; all are taught to hope and to look forward.

And then as regards mental training. There are 13·6 per cent. of those admitted without any education, 38·1 who can simply read and write, 43·8 with a common school education, and 4·5 per cent. with some pretensions to culture. The general standard, therefore, is low; but the training given has a wonderfully quickening effect. “The newly-awakened zeal is to learn, to know and understand seems to have opened to them a new world, and altogether different sphere of life,” so that “the man who in public life, perhaps, had never taken a book in hand, and who began to read novels, &c., in the Institute, now takes to ethical, economic, historical, ancient classics, and other works.” Some courses—such as the literary—attain to such a perfection that Shakespeare and other classic authors are studied and discussed with fair understanding.” Twenty separate culture classes exist, adapted to the various grades of pupils; and among the higher subjects studied are history, politics, law, political economy, electricity, chemistry, physiology, mental and moral philosophy.

Bodily training is also thoroughly cared for, being based on personal cleanliness and good diet, and including in its higher grades gymnastics and military drill. Mr. Brockway, the superintendent, declares:—“Good food is, for everyone, of

the first necessity for orderly life, if he wants to make the fullest possible use of the powers of his body ; and my long experience has taught me that I obtain far better results with the subjects by supplying a good diet."

Elmira is to be made self-supporting by a plan, according to which "the prisoner is to receive, for work done, an actual wage, according to an established scale ; out of this he has to pay for all that the institution supplies him with, such as board, lodging, clothing, &c., and even medical treatment ; the rest of the wages earned then remains the property of the individual." It is not yet decided whether the prisoner's credit is to be paid to him at once, or to be held over until he is discharged. It only remains to be added that at least 78·5 per cent. of those discharged are morally cured, and mentally so advanced as compared with what they were that they take their places as useful and honourable members of society.

C.

THE FOWLER INSTITUTE.

THE first annual general meeting of the Fowler Institute, took place in the Institute Rooms, Imperial Buildings, Ludgate Circus, on the 9th of March, Mr. Fowler in the chair. The annual report was presented and read by the secretary. It was as follows :—

ANNUAL REPORT.

In presenting our first annual report of the Fowler Institute, we cannot speak of any wonderful numbers or extraordinary work done, but we feel encouraged by the year's record to persevere in our efforts. At our first meeting in this room a year ago, we started with a membership of 20, and with many words of encouragement and approval from friends far and near. To-day, we record a membership of 60 in town, country, and abroad.

We think with this number of earnest friends of phrenology, an extensive influence should be felt, for it is the enthusiasm of the few, rather than the indifference of the many that accomplishes any definite result.

You have already been informed of some of our work, including our lectures in Exeter Hall, last spring ; our classes ; Miss Fowler's matinées in the winter ; our special lecture by Dr. Allinson in the Memorial Hall ; our weekly lecturettes, in which we have received the assistance of Mr. Webb, president of the British Phrenological Association, Mr. Bernard Hollander, and Mr. John Allen of Kilgrimol ; some very

good papers have been read at the members' monthly meetings by the following members: Miss Maxwell, and Messrs. Melville, Piercy, Coleman, Ashby, Brown, Moody, Smith, and Baldwin.

In January, the examination of pupils took place on these premises, under the personal direction of Mr. John Allen, who has been appointed examiner to the Institute. To one of the candidates examined, our honoured vice-president, Mr. Brown, has been awarded the diploma; to five other candidates, Mr. Baldwin, Miss Maxwell, Miss Crow, Miss Patenall and Mr. Ashby, the certificate has been awarded. Others failed to satisfy the examiners, more especially in the theoretical part; and other pupils have postponed their examination until another time. Special praise is due to these pupils, who have been particularly diligent in their attendance at 46 or more lessons, and who have determined to persevere still further in their studies to secure the diploma; what is most needed in their case is practical experience. Mr. Fowler has decided to grant an honorary diploma at this time, to be given to Mr. Allen, who has been a warm advocate and upholder of phrenology, as well as a student of the science, for at least twenty-five years, during which time Mr. Fowler has been personally acquainted with him.

We are disappointed not to have the diplomas and certificates ready for presentation to-night, but there have been unavoidable delays in connection with them. They are in the workman's hands, and will be presented by Mr. Fowler at our next meeting, Wednesday, March 18th. In addition to the spring class now being held, I wish to say a word as to prospective work.

We have decided to commence, almost at once, an artizan, or preparatory class in phrenology, in these rooms. We believe this will meet the wish of many, who desire an elementary knowledge of phrenology; we shall in these classes have the help of our certificated pupils; further particulars will be given on application. We are pleased to announce that we have arranged with the Rev. W. J. Dawson, of Glasgow, editor of *The Young Man*, to give a special lecture under our auspices, on Wednesday, April 22nd. This lecture will be entirely free as regards admission, and will be given in the City Temple Lecture Room. The lecture will be on "Savonarola, Monk, Patriot, Martyr." It will of course have no phrenological bearing (although, at the close Mr. Fowler will make some public phrenological examinations); but after Mr. Dawson's frequent remarks against phrenology in *The Young Man*, we are pleased to speak of his willingness

to lecture for us. We believe he is open to conviction, and we hope to make a convert of him. We desire our members and friends to make a special effort to be present on this occasion.

In conclusion, Mr. Fowler and his helpers will always be pleased to receive any suggestions from members, by which we can improve the method of our work, and extend the knowledge of phrenology. The members we have won, we hope to keep, and to add to their numbers; and we desire on this occasion, to thank our members and their friends, for their hearty co-operation and support of this Institute.

A. M. FOWLER, *Secretary*.

Mr. William Brown, vice-president, spoke on the future of phrenology, remarking first that we are engaged in the highest work man can be engaged in, though phrenologists and most men and women of to-day do not use one-half the abilities they possess. This is a serious thing. We do not know our responsibilities. We are living in a utilitarian age. In the future the human mind will have greater competition to contend with. I firmly believe that phrenology will make so much progress in the future that human minds will be a commodity in the market. Phrenology is a practical science; it is not an occult science, and the phrenologist knows about where he is. The older we get the more practical does phrenology become to us. Since I was a boy, how boys have changed! They now seem to move faster, and are quicker and brighter. Take notice of the schoolboard boys, they are outstripping the higher-class school-boys. Take an instance where the two are to be selected from for a manufacturer, and you see the former taken in preference to the latter, as the education he has received is more practical. How will phrenology affect the future history of the world? Take the household: it consists of father, mother, and children. The father will begin to study questions of health, because health is everything in the household; next, he will study himself, where he is wrong, and how he can make things right that do not appear right. He will show more forbearance to his wife, who may not see on all points as he does, and he will realize his responsibilities as head of the household. Then the mother—and I think woman is most important of all—her influence in the household is great. She will begin to realize her influence more; she will know how to guide the tender plants; she will be able to overcome the hereditary tendencies we have heard so much about, and in this, phrenology will aid her. Next come the children. The children of the future

will be taught the laws of health. They grow out of their teens into manhood, then they find out information they ought to have known years ago. They will know something about the antagonisms of their natures, and the parents will bring about harmony; and that is why you and I are going back to the children. We broke harmony in Eden, and phrenology will bring us back to this harmony. One thing where children go wrong is in a want of continuity. Through the aid of phrenology I saw this defect in my own son, and to encourage constancy in him I marked out a square in the garden, and gave him it to dig, making a bargain to pay him one shilling when it was completed; this stimulated and encouraged the boy to persevere, and to feel at the same time he was doing good. Parents want to please their children, with first one kind of amusement and then another, instead of letting them feel a little more responsibility in working out their own happiness and entertainment.

Next comes the workshop. When you enter a workshop, your eye will probably light on a man who is in a square hole when he should be in a round one. Think of the chafing there must be to the individual under such circumstances. We manufacturers will be much benefited by a phrenological bureau, one of which, I understand, is connected with our Institute.

There are no two men alike, therefore the preacher must be able to adapt himself to all classes, so as to be able to speak to the understanding of the people, as our Saviour did when on earth.

How will phrenology affect health? It will affect the doctors, surgeons and physicians, and bring them to see the relationship between the study of mind and health.

Phrenology is also necessary to teachers, for they need to know how to get at the talents of their scholars.

Mr. Fowler next made some practical remarks on the guiding and managing of children, and gave some valuable advice respecting their education and training.

Many interesting remarks were made at the close by several of the members present.

THE world will always be bad so long as we ourselves are bad; when we have become harmonized the world will all be good.

IT is not the superior ability and intelligence of the few, but the ignorance and prejudice of the many, that enable the former to become enormously wealthy at the expense of the latter's toil.

ENTHUSIASM :

NOTES OF AN INTERESTING PAPER GIVEN BEFORE THE
FOWLER INSTITUTE.

NOTHING either good or great is done in the world except by enthusiasts. Enthusiasm has been termed heat of imagination, and is to the mind what warmth obtained by oxygen is to the body.

Warmth is an essential to life, and is produced by an exchange of temperature with some substance warmer than ourselves. This is effected physically through the activity of the organs of respiration ; mentally it is effected through the activity of the organ of ideality, or the respiration of the mind with the divine mind, which vitalizes and invigorates all the other organs. It is this warmth which gives enthusiasm. Men with small ideality are content to have things as they find them, and the slightest obstacle or difficulty in the path of progression is sufficient to extinguish their feeble desire for improvement and advancement ; but no obstacle, however seemingly insurmountable, can daunt the man whose imagination is inspired, in whatever direction—philanthropy, invention, art, etc.—by contact with the divine mind.

Though no one faculty can perform the function of any other, or supply its place, none works independently, but each exerts more or less influence on the other.

Ideality is closely connected with the organs of imitation and spirituality. Man creates nothing. "The creation of his genius" should read "the imitation of his imagination." Imitation with small ideality can only copy other people's ideas ; with large ideality—the imagination, for instance—every great artist sees the picture he would draw as a vision in his mind, and imitates it. Musicians hear melodies and harmonies in the air, and make them their own by imitating them. Inventors, too, and those who would reach perfection of character, must imitate. "I loved and admired him to a degree of enthusiasm, and of course strove to imitate him."

Ideality also works with spirituality. Columbus believed in his idea of the existence of a new world ; and, in the face of great difficulty, stood firm upon his belief until he discovered it.

Gall would never have founded his system of phrenology if he had doubted the truths inspired in his mind. St. Peter began to sink when he began to doubt. Doubt ! it is the curse which mankind have brought on themselves. Nothing is so contagious as enthusiasm ; it is the magnetism which

draws. "Behold, what matter a little fire kindleth!" and all our greatest and richest achievements have been accomplished by its aid!

THE PSYCHOLOGY OF THE BIBLE.

THE FALLEN PNEUMA OR THE CONSCIENCE OF MAN
IN RUINS.

(PART III.—*Continued*).

It is only from the psychology of the Bible that we know man to be a trifold being, consisting of spirit, soul, and body. Hence, in this way, a correct scriptural psychology has thrown its bright lights on a dubiously interpreted and often darkened philosophical theology.

As stated before, the body is of the earth—earthy, doomed to die, and to mingle with its kindred dust. The spirit is from God,—is immortal by creation or emanation, and therefore cannot die. The soul, the resultant of the action of the Divine breath on the sarx or flesh, can either live or die, according to the fulfilment of certain conditions laid down for its guidance. Being in position, midway between spirit and body, the soul can lend its influences, good or bad, either towards the body, or towards the spirit, according to its own will-power. If it lean wholly to the former, the bias will probably end in a life of sin; if towards the latter, to a life of goodness; but the united influence of soul and body must certainly terminate in the second death, whatever that may be. The attribute of the other element, the God-consciousness of man, will, when separated from the soul at the judgment day, pass away, and become a part and parcel of the great ocean of universal being.

With such a scriptural-proven psychology, is it not strange that many divines and pulpit orators of the present day should indoctrinate their congregations with the errors of Platonism, rather than with the Bible truths of Paulism, in regard to the true constitution of man. Ministers of this class almost Christianize Plato, and make him like Clement, and others of the Alexandrian school, a sort of "Moses of Attica." This is not as it should be, neither would it have been had phrenology and scriptural psychology been systematically taught as the true philosophy of man from the logic and moral philosophy chairs of our universities. It is disgraceful, and an insult to the actual progress of the age, advancing as we are from a lower to a higher condition, that old errors and unproven

statements should be the pabulum of studential life when a universe of new and living truths are all about and around us, almost impertinently asking to become a part and parcel of the learned professor's daily academic lectures on that highest of all the sciences, the philosophy of composite man. If divines had been guided by a higher psychology in their Biblical researches and studies, the pages of the old Bible would have blazed forth with a catena of new and hitherto unthought-of explanations ; the mistiness of scores of passages would have become evident to the eye of reason as the mists cleared off, just as the rays of the morning sun roll up and dissolve the mists on the mountain side, bringing that object into view with a fuller presence of perception than before.

The Bible has now been in the hands of the people for nearly 2,000 years, and yet it is comparatively a sealed book. Neither clergy nor laity thoroughly understand it ; and the different interpretations put upon it are almost countless in number, and as diversified as the tints of autumn—nay, more so even when she has put on her autumnal mantle—"the pomp of groves, the garniture of fields." Butler, author of the "Analogy," says, "Nor is it at all incredible that a book which has been so long in the possession of mankind should contain many truths as yet not understood." Truly said : and these hidden truths will never be brought out and made evident to the minds of men whilst the Bible is merely read in Church in a strangely perfunctory sort of manner, without one word of explanation being offered as to the meaning of what is read. The whole system of Church worship requires altering. It is not listening to sermons, or hearing prayers read (which is not prayer at all to God *per se*, not absolute prayer-worship), but having the real meaning of the Bible explained, as far as man can do it. What is the meaning of the revelation God has sent, as recorded in the Bible?—that, is the great want of the age. This is the real object of the Christian ministry, and if not done, the religious services are a mockery, a snare, and an awful delusion. Owing to the advent of Jesus Christ into our world, every man on the face of the earth has it in his power to avoid the second death, and consequently to live for ever ; but, as religion is carried on in the world at the present time, such a glorious attainment at the end of the present life seems to be almost a foremost impossibility in the category of the impossibles.

If a millenium has to come, a great change in the present condition of things must happen. The Bible in Church will have to be well thumbed over whilst the minister is expounding the meaning, intermixed with many a short little prayer,

the outcome of a regenerated pneuma, and calling upon God to make the organ of the human spirit the presence-chamber of the Holy Ghost, the divine pneuma of the Trinity. Amid such environments in our churches, and carried out into domestic life too, "Holiness to the Lord" would soon be the general cry of the people. A new order of things would spring up. Children born under such conditions, "*ex traduce*" as Tertullian expresses it, would be so improved physically, intellectually, morally and spiritually, that a purer and a diviner man would, in due time, inhabit the earth. "Paradise Lost," with all its Miltonic horrors, remorse and gloom, would gradually pass away from memory; and "Paradise Regained," amid rolling worlds, angelic songs, and the music of the spheres, would be a home of joy for ever to all whose God-consciousness had been restored to supremacy over the soul and the body.

If, by the aid of science, and the outpouring influence of the Divine Pneuma, the organ of this God-faculty of man should be discovered, this would put a top-stone on the human temple, in which a being resides of whose grandeur and power earth-man himself has little or no conception. The phrenology of the future will account for many of the difficulties and crudities of the theology of the present day, divines having followed too closely certain notions current in the old schools of philosophy, instead of adhering to the psychology of the Bible—a book never intended to teach science, but which, in its own domain of ethics, and the philosophy of man stands without a rival.

When the locality of the pneuma shall have been determined upon, phrenology, in this, its highest department of spiritual exploration, will doubtless be found to have done good service to the cause of human progress.

SAMUEL EADON, M.A., LL.D., Ph.D.

WHAT ARE THE REASONS WHY PHRENOLOGY IS NOT MORE GENERALLY ACCEPTED ?

Two Papers read before the British Phrenological Association.

No. I.

OUR question presupposes a condition of non-acceptance, but at the same time leaves open to each to form his own estimate of the extent of it. For my own part, I am disposed to consider that, in so far as phrenology teaches innateness,

plurality of the mental organs, and definite location of function, it is very generally accepted; and that the points at which assent is withheld is, roughly, correctness of phrenological localisation, and the possibility of determining measure of endowment from external observation. The fundamental principles of phrenology permeate modern literature and thought; and theoretical phrenology stands more or less unconsciously acknowledged even by its opponents.

But there is not enough of scientific accuracy in practical phrenology. The attempts to outline cerebral areas for the various phrenological centres, and to define their comparative values by figures in a book, have done much to hinder the general acceptance of phrenology: not so much from the impossibility of approximate truthfulness in both, as from the immodest dogmatism with which the whole is too frequently carried out.

The general public have a right to expect that the lines upon which practical application is attempted should be easily followed, and that there should be no obscurity to baulk enquiry. They do not know enough of the dependence of phrenology upon physiological and other conditions; and the printed charts supplied in the largest numbers to the public (such as accompany cheap verbal readings) throw no light upon the subject. Phrenologists are vulgarly supposed to go upon the brain alone, or upon the organization, without regard to environment; and shrewd thinking men look askance at a system which, as they think, calls upon them to set aside the evidence of their senses.

A printed register with the same figure against an organ for two individuals, in the charts referred to, reads alike for both, and how are the uninformed to account for a disparity between the two individuals? To them, absurdity appears on the surface. Printed registers, if used at all, should be ample and unmistakably clear as to the influences of combinations and outside conditions, or they will continue to do more harm than good. An individual marked by four or five different phrenologists in the same kind of register, finds against an organ some slight variations; and in his case the apparent rule of thumb depreciation of scientific accuracy is a serious stumbling-block. The whole question of charts and chart marking needs revision; and such revision, in common with some other important phrenological questions, points to the necessity of a thorough combination of all phrenologists under one governing centre. Medical men may differ in their diagnoses of disease without detriment; but phrenology is not on the same level of public recognition.

Phrenology, from being misunderstood, from the start got into incompetent hands; and it has for a long time been imperfectly expounded and unfairly treated: its advocates often needing as much information as the public whom they have sought to teach. For the present receptive and enquiring state of the public mind we are indebted to the inherent truthfulness of phrenology itself, and to the patient perseverance of the few able men who, with much self-sacrifice and commendable devotion, have clung to the unpopular side, and given their lives to the sowing of what others will reap.

I take it that the reasons why phrenology is not more generally accepted are:—

1. That there is a very general misconception as to the (broad) basis of so-called phrenological character-reading: the term "phrenology" in this connection being a misnomer, very misleading, and altogether inadequate. When some other and more comprehensive word shall have been found and adopted in its place, we may hope to have done with the "bumpology" difficulty, and with a great deal of popular prejudice. The notion that the phrenologist reads character from the head alone needs a death-blow.

2. There is a great want of information in the public mind as to the conditions affecting size as a measure of power; and this fact needs more recognition in phrenological work.

3. The absence of scientific or mathematical accuracy in the methods of determining power of function, and the consequent confusion in the readings of different phrenologists of the same individual.

4. The unreliability and unscientific character of chart marking generally and specially by incompetent individuals.

5. Last, but not least, the longevity of popular prejudice.

G. Cox.

No. II.

Speaking broadly, phrenology has two gigantic powerful enemies in the pathway of its advancement. These are the same old foes which every good cause has had, and still has, more or less, to contend with. They are ignorance and prejudice. Happily, these are not such powers for evil now as they were in the old days, for two mightier factors—knowledge and truth—have been incessantly operating, so that we may confidently hope that in the not too distant future, knowledge and truth will reign where ignorance and prejudice now prevail.

One of the chief reasons why phrenology is not more gener-

ally accepted is, that it is not understood. Parsons are afraid of it merely because they misapprehend its teachings. Doctors repudiate it because they have been trained to regard it as an exploded theory, and have not sufficient time to investigate the matter for themselves. The leaders of scientific research discard it, because their cursory examinations of its truths have been conducted from a wrong standpoint, and they have looked for impossible results. This latter class merits reproach more than the others for obvious reasons. It is the duty of those men to disprove phrenology if they can, seeing that the arguments by which it was supposed to have been disproved, have since been found to be invalid.

Another reason why : because its scientific basis not being understood, phrenology is often regarded as a pseudo-science, and included by vast numbers of people in the same category as fortune-telling, witchcraft, palmistry, graphology, astrology, &c., &c., &c. ; and it is credited with being worth about as much as, but no more than, any of these systems of character reading.

Another reason is, because it is not fashionable to take phrenology seriously. How the public mind is swayed by that mystic influence fashion ! Let another Koch arise, let him touch the skulls which peacefully rest in our cabinets, and the effect will be marvellous. Even these dead skulls will speak and bear testimony to the world concerning the sublime teachings of phrenology, so that Gall, Spurzheim, Geo. and Andrew Combe, Craig, Vimont, Caldwell, Beecher, O. S. and L. N. Fowler, Sizer and others, will be forthwith recognized as having been heroes in a great cause ; and Phrenologists everywhere will be respected and patronised, where they are now snubbed and severely left alone.

Phrenology is however a popular subject. The people are on the whole friendly to it, but we are in need of a champion for phrenology from among the leaders of the people. For though we have thousands of supporters among the educated and influential classes, we have no great champion who has made our cause his own. This is another reason why phrenology is not more generally accepted. Another reason is this—phrenology is too democratic to meet with the approval of vast numbers of people. Such, for example, as those who rely on their material wealth or social status as being equivalent to true greatness of character. Many persons are filling important posts who are totally unfit to do so ; and many who are qualified never have the opportunity. This accounts for a large number of anti-phrenologists among the influential classes. Then, beyond these, there is another class

of persons about whom phrenology has some very unpleasant things to say ; consequently, these do not like it, and so furnish another regiment in the great army of antagonists to phrenology.

“Men love darkness (mental and moral) rather than light, because their deeds are evil.”

I think I have given most of the reasons why phrenology is not more generally accepted ; but I have one other to refer to before concluding, viz. :—that phrenological professors and teachers have often presented the subject to their hearers in an unscientific way, and they have sometimes overstated the truth in their very zeal for it, which is to be regretted. This much, however, is certain—that no man possessing small combativeness can be a professional phrenologist : for he has to work against prejudice and ignorance wherever he goes.

J. FRANK HUBERT.

THE BRITISH PHRENOLOGICAL ASSOCIATION.

THE annual meeting of the British Phrenological Association was held at Imperial Buildings, Ludgate Circus, on Tuesday, March 4th, Mr. Webb in the chair. A short report of the work of the past twelve months was read by Mr. Warren, in which it was stated that though the membership had not greatly increased in the year, the capacity for good sound work was greater than it was a year ago ; and that the influence of the Association was making itself apparent, inasmuch as many who had spoken against phrenology now hesitate to do so, and others had admitted that their views are more favourable to the truthfulness of the science. Attention was called to the interest in the work and welfare of the Association taken by the President (Mr. Webb), and to the paper read by him, entitled “Phrenological Aspect of Modern Physiological Research,” also to the contributions by Messrs. Hollander, Donovan, Hall, and Miss Jessie Fowler.

It was pointed out that the rules were completed after careful thought, and adopted at a special meeting, and that the election of officers by ballot came into operation this year.

A vote of thanks was accorded to Mr. Warren for his work during the past year, to Mr. Cox for his reports of proceedings, and to Miss A. M. Fowler, as treasurer.

Mr. Hollander reported that he had examined the accounts, and that there was a small balance in favour of the Association.

Two scrutineers were appointed to examine the voting papers, and their report was that the following were elected :—

President, Mr. Webb ; Corresponding Secretary, Mr. Hollander ; Recording Secretary, Mr. Warren ; Treasurer, Miss A. M. Fowler. Council (3 years), Mr. J. F. Hubert, Mr. Piercy, Mr. Hall, Mr. Wm. Brown ; (2 years) Mr. O'Dell, Mr. Owensmith, Mr. Dillon, Miss Oppenheim ; (1 year) Mr. Moores, Mr. Stooke, Mr. Gray, Mr. Rham.

Mr. Hollander made a few remarks on his election, and proposed a hearty vote of thanks to Mr. L. N. Fowler and the conductors of the "Fowler Institute" for their kindness to the members of the British Phrenological Association, which was carried unanimously.

Mr. Piercy responded.

EMPLOYMENT BUREAU.

As there are so many people who pass under our hands for phrenological examinations, who are in their wrong places, and who desire to get into their proper sphere, a labour Bureau has been opened by the Fowler Institute, to help such people out of their difficulties. Many firms send us young people to examine, to know if they are suited to their vacant positions. If this were more widely known to the heads of firms, schools, &c., it would become of practical value, and save much time and expense, as well as many mistakes. A man is wanted for a place of trust, an advertisement is put into the papers, but out of the number who apply it is difficult to choose the right one, unless the applicant has passed under the hands of a conscientious phrenologist, and the weak and strong characteristics pointed out, &c.

One object of the Fowler Institute is, therefore, to make phrenology of so much value, that the young members of every household will see the necessity of possessing a phrenological delineation.

We have had the testimony of so many whom we have placed aright, of fortunes that have been made, just by having an examination, that we feel confident the above intimation will be read with interest.

The Fowler Phrenological Institute is centralizing the good that has been scattered abroad at their London headquarters.

All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C.

THEY who have the lightest hearts and but few material possessions get the most of life ; too much material baggage is an impediment.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

II.—CAUTIOUSNESS.

Solicitude about consequences—apprehension of danger—instinct of fear—care—anxiety.

So numerous and so great are the dangers with which man is surrounded, so many evils beset his path, and so many things are to be provided against, that, unless there were implanted in the human breast by the hand of nature *some* faculty which, upon the least intimation of danger should sound the tocsin of alarm, and thus save him from accident, and, also, which should give him consideration and forethought, he would be liable to be frequently overtaken by impending dangers, and, also, would make, comparatively, little preparation for future wants. Of the *necessity* of the faculty, then, there can be no question; nor that the function of solicitude constitutes a very large class of the intellectual functions. Hence, the inevitable conclusion is, that there exists a faculty which exercises this class of the mental operations. But when we find that the strength and activity of this faculty, when compared with the other feelings, are proportionate to the size of a given portion of the brain, reason and philosophy join in admitting cautiousness to be a separate faculty of the mind. Its office is, to provide against present danger, to cast up a bulwark of defence against danger in the distance, to watch over the interests of the individual, and to excite, repress, and direct the operations of the other faculties.

VERY LARGE.—One having cautious. *very large*, is so doubtful, fearful, uncertain, and apprehensive, irresolute and inefficient, that he is disqualified for prompt, enterprising, vigorous effort, and wastes the day of action in fruitless deliberation; indulges groundless and unfounded apprehensions; anticipates danger when there is little or no cause; is unwilling to run any risk, and much more alarmed by sickness and trouble than the occasion really demands, &c.

One having cautious. *very large*, with combat., self-e., and hope moderate, will be irresolute; easily discouraged; unwilling to engage in any important undertaking for fear of experiencing a failure; is timid, easily frightened, destitute of decision and energy, and unable to effect any thing important; but if hope, firm., and self-e., are also very large, and combat. is large, cautious. will not prevent action and effort, but will simply take care that every thing is provided for, arranged, and seen to: with hope, caus., and compar. *very large*, and the perceptive organs large, may take some seemingly bold measures, but they will be dictated by a correct judgment, rendered the more acute by the strong excitement caused by cautious.: with hope and combat. moderate, looks always on the dark side of prospects: borrows a world of trouble, even in prosperity; apprehends the worst

rather than the best ; indulges gloomy, dismal, melancholy feelings, and often suffers intolerably from them ; pores constantly over misfortunes ; magnifies every difficulty ; diminishes advantages ; fears much more than hopes ; does not venture, or run any risk ; shrinks from difficulty, and, by his terror and alarm, is easily overcome, so that he cannot act on occasions of danger.

LARGE.—One having cautious. *large*, looks at every plan and project with a careful, anxious eye before he concludes upon the course to be pursued, and hesitates long before he finally decides ; turns the



DR. W. A. WINDER.—Large Cautiousness.

whole matter over and over again in his mind ; is very often in suspense, and remains too long undecided ; fully considers every chance against him ; takes all necessary, and, often, even unnecessary, precaution ; too often reconsiders, and manifests a pains-taking, careful, anxious, provident disposition in all he does.

One having cautious. *large*, with combat. and destruct. also large, is slow in commencing, yet when once interested in any project, pushes it with great spirit ; may be timid and fearful till his courage is once excited, but will then be bold and fearless ; may be nearly overcome with fear before he commences acting or speaking, yet is full of courage, and spirit, and determination when he has once commenced, and where effort is required, combines discretion with valour ;

prudence with determination, &c. ; in cases of danger, will be perfectly self-possessed, and yet have forethought enough to do just what the occasion demands ; cannot be soon worked up to the sticking point, but is determined, when once kindled ; may drive forward with some fury, but will steer clear of every thing that can upset his vehicle or obstruct his progress ; and, with cautious. and hope also large, will enter so largely into business, and push his projects with so much energy and zeal, as to *seem* to be very rash, and nearly destitute of caution, yet come out about right in the end ; with compar. and caus. large in addition, will very seldom entirely fail in his projects, though he may be sometimes obliged to retrace his steps ; will present seemingly contradictory points of character, sometimes appearing to be rash, and at others fearful ; and, with a nervous temperament, will be either “in the garret or in the cellar ;” when circumstances are favourable, or excite his hopes, and quiet his fears, will be in high hopes and spirits, and promise himself too much ; but when his fears are awakened, and nothing excites his hopes, he cast down, discouraged, and exceedingly anxious, and subject to extremes of hope and fear : with very large compar. and caus., and large perceptive organs, will generally come to a correct decision, yet take his own time for it ; will act understandingly, and make every effort tell directly on the object in view ; take hold of things judiciously and in the right place ; seldom retrace his steps, change his decisions, or undo what he has done ; in general, will be eminently successful, and seldom subject to accidents or disappointments ; consider well the *pros* and *cons* on both sides of all questions, and investigate the whole matter in hand thoroughly before decision or action.

FULL.—One having cautious. *full*, will possess a sufficient degree of this faculty to secure success, and provide against accidents in ordinary cases, yet will frequently seem to be very imprudent ; does not act without care and forethought, yet does not consider so long as to let pass the day for action ; and cannot be called rash or careless, except when rendered so by his other faculties.

One having cautious. full, with hope and combat. large, will not possess sufficient circumspection to regulate and prevent the precipitate action of these faculties, and thus be hurried headlong by them into projects without sufficient caution or forethought, and will seem to be much less cautious than he really is.

When full, large, or very large, cautious. acts with a vigour reciprocally proportionate to the power of this faculty and the strength of the desires of the other faculties. This accounts for the phenomena, so frequently occurring, of an extreme anxiety concerning some things, and a want of it in other things—a class of phenomena which no other system of mental philosophy has ever accounted for, or can ever explain.

MODERATE.—One having cautious. moderate, will discover a want of forethought and discretion, yet the extent of this deficiency will be greater or less according as his other faculties do, or do not, expose him to danger. One having cautious. moderate, for example, with

hope and combat. also moderate, will need but little cautious. to restrain the excesses produced by these faculties; with combat. and hope large, will be hasty, inconsiderate, and improvident; with caus. and compar. very large, when not blinded by passion or prejudice, may be judicious, and lay good plans; with acquis. very large, will take good care of his property, yet be careless in other respects, &c.

SMALL.—One having cautious. *small*, will decide and act without due deliberation; be careless, precipitate, imprudent, and, consequently, often unlucky, and subject to frequent accidents; will fail to perfect his plans, and therefore, often be obliged to undo what he has done; proceed without forethought or care, and thus labour to the greatest disadvantage; will sustain repeated and heavy misfortunes; and, with combat. and destruct. large, will drive forward in a furious reckless manner, so as often to defeat his plans, and frequently be in hot water; will know nothing about fear; but, with large reasoning organs, may proceed so habitually under the influence of *reason* as to sustain few losses, yet will lack solicitude.

VERY SMALL.—One with cautious. *very small*, will be destitute of fear, of forethought, of discretion, and, consequently, rash, heedless, headlong, regardless of consequences unfortunate, and governed by his other faculties.

This faculty is generally much more active, and the organ much stronger, in females than in males; while combat. and destruct. are much smaller. Hence, the irresolution, fear, terror, groundless alarms, and uncalled for anxiety which they so often manifest: and also the superior discreetness and propriety they generally possess over the other sex. In children, too, this organ is much larger than in adults, doubtless because their dangers being greater, the protection demanded is proportionally greater.

Cautious. has three divisions, the front part gives Prudence; the middle portion gives Solicitude; the back part gives Timidity.

LOCATION.—This organ is located in the brain in the angular gyrus, the centre for movement of platysma myoides, or muscle of fright and fear; and under the parietal eminence of the skull; just above, and partly behind, secret. Or thus: when the head is erect, cautious. will be found upon the sides of the head, just back of a perpendicular line passing through the opening of the ears.

12.—APPROBATIVENESS.

Love of the approbation of men—sense of character—desire for the favourable estimation, and the good opinion, of others—ambition for distinction and popularity—love of fame, &c.

Certain actions are considered praiseworthy, while others are considered disgraceful, which proves that the mind is so constituted as to approve of some things, and disapprove of others. Hence, we infer the existence of a distinct faculty which exercises this class of functions, and the facts that the strength of this class of functions is various, being energetic in some, and weak in others,—that it is manifested in proportion to the development of a certain portion of the

brain—and that it is an instinctive and intuitive, and not secondary exercise of the mind, and that it is unique and homogeneous in its character, establish the conclusion, that it is the product of a distinct faculty of the mind.

This faculty does not decide what actions are praiseworthy and what are not, but only arraigns the actions before such a standard as may have been settled upon by custom, by the dictates of the other faculties, by the passions, &c., and praises or blames, according as they do, or do not, conform to this standard. Its influence, however, in promoting morality and refinement, and in preventing vice by censuring it, is very great.

VERY LARGE.—One having approbat. very large, will regard his character as the apple of his eye, and the approbation of others as the idol of his heart; will be withered by the finger of scorn or the breath of slander; unable to bear up under ridicule, and be ever goaded by a morbid sensibility to shame and reproach. One having approbat. very large, with self-e. large, caus. only full, and a brain of only ordinary size, will be both proud and vain; inclined to be very ceremonious, merely for effect, and for the sake of appearances; affected in his manners, excessively eager for fame, and ever fishing for popularity, yet destitute of the talents requisite to obtain his desires; and, with ideal. very large, will be a gay, dressy, showy, affected, ceremonious fop or belle, floating upon the surface, or following the wake of popular applause and fashion, and a perfect index of both, shifting like the weather-cock, with every changing breeze of public opinion, &c. Under approbat. large, will be found additional descriptions and combinations, which will apply to approbat. very large, except that they are not sufficiently intense.

LARGE.—One having approbat. large, is extremely sensitive upon every point connected with his honour, his character, his reputation, &c., frequently asks himself, what do, or what will, people think of this or that course of conduct, &c.; is very desirous of being thought and spoken well of, of being esteemed, praised, and admired; will be affable, courteous, polite, and mindful of appearances, and frequently experience, in a very high degree, the feelings of mortification and shame.

One having approbat. large, with adhes. large, will be extremely sensitive to the approbation and the disapprobation, particularly of his friends, and with self-e. moderate and firm. only full, will be disposed to act in conformity with their wishes, lest he should incur their censure, and with combat. and destruct. large in addition, will be too quickly offended by any coldness or apparent neglect, and too ready to construe any want of attention into dislike; will avenge his injured honour, and never allow any disgrace to be attached to his character: with self-e. only full, benev., at least, large, combat., destruct., and secret. only full, individ., event., lang., imitat., ideal., and compar. large, will be a perfect gentleman: with secret. large, and conscien. small, will do things which he would not, for the world, divulge; be governed far more by the voice of public opinion, than by the dictates

of justice, and make the former, rather than the latter, his code of morals ; but with conscien. larger than approbat., will fall in with public opinion so far as he considers it right, but no farther, and, with combat. also large, will not only breast public opinion with boldness, but will glory in facing the frown of men while engaged in what he considers a righteous cause : with benev. large, will add to his strong desire to please those around him, a strong desire to make them happy, which together will make him doubly obliging and attentive to the wants of others : with cautious., secret., ven., and conscien. large, and self-e. small, will have a very strong desire to please, and, also, great anxiety lest he should not succeed in pleasing ; feel a great deference, especially for superiors in age, talents, &c. ; possess a feeling of his own unworthiness ; and also of reserve, which together produce extreme diffidence ; a natural shrinking from exposure ; and a bashful feeling, from which, when he is among strangers, he will suffer intolerably : with combat., destruct., self-e. firm., ideal., individ., event., and lang. large, and compar. and caus. very large, will possess, not only a high order of talent, but, also, that restless ambition for distinction and fame which will spur him on to use his utmost efforts to attain pre-eminence, and thus enable him to distinguish himself, particularly for his intellectual qualities : with cautious. and conscien. large, secret. full, and the intellectual organs large, will fear to be noticed, lest he should be reproached : appear before the public with extreme reluctance ; shrink from the popular gaze ; sometimes feel almost compelled to abandon any undertaking in which he may be engaged, and shrink from the thought of public responsibility, with self-e. large, hope very large. combat., ideal., individ., lang., and compar. large, and conscien., ven., and caus. only full, will take the other extreme ; be likely to put himself forward in conversation, debate, public meetings, societies, parties, &c., be officious, vain, and conceited, and too apt to meddle in affairs which belong to others : with ideal. very large, caus. only full, and a smaller sized brain, will be a fashionable dandy, who will devote himself chiefly to dress, etiquette, and tea-table talk, which will be without sense or point, and, though he may pass well in fashionable society, will be unable to think or reason upon subjects, &c.

FULL.—One having approbat. full, will place a high estimate upon his character, and be by no means indifferent as to what may be thought and said of him, yet will sacrifice his honour upon the altar of his stronger passions ; may seek distinction, and indeed, manifest a strong desire or make great sacrifices to obtain it, yet he will seek it, not chiefly as an end, but partly as an end, and partly as a means ; will not be governed by the voice of public opinion, yet will not by any means be insensible to its dictates ; and will so conduct himself as to secure the goodwill of all, at least, as far as he can do so, consistently with the gratification and the demands of his other faculties, yet no farther ; with large firm., self-e. and conscien., and full combat., will be sufficiently condescending and affable to please all, and yet be too firm and independent ever to be enticed from the path of rectitude or

voice of popularity ; will not eagerly adopt all the ridiculous whims of "fashion," because "everybody else does so," nor yet be so inattentive to what is generally approved as to be singular, and without cause, to incur the displeasure of any one ; with combat., destruct., amat., self-e., and ven. full, benev., conscient., ideal., adhes., mirth., imitat., lang., and the reasoning organs large, will be a favourite, go where he will ; will please all, and yet command respect from all ; be neither stubborn nor obsequious ; will be pleasing, dignified, and popular in his manners, and reasonably condescending, yet sufficiently independent, and will readily enlist the good will and the affections of all, especially of the other sex.

Approbat. full or large, combined with large combat. and destruct., and educated in a warlike community, would fasten, for its object, upon warlike exploits, upon intrepidity, bravery, and, perhaps, even upon acts of bloodshed, or create in its possessor a desire to be considered the best boxer, pugilist, wrestler, &c. : with aliment. large, to be noted for the quantity he can eat or drink : with large construct., ideal., and imitat., to be considered the best mechanic, or create a mechanical ambition : with large or very large moral organs, will create a moral ambition, and desire to be distinguished for morality, for piety, for honesty, and for a correct, if not religious, walk and conversation : with very large ideal., mirth., compar., and caus., the perceptive organs generally large, and the propensities only full, will seek distinction as a wit, a poet, an orator, a scholar, a writer, or for his intellectual, rather than his physical or animal qualities, &c.

MODERATE.—One having approbat. moderate, will not be influenced by what others may think of him or his actions, nor be ambitious, or care much for reproach and ridicule, &c. One having approbat. moderate, with firm. and self-e. large and ven. moderate, will be too independent to give general satisfaction or become popular, and even if his talents are such as to place him in stations of trust and public observation, he will have many enemies, and, whenever duty, or judgment, or interest demands it, will do just what he chooses to do, whether his conduct be approved or censured, even though he knows it will bring down public odium upon his head.

SMALL.—One having approbat. small, will experience but little shame ; be comparatively insensible to ridicule and reproach ; and indifferent whether his conduct, appearance, expressions, &c., please or displease. One having approbat. small, with large intellectual and semi-intellectual organs, may possess commanding talents, yet will have too little ambition, and too little love of fame, to exert and apply his powers, &c.

Perhaps no faculty is more frequently perverted. The rich, in order to gratify this passion, "have sought out many inventions" by which to distinguish themselves from the poor, and attract attention ; and the poor exhaust all their powers to follow in the footsteps of the rich. The rich, finding themselves partially imitated, change the fashion, and are again followed by the poor. Thus it is that a vast amount of time, and labour, and comfort, and, it might be safely

added, of virtue, too, is worse than wasted. This evil is daily augmenting. It holds an equal sway in the church and in the state. This tyranny nowhere holds so cruel a despotism, and rules with such an iron sceptre, as in this our boasted land of freedom and equal rights. But, so long as men will follow, and submit to, so fickle and so tyrannical a dame as fashion, they need not complain of "hard times," and of the ten thousand miseries which she heaps upon the devoted heads of her subjects.

Approbativeness has three divisions: the lower part gives Ambition and Emulation; the upper part, Display, regard for Fashion; part joining self-e., Sense of Character.

LOCATION.—Approbat. is located between cautious. and self-e., in the superior parietal lobe of the brain, half-an-inch above the lambdoidal suture.

(To be continued).

Hygienic and Home Department.

THE "LADIES' FRUIT AND SALAD GARDENS."—The first of Miss Harriman's "Ladies' Fruit and Salad Gardens," near Derby, with its excellent dwelling-house, large orchard-house, and plantation of over 3,000 choice fruit trees, is now very near completion, and the first six ladies will very shortly go into residence. Starting as it does in a thickly populated neighbourhood, there seems every probability of the greater part, if not the whole, of the produce of the garden being taken by people near, who will open deposit accounts with the lady gardeners. On and after April 1 the gardens will be open to visitors every Thursday afternoon on payment of one shilling. During April, May, and June, the busiest months of the year, most of the day will be taken up with gardening work. Holidays will have to be taken by the ladies in turn during the winter, when those left at the gardens can with ease do the work of sending off the stored crops as ordered, attend to the plants under glass, and feed the poultry.

WHY YOU SHOULDN'T SNUB A BOY.—Don't snub a boy because he wears shabby clothes. When Edison, the inventor of the telephone, first entered Boston, he wore a pair of yellow linen breeches in the depth of winter. Don't snub a boy because his home is plain and unpretending. Abraham Lincoln's early home was a log cabin. Don't snub a boy because of the ignorance of his parents. Shakespeare, the world's poet, was the son of a man who was unable to write his own name. Don't snub a boy because he chooses a humble trade. The author of Pilgrim's Progress was a tinker. Don't snub a boy because of dulness in his lessons. Hogarth, the celebrated painter and engraver, was a stupid boy at his books. Don't snub a boy because he stutters. Demosthenes, the great orator of Greece, overcame a harsh and stammering voice. Don't snub anyone. Not alone because they may far outstrip you in the race of life, but because it is neither kind, nor right, nor Christian.

How long does our "first sleep" last? Sir James Crichton Browne, continuing his lectures at the Midland Institute on "Brain Rest," told his hearers that ordinary sleep grows deeper for the first hour and a half, and then steadily diminishes until the slumberer awakens. Dr. Browne pleads for eight hours for actively working brains, though ascetic notions have led many people to shorten the time, with the result that in certain cases it has been proved that the amount of sleep may be considerably reduced without injury. Literary men are apt to starve the brain in the matter of sleep; but some nevertheless have got on pretty well in spite of insomnia. Carlyle and Rossetti furnish instances. Dr. Browne quoted a letter from his friend Dr. Tyndall, who says "for four weeks I never had a single second of sleep, and during those nights I walked thousands of times round my room to no purpose. What astonishes me above all (he adds) is, notwithstanding my night's weariness, my brain power does not appear to be sensibly impaired. After two or three hours' sleep I feel my brain as strong and clear as it ever was at any period of my life." It was, in Sir J. Crichton Browne's opinion, impossible to doubt that nutrition and repair must have gone on in the brain during periods of sleeplessness. The brain, in short, must, as he expresses it, "have learnt the trick of the heart, and gone to sleep during the beats, or it must have slept in centres which were not active at the same time."

WHAT TO TEACH.—At a social gathering, some one proposed this question: "What shall I teach my daughter?" The following replies were handed in: Teach her that 20s. make a £1. Teach her how to arrange the parlour and library. Teach her to say "No" and mean it, or "Yes" and stick to it. Teach her how to wear a calico dress, and to wear it like a queen. Teach her how to sew on buttons, darn stockings and mend gloves. Teach her to dress for health and comfort as well as for appearance. Teach her to cultivate flowers and to keep the kitchen garden. Teach her to make the neatest room in the house. Teach her to have nothing to do with intemperate or dissolute young men. Teach her that tight lacing is uncomely as well as injurious to health. Teach her to regard morals and habits, and not money, in selecting her associates. Teach her to observe the old rule: "A place for everything and everything in its place." Teach her that music, drawing and painting are real accomplishments in the home, and are not to be neglected if there be time and money for their use. Teach her the important truism:—That the more she lives within her income the more she will save, and the further she will get away from the poor-house. Teach her to embrace every opportunity for reading, and to select such books as will give her the most useful and practical information in order to make the best progress in earlier as well as later home and school life.

Notes and News of the Month.

IN the May number, under the title of "Men of the Times," will appear articles on Count Mattei, Dr. Kennedy, and Mr. W. T. Stead, with portraits.

WE omitted to note last month that the portrait of Sir Edgar Boehm was from Elliott and Fry's photograph; that Wilkie Collins was from a photograph by Bassanio, and that we were indebted to the *Review of Reviews* for the loan of the portrait of Miss M. M. Dowie.

MISS RHODA ANSTEY, a young lady residing in Devonshire, is extending to a few delicate children all the advantages of her happy farm house home. She combines hygienic living and physical culture, arranges games, rambles, tennis, &c., and bestows loving care. A small charge is made for board, and tuition is given if desirable. All particulars can be obtained at the office of this Magazine, or of Miss R. Anstey, Juryhays, Tiverton.

ENGAGEMENTS OF THE FOWLER INSTITUTE.—April 4th, at the Leopold Rooms, 3, St. Bride Street, E.C., Miss Jessie A. Fowler, on "Phrenology." April 13th, Members' Meeting, Madame Patenall (of Hastings) on "Faces." April 22nd, at the City Temple, Rev. W. J. Dawson (of Glasgow) on "Savonarola, Monk, Patriot, and Martyr." April 23rd, at Mottingham, Kent, Mr. L. N. Fowler, on "Tact and Talent." April 1st, 8th, and 29th, Lecturettes at the Institute.

Want of time and space prevent us from more than just mentioning the presentation that was made on Wednesday, March 18th, to Mr. L. N. and Miss Jessie A. Fowler, of a handsome illuminated address, marble clock, and gold watch, by the members of the Fowler Institute. A full account of the proceedings will appear in the May number of THE MAGAZINE.

AT a recent meeting of the Middlesex Hospital Medical Society, Mr. R. E. Holding, of Queen's Park, exhibited, and made remarks on two skulls, remarkable for their peculiarity of shape, owing to the fusion, during youth, of the two parietal bones, which, checking the growth of the brain in width only, allowed growth towards the front and back parts of the head, causing the elongated appearance known to anatomists by the name of scaphocephalic. The skulls are owned, and in the possession of Mr. Crothall. We hope shortly to be able to publish sketches of the above in the PHRENOLOGICAL MAGAZINE.

ELIHU BURRITT says:—"No human being can come into this world without increasing or diminishing the sum-total of human happiness, not only of the present, but of every subsequent age of

humanity. No one can detach himself from this connection. There is no sequestered spot in the universe, no dark niche along the disc of non-existence, to which he can retreat from his relations to others, where he can withdraw the influence of his existence upon the moral destiny of the world; everywhere his presence or absence will be felt; everywhere he will have companions, who will be better or worse for his influence. It is an old saying, and one of fearful and fathomless import, that we are forming characters for eternity. Forming characters! Whose? our own or others? Both—and in that momentous fact lies the peril and responsibility of our existence. Who is sufficient for the thought? Thousands of my fellow-beings will yearly enter eternity, with characters differing from those they would have carried thither had I never lived. The sunlight of that world will reveal my finger-marks in their primary formations, and in their successive strata of thought and life.”

GIVE a man the necessaries of life and he wants the conveniences. Give him the conveniences and he craves for the luxuries. Grant him the luxuries and he sighs for the elegancies. Let him have the elegancies and he yearns for the follies. Give him all together and he complains that he has been cheated both in the price and the quality of the article.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

SOHO HILL CHAPEL.—On Thursday night, a lecture on “Phrenology” was delivered by Mr. A. C. Fellows, in the Lecture Room adjoining Soho Hill Chapel. The Rev. Charles Lemoine presided, and there was a large attendance.—*Handsworth News*.

LECTURE.—On Tuesday evening, Feb. 17th, a densely-crowded audience assembled at the Oddfellows’ Hall to listen to an interesting and instructive lecture on “Love and Lovers,” by Mr. Jolley, president of the Norwich Phrenological Society. Dr. Matthews presided. The lecturer well seasoned his subject with mirth and wisdom. The proceeds were presented to St. Faith’s Newton Chapel funds. A vote of thanks to the chairman and Mr. Jolley brought a pleasing entertainment to a close.—*Eastern Daily Press*.

ON Thursday evening, February 26th, Mr. Mark Guy, lecturer on Mental Science, gave an interesting and instructive lecture on Alcohol, at Villier Street Temperance Society, Winson Green Road,

Birmingham. The lecture, which was illustrated with diagrams, &c., was full of interest; there was a large attendance, and great attention was paid to the lecture by the audience. Professor Burton presided. At the close of the lecture, Mr. Guy examined two heads, and the delineations he gave of their characters were said to be remarkably correct.

LARGE audiences are still assembling nightly at the Temperance Hall, to hear Mr. and Mrs. Thompson, who are delivering a series of lectures on phrenology and kindred subjects. The lectures are well delivered, and are interesting as well as instructive. At the close of the lectures, several persons submitted themselves for examination, and afterwards declared that, if the lecturer had been on the most intimate terms with them, he could not have given better delineations of their character. Mr. and Mrs. Thompson seem thorough masters of the subjects they deal with, and treat them in a style at once pleasing, clear and effective.—*Bradford Daily Telegraph*.

ON Wednesday evening, March 11th., Miss J. A. Fowler gave a lecture on "Australia and Emigration," before the members of the City Temple Literary Society. There was a large attendance of members and friends, who very much appreciated all that was said, but special interest was taken in the advice given to those who purposed visiting the "Sunny South." At the close of Miss Fowler's remarks, a vote of thanks was given with acclamation, after which Mr. James, from Adelaide, gave some very interesting particulars in corroboration of what had previously been said.

ON Thursday evening, the 12th of March, Miss J. A. Fowler delivered a lecture on "Phrenology" in the United Free Methodist Chapel, King's Cross. There was a large and interested audience. Mr. Sutton presided. In his opening remarks he acknowledged his limited amount of knowledge on the subject, but, at the same time, he was open to conviction. Miss Fowler said we hear much about bumpology, but phrenology is the science of the mind, not bumps. Let us look beneath the skull, or examine the interior. "I am very glad you show you are believers in phrenology, for if you had not believed in it, you would surely have left your minds and characters at home. One object of phrenology is to direct children's talents aright, &c. It was intended that people should know themselves; and what subject is more interesting than the study of mankind, &c., &c.?" The lecturer concluded by some examinations of persons in the audience.

ATTERCLIFFE, SHEFFIELD, AND ROTHERHAM PHRENOLOGICAL AND PHYSIOLOGICAL ASSOCIATION.—The inaugural lecture in connection with the above Association was recently delivered by the president, Mr. G. B. Setchfield, at the Vestry Hall, Attercliffe, to an appreciative audience. Dr. C. W. Robinson was in the chair. The lecturer, who met with a hearty reception, said the cardinal object of the Association was for the intellectual, social, moral, physical, and spiritual uplifting of the masses. While physiology was a

mighty lever for lifting a man physically, phrenology was a lever for lifting a man in the intellectual, social, and moral scale. He predicted much good as the result of a thorough knowledge of physiology, which is a special branch of the Association. He spoke of Dr. Ferrier's discoveries as favourable to phrenology, and alluded to the evidence of 20 medical men and divines in support of it. A vote of thanks brought a very pleasant evening to a close.—*Sheffield Independent.*

Temperance Notes.

REV. CANON SCOTT, of Woolwich, says "one of the greatest blots on our Christianity is the fact that in England we had 70,000 girls engaged in public-houses and drinking bars, there to work for many hours amidst temptation, foul language, and impure air."

IN London alone, 500 children, under 10 years of age, were taken up in a state of intoxication; 1,500 under 14; 2,000 under 21 years of age. A little book, dealing with this subject, is called "Alcohol and Childhood." Few people are aware that there are children who like a larger amount of stimulant than they get from the sugar which affectionate parents sometimes give them from the whisky glasses.

DR. BENJAMIN WARD RICHARDSON is credited with the following expression of opinion concerning woman's work in Temperance. An old and familiar story places the responsibility upon woman of having first led man into temptation, which brought woe and death in this present world. If the experiment had to be tried again the man would follow. As this is the case, woman had better be foremost in Temperance, and man following in due course, the *amende honorable* would thus be brought about; and life, health, and prosperity, become the world's gain.

THE following extracts are taken from an address given by Her Grace the Duchess of Bedford some time ago to young women engaged in business:—

"The subject of Temperance is a noble subject: one to occupy the splendid energies of a great mind, and yet one which the humblest may understand, and about which the most ignorant may diffuse knowledge."

"The Temperance question has a very large application: it *teaches* us to think of others, but it *forces* us to think of ourselves."

"Whatever you do, break your dependence on stimulants."

"Of all kinds of knowledge, the branch of knowledge which is most neglected, even in these days of education, is *self-knowledge*; and a branch of self-knowledge which is almost ignored is the knowledge of our own need of self-restraint."

Book Notices.

Our Boys and Girls, by L. N. Fowler (1d.), London : Fowler Institute.—This little pamphlet (24 pp.), is a reprint from the PHRENOLOGICAL MAGAZINE ; it reads pleasantly, and for profit is worth reading. Hints on the training, management, and character of children are numerous ; the philosophy is sound, if not deep ; the experience true, extended and practically put. It is a plea for the use of scientific phrenology, and sets forth some of the benefits of examinations.

A NEW edition of *Lectures on Man*, 325 pp. 50th thousand. By Professor L. N. Fowler, of New York. Published at Imperial Buildings, Ludgate Circus, London.—The exhortation, “Man, know *thyself*,” can scarcely be accomplished in satisfactory conclusions without the aid of such phrenological help as the able work Professor Fowler here offers to his readers. During his residence in America, his character, talents, and work were familiar to us, through the leading American papers, both religious and secular alike, as a scholar and a Christian gentleman. His settlement in London, and the lectures he has delivered to many thousands of hearers here and in the provinces, have fully confirmed his pre-eminence in the science of phrenology abroad as at home. We can recall facts amply sufficient to impress our readers of the *value* of phrenology, particularly for parents seeking a suitable establishment of their children in life, but content ourselves by urging a perusal of these all-absorbing pages, which have reached the 50th thousand.

Correspondence.

PROFESSOR WALLACE AND PHRENOLOGY.

To the Editor of the PHRENOLOGICAL MAGAZINE.

SIR,—I have read with much interest Mr. Bernard Hollander's article on “A. R. Wallace's Darwinism.” The mistake that Professor Wallace has fallen into is a mistake that every one ignorant of the fundamental principles of Phrenology must naturally make when they touch upon anything appertaining to mind. Professor Wallace assumes that musical power, artistic power, mathematical power, &c., &c., are each of them distinct faculties. A faculty has the same relation to phrenology that element has to chemistry. There is no such faculty as the musical faculty, or the artistic faculty, or the mathematical faculty. It takes the happy combination of many faculties to make a musician. The same with the artist, hence the many phases of artistic power. Maclise was a great artist, but had his faculty of colour been better developed, he would have been a greater one. These happy combinations of highly-developed faculties are rare, and will ever be rare. A professor of the violin told me that he had many pupils who had good taste for music, but very few of them, especially the women, had good “touch.” We call it the faculty of “weight.” They could not estimate the amount of pressure to put on the strings to produce certain effects. Professor Wallace might just as well talk about the jumping muscle as about the artistic, musical, or mathematical faculties.

H. C. DONOVAN.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

ETHEL (Brighton).—This child is prematurely developed in mind; she talks and acts like a grandmother, has many opinions of her own, delights to teach and tell others, and is naturally a teacher. She is more original than children generally are, and is remarkable for her conversational talent. She has powers to mimic, draw, and do artistic work, and would excel as an artist. She is very active, executive, ambitious, hopeful, and acts like a young woman much older than she is. She is full of life and health, and should be kept so restrained from study as not to overdo and become extra nervous. She had better be educated for a teacher, a writer, or a public entertainer and instructor of some kind; she will never be content to live a quiet, retired life.

J. B. (Acton).—This young man has great aspirations, possesses great executive power, is not easily stopped in his progress, or made to change his course. He possesses pluck unto the last drop of blood; will be particularly executive and energetic in the sphere of life he chooses to follow; will be forcible in speech, and lay down the law without any compromise. He acquires knowledge easily, delights to tell what he knows, and has a critical, analogical, discriminating kind of intellect. His thirst for knowledge, and his desire for public life, will push him ahead, and bring out all his forces. He is full of hope and anticipation, and will never be satisfied either in this world, or in the world to come, unless he gets the place that James and Andrew wanted by the side of Jesus. His aspirations are such that he almost feels as though he could fly without wings; and he is not at all satisfied to remain in any constant sphere of life.

T. C. (Leicester).—You are quite different in your general physiological structure, but that difference will not militate greatly against your happiness, because of your having similar views of life and truth. You possess a high degree of the vital temperament joined to the mental. You are capable of more than ordinary improvement, and may encourage yourself with the idea that you can make what education you can get hold of pay to a good advantage. You have a well rounded-out head and will not be content with a simple sphere of life. You are ingenious and quite original in your thoughts, and very anxious to know everything. You have active sympathies, strong feelings of respect, a good amount of perseverance, and a great deal of caution and forethought. You love the sublime, are fond of beauty, and are quite intuitive in your perceptions of character.

The lady has an elevated head with a cast of mind that would adapt her to other spheres of life than to make a display of her gifts or to show off with the fashions. She is decidedly original, will do her own thinking and have a mind of her own. She is specially ardent, earnest, and devoted. She is not very animal in her nature: her pleasures come from her intellectual and moral faculties. She is not cruel, cunning, or specially selfish. Her love is sanctioned by her moral feelings, and she is quite far away from all that is gross and coarse in conversation and enjoyment. She will need to take care of her health, breathe deeply and freely, and keep her chest well protected from the sudden changes of temperature, and especially be careful not to work beyond her strength. She is so active and earnest that she frequently becomes exhausted of strength before she knows it, and needs someone to have a superintending influence over her labours. The lady will exert a decidedly good influence over the young gentleman; if they mate they will be sure to agree because she is not so selfish, and will adapt herself to almost anything that is reasonable. If she marries him, it should be from her own choice, because she prefers to do it; if she was over persuaded, and was not so much inclined to do it herself, circumstances might make the choice a more risky one; but not if she marries from her own choice. I see no reason why they should not marry, but they had better manage not to have many children.

DOLPHIN (Northumberland).—This gentleman possesses great strength of will and force of character; he comes from a family noted for their determination and presence of mind in times of danger. He is a straightforward man and prefers to pursue one uniform course without going from one thing to another. He is well qualified to be the master, take the lead and have control; he cannot be led contrary to his own inclination; he is shrewd in his judgment, intuitive in his perceptions, and arrives at the truth at once; he makes up his mind very promptly. Has good, practical judgment, makes up estimates and calculations very correctly, and is a man of method and system. Is not so noted for conversational talent, extravagance of imagination, or quick wit, as he is for good judgment, a quick perception of truth, and great decision of mind. He speaks his mind rather promptly, and if he were on the battle-field, would want to go to work as quickly as possible and have the affair settled. He would fight most desperately and die in the struggle rather than submit.

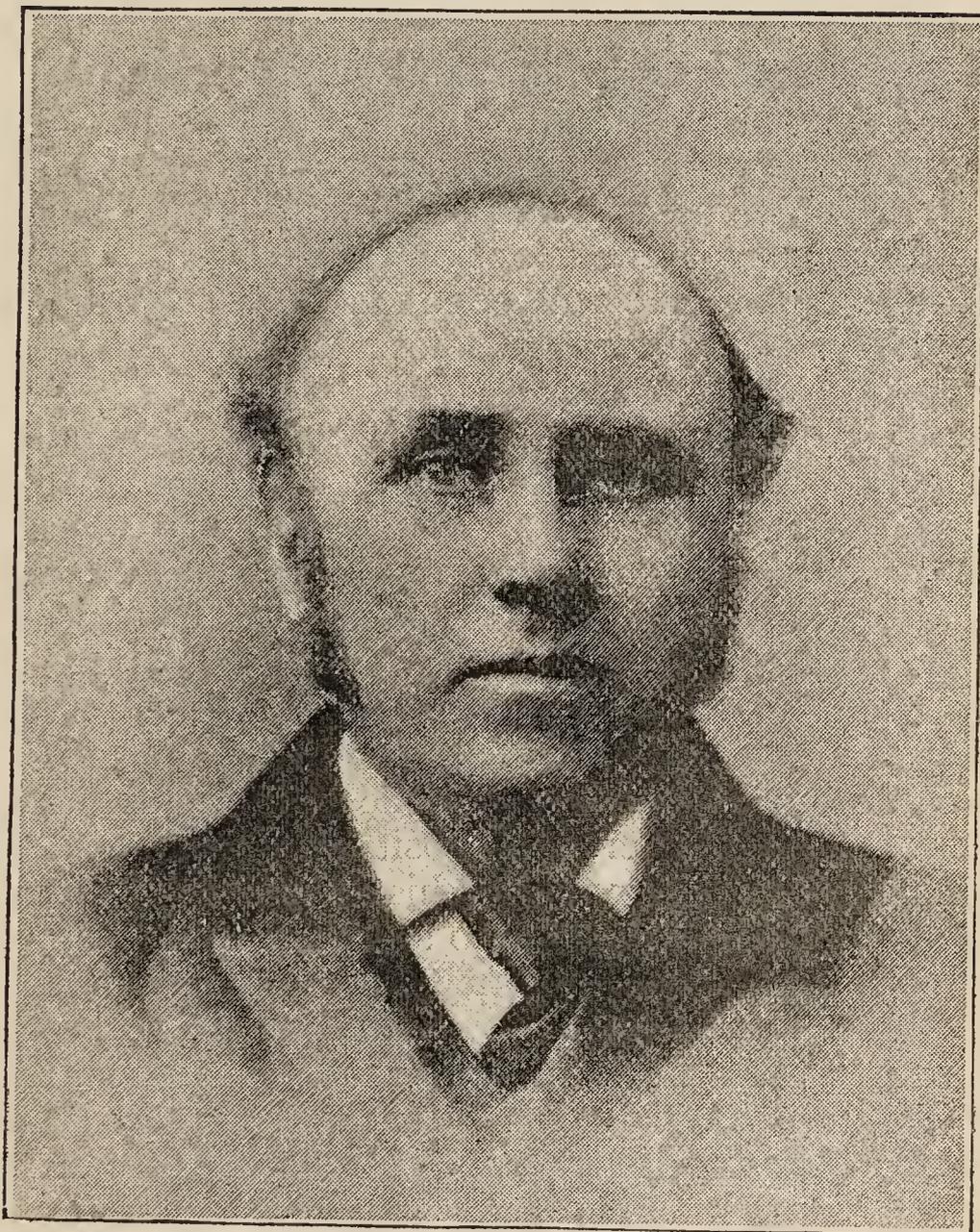
MARTHA.—There are some features of character indicated by the likeness of "Martha." She has balance of power and harmony of mental action, and is not subject to many extremes. She is characterised first of all for her sense of duty and obligation; is a lover of truth; is very anxious to live a circumspect, prudent life; she worries when she has done wrong and feels particularly unhappy. Few persons have so much of the feelings of circumspection and forethought as she has. She shows firmness in all matters of duty and obligation, but is not stubborn or wilful. She is very sensitive as to her character and what others think of her, but more especially sensitive through fear

that she may do wrong and bias others in a wrong way. Her ambition is of a moral character ; she has a high tone of mind, is naturally hopeful, especially with reference to the future. She has a high spiritual sense, and if she follows her inclinations, will be highly religious and spiritual. She is respectful and mindful of superiors, and never rude or careless in her remarks. Her sympathies are universal ; all that lives and can enjoy and suffer she has respect for. She is rather reserved, quite economical, and very industrious. She is sound in judgment, decidedly original in her mode of thinking, and is very much interested in all intellectual and moral questions, but her memory of common occurrences is not very good ; she thinks more than she observes. She has good talents for conversation under favourable circumstances. She ought to be devoted to some moral enterprise where she can do good and make others happy ; has naturally a refined and high tone of mind, and is as clear from coarseness and vulgarity as it is possible to be.

H. L. B. (Grantham).—You have a great predominance of the motive and mental temperament, are naturally industrious, and could not be content with an idle life. You are in danger of overworking, not having enough time for recreation and recruiting. You must do all you can to encourage the vital temperament ; take life easily when you can, and do all you can to improve your digestive powers, so that your body shall nourish the system more. You are very intense, earnest, and keenly alive to all that is going on around you. Your brain power is rather too active ; you need not be afraid of sleeping too much. Your talents are of the practical available type ; are specially anxious to see everything and experience things for yourself. Your powers of observation and criticism are the leading ones in your intellect. Your causality is active, but comparison is still more so ; you are well qualified to analyse, compare, and see the application of truth, you also are quite intuitive in discerning the character and motives of others ; in fact, you are almost too particular in your mental operations, and not satisfied unless you are learning what is true and useful. You have a special faculty to study phrenology, and can make a very correct examination ; but will require considerable experience, and must strive to be content when you have done your best. There is no reason to discourage you from studying phrenology with the idea of making it a profession. You will find several practical books to aid you in your experience and observation, such as “The Self Instructor,” “System of Phrenology” and “Lectures on Man.” You are better adapted to mental than to physical labour ; you appear to have an elevated mind which can be gratified more in study and intellectual and moral pursuits than in making any amount of money, for money alone could not satisfy you. You will find speaking to be of great service to you, both as to your health and usefulness, for more talking will help to enlarge your lungs, which would benefit you in many ways. You will find it difficult to please yourself in anything you do ; other persons will be much more satisfied with your work than you will yourself. You are almost too earnest and intense in your mental operations. You are fond of exact sciences, are particularly interested in facts, and you have an enquiring, investigating mind. Take time to live, and keep your health, whatever else you try to do.

THE
Phrenological Magazine.

MAY, 1891.



DR. S. KENNEDY.

HE has an organization peculiar to himself. He differs from most men, he is alive all over ; few persons have so fully developed a brain and an all-round kind of mind to the extent that he has, for he is equal to almost any task or duty. He has a favourable physiological organization, is well qualified to generate life and vitality, and to take care of what he has and to use it to the

best advantage. Few men work more easily and do so much with so little fatigue as he does ; but to begin with he had first-rate stock and a healthy foundation to start on. He is constitutionally wide-awake, very susceptible, exceedingly intense and earnest in all his mental operations. He does not require persons to tell a thing twice, for he hears what they say the first time, and senses it. There is danger of his becoming too excitable and of giving off more nervous energy than is really necessary to accomplish the end, and in time he will find it necessary to husband his resources.

His brain is rather large, which gives him an advantage over many (especially taking his temperament into account), enabling him to think more vigorously, to comprehend more easily and to take greater responsibilities and more labours upon himself than usual. He will generally be successful, but he has had to learn some lessons before now in order to make everything follow all round.

He makes friends that last. He is social, companionable, and delights to exchange thoughts and feelings with others. He is very much interested in home and one place, and is willing to spend more than an average amount of money in a home that will give to him such pleasure and luxuries as he can enjoy. He has a great amount of application ; he can give his whole mind to a subject for as long a period as is necessary to comprehend it all. He is liable to become absorbed, if not absent-minded, while dwelling upon a subject. He is spirited where there is opposition ; he takes delight in overcoming all impediments in his way. If he is told in a bantering way that he cannot do such and such things, those are the very things he will want to do, for he cannot bear to be outdone by anyone. He is not destructive and revengeful in his spirit ; but he is rather fond of opposition, and delights to take hold of works that are not easily done, if there is any glory in doing them. He values property for its use, but he values his time more than he does money. He is naturally an open-minded man ; he is free in talking ; he shows himself very much as he is ; persons see him the same under various circumstances and at different times. He is cautious in most things, but he is not timid ; he does not worry, chafe, and fret about things. He can accomplish his work with less friction than many, and at night, after a severe day's work, he is almost as fresh as when he started in the morning.

Neither praise or blame go very far with him ; when he has discharged his duty and done his best, he is satisfied, and he will allow others to criticise, find fault, or praise as

they please. He has an independent spirit. He does his own thinking, and gives others the same privilege. He is not haughty and dictatorial, but is self-relying, and generally satisfied with what he does. He is more inclined to lead than to be led, to direct others what to do rather than to listen. When anyone else has made a discovery, made improvements, or is doing something different from anyone else, he, instead of going to them to know how to do it, would prefer to find out himself and thus feel under no obligation to others. He has great power of will; he can make himself do almost anything. He has more control over himself, and with the knowledge and genius he possesses, whatever he makes up his mind to do he will do it by hook or by crook. He is full of hope and anticipation; he sees the bright rather than the dark side of things. He cures many individuals by inspiring their hope, which does them more good than medicine that another person may give.

Conscientiousness, spirituality, and veneration, are all fully developed and have their influence in modifying his character; but they do not take the lead so much as benevolence does, which is a large and active faculty. He readily becomes in sympathy with others, and takes hold of a cause in real earnest. He has a large spirit, which can be interested in public affairs and in what is going on in the world. He becomes one with the company he is in; so with the labours he is engaged in, he at once gives all his active, wide-awake sympathies. He is ingenious and given to contrivance. He has taste, sense of beauty and perfection, and can appreciate all kinds of improvement and perfection. He enjoys all that is sublime and grand, and he is liable to use strong, vivid language while he is describing things.

He is full of fun, and quick to perceive a joke and to enjoy mirthful, lively, wide-awake company. He is very close and minute in his observations, and can attend to details just as well as to subjects of larger dimensions.

Form, size, weight, colour, and order are large: hence his perceptions of things and their qualities and uses is superior. He is noted for his method, accuracy, and exactness in work, and he is able to plan and devise ways and means so as to save much time and expense. He remembers places very well; details and things that have transpired he forgets rather easily, unless connected with himself. He enjoys travelling highly, and remembers places accurately. Sense of time is large, which aids him much in turning his time to as much account as possible, and helps him to detect mistakes in music. He is rapid, though not so copious as a talker. He

is particularly apt in devising ways and means. He is quite original, for causality is decidedly active ; comparison is equally so, for he is a great critic, and he makes nice discriminations between one thing and another. As a physiologist, he is more accurate in his judgment of the temperaments, tones, and conditions of individuals at various times than many ; he also detects quickly the changes that are taking place from day to day in connection with his practice. He is particularly intuitive in his discernment of character and motives. He judges of disease at once, and he is more correct in his first estimates of the condition of an individual than he is at any time afterwards : hence he seldom has occasion to change his opinion. He would be equally successful in other departments of life if he were to give up the medical profession. He is fond of reforms and progressive movements, and appears to have but very little of the old fogey, old school, or old way of doing things ; but he cares very little about changes, if he can only gain his purposes. Hence he is more universal in his style of practice and in his modes of doing things than men usually are.

On renewing acquaintance with this skilled scientist the other morning, I felt I was speaking to the same man of genial bearing whom I had become acquainted with twenty-five years ago, in Dundee. Personally, if I had known nothing of the merits of the Mattei system, I should have thought the doctor was in his right profession. His very presence is enough to make many forget their ailments. On entering the doctor's sanctum, to make a re-examination of his head, and gain some particulars respecting the Mattei system, I was shown the photographs of two cases that had been under his treatment. The first was that of a person whose face was well-nigh covered with marks of cancer ; and in a photograph taken of the same person, in the short space of nine months, there was visible only the least possible disfigurement. The photographs of the second case showed a similarly remarkable result. Judging from the demands made on the doctor's and his son's time, the Mattei system appears to be having a thorough trial, both through his private consultations at 22, George Street, Hanover Square, and at the Hospital of St. Saviours, by Portland Road Station ; and at 3, Suffolk Street, Pall Mall.

L. N. FOWLER.

To thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man.

KNOW THYSELF.

THERE is such depth and fulness in the nature of man, when once it is duly explored and explained in all its parts and bearings, that we shall in the course of time be immensely surprised that we ever could have contented ourselves with the very meagre ideas we so long held as to our phrenology and physiology. There are more latent potencies and faculties involved in man's being as yet unfolded than have ever in his history and experience hitherto been evolved so as to have borne fruit. To the many, this will appear to be nothing but "tall talk;" happily for the race, however, the few are awakening, and are on the *qui vive* of expectancy in the direction suggested.

Every here and there amongst these expectant ones, we hear them affirming that the spirit portion of man is something he has not yet learned how to grapple with or understand. There is much more truth in this statement than is likely to be accepted or appreciated, and mainly because what is measurably less than spirit has been accepted and treated as such. Few have any idea that soul (*psyche*) and spirit (*pneuma*) are distinct and separate portions of the human economy; but it is so, nevertheless; and all the faults and failings of modern theology have been begotten by this gross and grievously misleading conception. When Paul wrote about the resurrection, he used terms expressive of the psychical and the pneumatical states of humanity as a body, which have been made to do quite other and misleading service. He never wrote what could truthfully have been translated as the "natural body" in contradistinction to the "spiritual;" and yet the deductions of our popular theology to-day are entirely based upon that error in translation. Paul's idea of the resurrection and the modern idea of the same are almost as different as light and darkness. Before humanity as a corporate body could realise the spiritual state of its upward development, Paul declared that it must first pass through the intermediate process of developing itself psychically. Paul distinctly so affirms that the psychical or soulish stage must precede the spiritual, but he is falsely made to say that the natural must take precedence of the spiritual. At that rate then, the spiritual is other than natural, or according to nature; but such an idea will not for one moment bear looking at or into.

Then another grave misapprehension of Paul's intention is shown in the modern view of the resurrection of personal individualistic bodies of mere material, whereas all that Paul's language contemplates is the resurrection of the body of

humanity, in due course, out of the defective and blundering soulish stage, in which it would contentedly anchor for a period, into the truly spiritual one, for which it had to undergo a very necessary and natural preparation. Speaking of this, Paul said, "Thou fool, that which thou sowest is not quickened except it die." Humanity, like a plant, had to progress through all its stages—"first the blade, then the ear, afterwards the full corn in the ear." One dispensation served to bring him through the blade period, and that was the Mosaic one; the next served to bring him into and through the ear-forming period, and that has been up till now; the next that is dawning will fill the formed ear with ripe corn. When the first portion of the Christian dispensation came in force, its work was to develop the soul or psychic forces in readiness for the spiritual to come after. So then, as Paul writes, it was sown in dishonour to be raised in glory; it was sown in weakness to be raised in power; it was sown in a psychical or soulish body to be raised a spiritual body. The body sown was the body of humanity as a whole; the object of the sowing was to produce the stalk and ear, formed in readiness for the reception afterwards of the full corn in the said ear, which would be the reality of the spirit with something like its natural life and forces.

Man does not know himself until he has grasped the thought of this article, and so the intention of the Nazarene and Paul relative to the resurrection. Fancy all the wordy nothings promulgated from thousands of pulpits in many centuries relative to the rising from the literal grave of every corpse committed thereto, when all the time those, giving expression to their thoughts so, were "Men of soul having not the spirit," as Jude defines them; and as such described so aptly by Paul, when he says, "The man of soul receiveth not the things of the Spirit of God, for they are foolishness unto him, neither can he know them because they are only spiritually discerned." In both these cases Jude and Paul are made to speak of the "sensual man" and the "natural man," when in neither case had they the remotest idea of the kind. The truth is, that man has passed through a very critical period of his racial history in coming to where he now stands; and the signs are not wanting that another era is dawning, and a very marked and important change coming unmistakably into his racial life history. Man's thought is by far too individualistic to grasp the truth which belongs to the sphere of spirit and reality. Man is not nearly so individualistic as he appears to himself to be. To alter Pope's words somewhat:—

Each is a monad of one wondrous whole
Whose body nature is, and God the soul.

Universal man is the only true light in which to critically examine man, so as to know him as he must be known. Each part is simply cast in the same mould as the whole, and as we study the individual, we must let our thoughts revert therefrom to the universal ; before we can get into the very spirit and reality of our great subject.

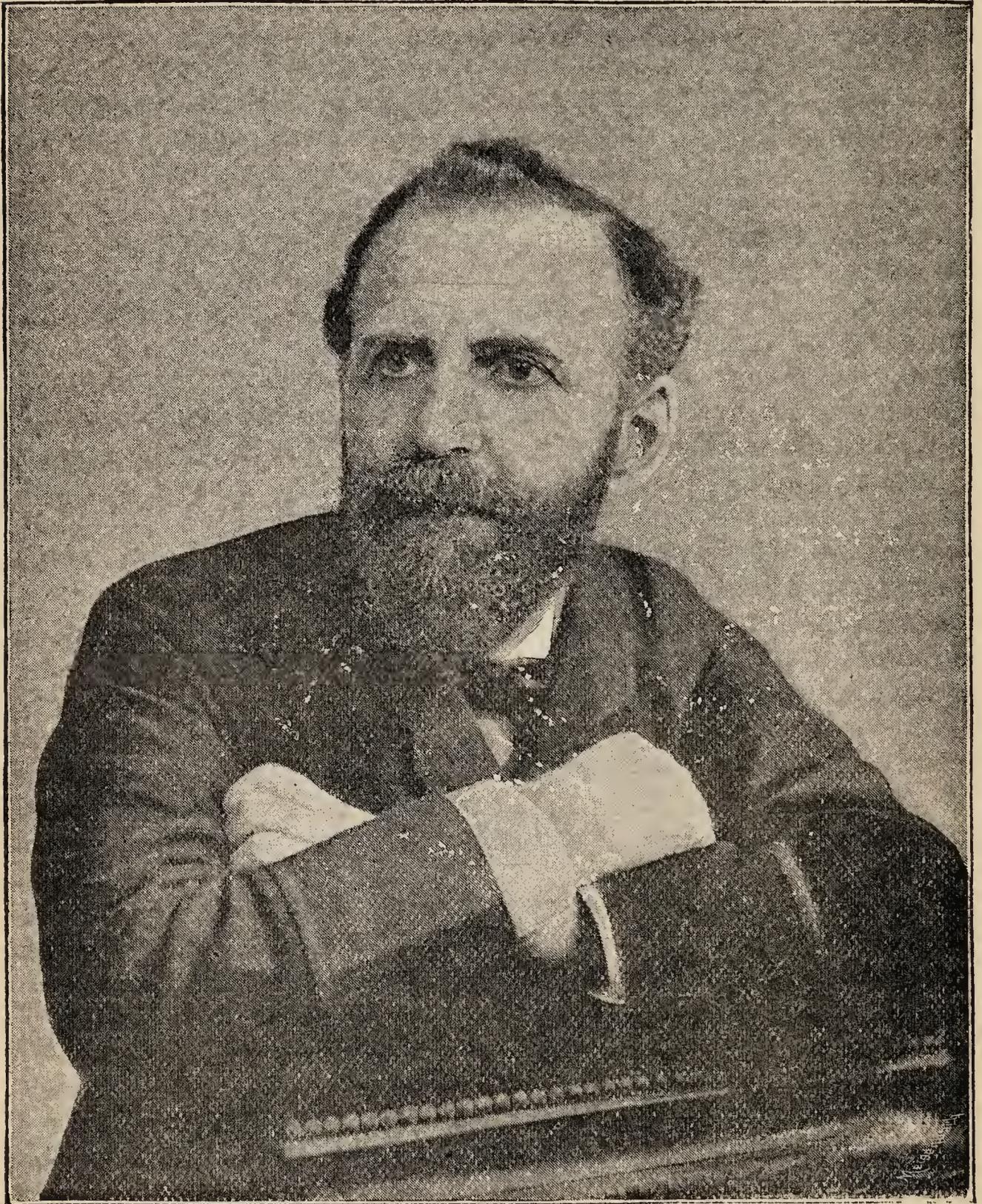
Fancy what an amount of blindness, and groping in thick darkness, has been the inevitable all these centuries, while man has been passing through this strangely defective experience ; persuading himself meanwhile that it was very much more ! It is easy to conceive how many will scoff at the thoughts thus presented ; but the time has come for advanced thinkers to occupy their places in the field, and to fight the battles they have been fitted to engage in for the emancipation of humanity. It is time that the gross misconception of corpses rising from their graves to fulfil the wondrous teachings of Christ and Paul, was fully exposed in all its hideous wantonness and deformity. Ere long the idea will be consigned to oblivion, and the reality intended by these forward writers and prophets, be heartily welcomed and intelligently acted upon. When that comes to pass, something like the meaning of self-knowledge will become fact, and as the full corn in the ear begins to grow into its place, as it is now doing, we shall soon come to the knowledge of all that is involved in the great thought of the resurrection.

THEODORE WRIGHT.

MEN AND WOMEN OF OUR TIMES.

WM. T. STEAD, ESQ.—In speaking of a man of Mr. Stead's intellect, one must take into account his whole mental power and deal with the strong and weak influences at work. The means that such a man as he uses for his ends, no doubt shock a less vigorous mind, but his work must be judged from his standpoint. Certainly he possesses a most remarkable mind, a highly nervous mental temperament, and great intensity of thought, marvellous intuitive power, and a broad sympathy that is in touch with everything noble, pure and true, however insignificant or unpopular. He has done what no other man would or could have attempted—epitomised the cream of current literature, and has based his work upon a financial success in less than twelve months, through the success of his *Review of Reviews*, and has established an association of helpers which he feels will become in time a powerful aid. It is difficult to paint a word picture of the

character of a great man from the light of his own study when he has thrown aside the stupendous cares and responsibilities of city life, and when he heartily joins the domestic happiness of his own home. It almost makes one dumb with



WM. T. STEAD, ESQ.

pleasure to see a man who is the household word—not only of every Englishman and American, but every European—and to see him enthusiastically enter the simplest cares of home life. The examination I made of Mr. W. T. Stead's head some ten years ago was in a measure, however, an

introduction to the great man of to-day. Joined to the privilege of knowing so enthusiastic a leader of men is the charm of seeing him at home, and of being introduced to his wife and children ; it is a pleasure worth recording before we pass on to mention further individualities. The rushing genius led the way from the train at Wimbledon, to the carriage which took us along winding roads, up hill and down, until we arrived at Cambridge House, where every practical comfort surrounds him and his family. During our visit, conversation turned on many of the great men and women of the age. Count Mattei and his castle were interestingly described by Mr. Stead, who was accompanied by his wife on his visit to Italy, where he met the younger Dr. Kennedy. The character of the late Charles Bradlaugh, also Gladstone and General Booth, Parnell, and the notorious Sequah, who had just paid a visit to Wimbledon Common, were touched upon. On being introduced to the queen of his home, a glance at her face told us where her heart is centred. Here happiness in working the machinery of home duties with loving thought in the little and the great things that make up a home were joined to a refined and intelligent mind. It was not a surprise, therefore, to find that the circle of loving and devoted children, ranging from 16 years to 15 months, all shared in the characteristics of both parents. The eldest son, William, named after his father, partakes of his mother's cautious, practical, quiet mind, and is his father's right-hand man and private secretary. Little Pearl Müller is certainly a rare jewel of a baby, who is a namesake of Mr. Müller, of Bristol ; then Jackie, the golden-haired boy, came in for a share of attention. He is an ideal lad such as you read of, but never expect to find in real life. I begged for one of his beautiful curls, but, said he, "I have promised twelve already." "But may I not have the one on the top?" "Oh no, that one is promised to a gentleman with a bald head," replied my little friend. This lad is destined to make his mark some day in the world of letters, and be a leading spirit. Harry, Emma, and Alfred, are just as clever in their way ; the first, a master of machinery ; the second, a pattern of her mother ; and the third, a born traveller, who, I predict, will carry out his father's ideas in other lands when he becomes a man, as the *Review of Reviews* has now its American editor, with an office in New York. As we sat at dinner my eye rested on the full length portrait of Mr. Stead ; this, he said, was presented to Mrs. Stead by the staff of the *Pall Mall Gazette*, when he left that office for his more commodious one on the embankment, and organized his new

departure in journalistic work. Mr. W. T. Stead has a mind of broad possibilities and unusual foresightedness. He has a thought for everyone ; especially for the rights of women, and the brotherhood of man. He is able to stoop to the wants of a little child, or stretch out his hand to the cry of a nation. He is like what a search light is in the Suez Canal, which the traveller passes along the highway to the Indian ocean, learns to value, his mind is capable of becoming a beacon in the broad lines of philanthropy. His dominating qualities are his insight into truth ; his conscientious convictions of justice, as opposed to State red tapeism ; regulations of equity ; his strong and genuine sympathies for suffering humanity, and his unswerving sense of duty and fearlessness in carrying it through. He is economical in the use of time ; and uses his influence for good. He is morally ambitious—not for the sake of what men will say of him or of his work, but his ambition is to get the work done that is given him to do. These features, to a great extent, make him what he is. He was designed for a master-spirit. He can lead the van-guard rather than pipe to the tune of another. He has a vastly creative mind. No other mind is attuned as his is. The strings of the violin are tuned to a certain tension when ready for the fingers of a Neruda, Joachim, or Paganini, but when not used, their tension is lowered. Mr. Stead's mind is much like the said strings at their highest tension, and is ready for use all the time ; there is no real relaxation time, indicated by his mental faculties, all seem to be at high pressure. He could not allow himself to walk upstairs, step by step, if he tried. An express train travels at the rate of sixty miles an hour. Mr. Stead's mind travels at express rate during all his working hours, which are not few, and his express always takes ninety miles an hour. He hates delays as much as a general hates defeat. His standard of perfection is not above human skill, but it must be the highest skill that can attain to it. He is not stimulated so much by hope as by practical knowledge and experience. He does not hope that "his Redeemer liveth," but he knows that He liveth. It is the same in all his work ; he trusts to his observation of men and things, not to hearsay. His religion is not one of long prayers and fasts, but of prayer through works first, along with spiritual inspirations, that reveal to him many things ahead of his day. He cannot believe in an empty dogma, creed or doctrine ; his "dogmas" are "living ones ;" his "principles" are filled with "enthusiasm." His mind could not believe that the Divine grace was dispensed to a limited company of men, who arrogate to themselves the title of priest, or bring himself to

believe that the "Divine Spirit is farmed out to any ring of ecclesiastical monopolists, as if it were a syndicate with an exclusive concession for a patent medicine." His organ of veneration is not large enough to allow him to spare any on old institutions, simply because they are old. His organization indicates that he has the broadest kind of faith, that could shelter all the truly contrite of heart, but toward the proud Pharisee he would show no sympathy. His social faculties are the most distinctly represented by his strong attachments to home and all that goes to make it home. He possesses the parental feeling for the young. His friendship and benevolence both being so strong, he can take into his circle of friends the great area of the globe and the people thereon. He has not so much dignity as independence of mind—in fact, he has as little of the first as he has abundance of the latter. He places a higher value upon life than the cost of it. He will give and spend it as freely as though he had a great stock of vitality always on hand. His language shows itself in ease of expression and directness of style ; in fact, his whole brain is so active, that each faculty expresses itself with unction and force. His keen sense of humour is a greater safety-valve to his mind than he is perhaps aware of. He, like Abraham Lincoln, knows how to turn off serious annoyances with a good-natured laugh or clever joke. It is to be hoped that Mr. Stead will learn the important lesson of husbanding his vitality before he has prematurely exhausted it, so that he may have the chance of living to a ripe old age.

COUNT MATTEI has a powerful organisation both of body and mind ; few individuals indicate more strength and completeness of consciousness. He may not be specially brilliant, imaginative, or particularly prompt and active, but everything goes to show strength, self-possession, and originality of mind. Few have so strong a body, or so perfect a relationship between body and mind, for he has a powerful physique everywhere. His face—especially his nose and chin—indicate great strength, tenacity of mind, and long life. His head is large and fully developed in all parts. He should be remarkable for his perceptions and ability to acquire knowledge by observation, for his capacity to carry his experience in his mind, for he seldom loses sight of any information he may gain ; he is a good judge of all physical phenomena, and is inclined to test everything. He has a superior memory of facts, actions, history, and analogies ; he is very intuitive in his perception of character and motives, as well as of truth. He does not indicate any special wit or brilliancy. Memory

as applied to dates is apparently weak, but general memory, such as a scientist, is good. He should be noted for his kindness, sympathy, and tenderness of mind, being as mindful of the happiness of the small as of the great. He has a due regard for superiority, is not an iconoclast, although he will do his own thinking and take the responsibility of his own life and actions. He has great powers to acquire property and to manage financial matters, but that is not a controlling element of mind. He has not much fear or timidity of mind, but acts promptly and courageously when necessary. Few heads and faces indicate so strong a character and such versatility of talent as his do.



COUNT MATTEI.

Count Mattei has had a most remarkable career. He was born twenty years after Galvani had made his wonderful discoveries. His parents were rich, and at nineteen, on the death of his father, he was left sole heir. It was not until he was forty that he was given a Countship by the Pope for the present of some land at Magnavacca. It was some years later, after devoting his time to the study of the teaching of St. Halinemaun, that, through his collie dog, he was led to the discovery of the efficacy of certain herbs. It is about thirty years since a favourite dog was seized with a terrible species of mange. It, with canine instinct, fled to the hill sides for its cure, which it found in a certain herb. Count Mattei reasoned that very possibly, what the sagacity

of a dog had found so beneficial, might be equally so to man. He, therefore, decided to experiment upon the same herb, from the leaves of which he extracted an essence; and then administered it to a human sufferer from scrofula, with such excellent results, that the Count continued his experiments with herbs, until by degrees he succeeded in working out eight or ten medicines, and fine electricities, with which he treated many kinds of diseases. He does not believe in herbs alone, but electrifies his concoctions with a secret force or element. He at first gave away his remedies; but he found for several reasons that that would not do, so he decided to keep the secret of his compound to himself, in order to secure accuracy in their manufacture. But, at the same time, he sold the medicine at as low a cost as was possible, and provided funds for the diffusion of knowledge concerning the real benefit of the remedies. His nephew, to whom he bequeathed and entrusted all his property, wealth, and even his secret, shamefully belied his trust and spent the best part of his fortune. The Count then disinherited him, and adopted in his stead, Signor Venturoli Mattei, who is proving a worthy assistant. The Count is 82. Though his hair is black, and his spirit equal to twenty years younger, his enthusiasm seems unabated.

DR. M. J. HALL WILLIAMS.—This lady has a brain capacity which indicates great individuality and perseverance of mind. She is exceedingly sincere and sympathetic, and strong in her attachments to friends; is very fond of children, and could manage and care for them as well as add to their happiness. She appears to be most too tender hearted; but courageous when necessity calls for it. Is not high in the crown of the head, and hence does not appear to be so proud as independent, but the organ of benevolence being so prominently developed, adds uncommon height in that locality. She is highly ambitious, and very mindful of everything that affects character; but does not care very much about the fashions. She has much more of a moral than religious cast of mind. She would regulate her own conduct whether there was a church in the neighbourhood or not. Her religion consists principally in doing good. She can scarcely conceive anything more important than to help others along in a better way. She has a strong sense of perfection, and considerable versatility of talent. She is well qualified to entertain others. Her power to organize, superintend, and do methodical work is great. Her special gifts intellectually are ability to plan and comprehend principles; readiness to devise ways and

means, and manage complicated work ; good general memory of her travels and labours, and power to make the most of her time. She would do well for a leader ; and she has an excellent capacity to manage complicated diseases ; and would excel in a hospital where she had difficult cases to attend.

Dr. Hall has been practising in London for many years, and advocates the theory that women can, even with five ounces less of brain, succeed in the medical profession.

“ORION.”

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

13.—SELF-ESTEEM.

Self-respect—self-confidence—self-complacency and satisfaction—high-mindedness—independence—nobleness—love of liberty and freedom.

The proper office of this faculty is to create a good opinion of himself, of his own character and opinions, and of whatever belongs to, or proceeds from, himself ; to beget an esteem and respect for himself ; to feel satisfied with himself, and unwilling to change his identity and mental qualities for those of another ; to give a manly tone to the character and turn to the conduct, and a dignified, erect attitude and bearing to the person, and thus to exert an important influence in elevating and ennobling the character of man. And what is still more important, it gives that innate love of personal liberty and independence, and of religious freedom, so deeply seated in the nature of man, and so conducive to his virtue and happiness, which constitutes the sole foundation of his free institutions, civil rights, and religious privileges, and inspires him with an aversion to every thing connected with arbitrary authority, despotic rule, or religious intolerance, and gives him that spirit of resistance to such things, which no despotism can destroy.

The proof of the existence of this faculty, as a separate and primary mental power, is derived from the same data which establishes the existence of the other faculties.

VERY LARGE.—One having self-e. very large, willingly assumes the responsibility, will think too much of himself ; of his opinions, plans, judgment, &c. ; and, with combat. large, and caus. and conscien. only moderate, will be likely to be regardless of the frown and of the favour of men ; deaf to reproof ; liable to have many enemies ; intractable, bold, proud, haughty, domineering, forward, conceited, jealous, austere, and repulsive ; to be blind to his faults, and unable to see his errors, be they ever so glaring, because he will feel that he is well nigh infallible ; will look down with a kind of contempt upon the great

mass of his fellow-men, and treat even his equals as though they were his inferiors ; will be extremely ambitious to obtain power, and also arbitrary in its exercise ; insensible to the shafts of ridicule, thinking that surely he cannot be intended ; by his manner and expression, will give an air of consequence and importance to what he says ; with approbat. moderate or small, and firm. very large, will be perfectly independent ; will go straight forward in his own way, follow his own judgment, and defy the consequences, &c. Many of the combinations under self-e. large, will apply to self-e. very large.



JAMES MC. COY.—Self-esteem.

LARGE.—One having self-e. large, will be independent, and place a high value upon himself ; feel that whatever he thinks or does, is well thought and done ; throw himself back upon his own unaided resources, and rely upon his own judgment and strength ; will never knowingly degrade or demean himself ; aspire at something commanding ; never be content to be dependent or to serve, but rather aspire to be himself a leader and commander of others ; will despise and detest meanness, and shrink from it ; and assume an appearance of dignity and manliness, calculated to command respect.

The manifestations of self-e., combined with large combat., destruct., and firm., and with only full conscienc., ven., benev., and

reasoning faculties, it makes one haughty, domineering, overbearing, dogmatical, arbitrary, egotistical, arrogant, authoritative, conceited, and extremely selfish, while the same amount of self-e. combined with only full combat. and destruct., and with large benev., and reasoning organs, large conscient., ideal., ven., and perceptive faculties and a large brain, will impart to the character a commanding dignity, a nobleness, a high-toned sense of honour, an elevation, and authority which cannot but command universal respect and admiration ; and impart an air of greatness and magnanimity to the whole man.

One having self-e. large, with amat. and adhes. large, may love strongly and tenderly, especially when his love is in harmony with his ideas of propriety, yet will never sacrifice his independence to his love, nor break down under the pressure of blighted affections ; with the domestic organs generally large, will love his family, yet make them obey him ; with acquis. large, will place a high estimate upon what he possesses, upon his horse, his farm ; with combat. large, and firm. large, will pursue his own course, and will not be dictated to ; is disposed to push himself forward ; feels that he is as good and as worthy as anybody else : with cautious. large, may sometimes ask advice, and then follow it or not, according as it does, or does not, coincide with his own views ; and will be so solicitous about everything which is likely to affect him, that he may, at times, be disconcerted, and diffident, and appear awkward and unbending in his manners ; with combat. and destruct. large, and conscient. only full, will experience strong indignation at every word or deed calculated to throw him into the shade, and will guard, with a jealous eye, his liberty, and whatever belongs to him ; with compar. and caus. only full, will make greater pretensions to knowledge and talent than he is in reality able to sustain ; and with only a fair-sized brain, thinks and talks much more of himself than others do of him ; pushes himself forward where he is not wanted ; and is proud, egotistical, and self-important ; with combat. and destruct. full, benev., hope, ideal., individ., event., and lang. large, and compar. and caus. very large, accompanied with a large and an active brain, will not only possess talents of a high order, but will so employ them as to cut a commanding figure wherever he moves, and add to it that force of character, that dignity of feeling, which will command an extensive influence in the world ; advance him to some commanding station, and enable him to sustain himself in it with great ability ; will place such unbounded confidence in himself, and also have such towering ambition, that he will attempt great things, and also have the talent requisite to carry them through ; will not be satisfied with ordinary attainments, but will grasp at some great, some imposing object, and aspire to pre-eminence ; will aim high ; never trifle with himself, nor allow others to trifle with him. The same combination of other organs, with self-e. very large, will produce the same result.

FULL.—One having self-e. full, will think well of himself, yet, when benev., conscient., and caus. are large, his self-e. will manifest itself in creating a manly, noble, self-respectful feeling, which will prevent him

from doing anything beneath himself; will be sufficiently condescending, yet not servile, and enabled and disposed to pay a due respect, not only to himself, but also to his fellow-men; will possess sufficient force and weight of character to do a good business and sustain himself; to mingle dignity with condescension and talent, and so conduct himself as to be generally respected; will neither assume too much to himself, nor yield too much to others; and will maintain his rights and his self-respect, so that others can have no face to trifle with or trample upon him, and yet, will not be haughty or conceited.

MODERATE.—One having self e. moderate, places too low an estimate upon himself, upon his own judgment, and is too ready to give in to the judgment of others; will lack the requisite independence, manliness, high-mindedness, and self confidence to beat his own way through life, and will suffer from a feeling of unworthiness; will fear to trespass upon the attention of others, and not possess an influence equal to his character and talents, merely because he does not assume enough to himself. One having self-e. moderate, with combat., firm., and conscien. large, will possess genuine firmness of character, and much moral courage, yet will seldom manifest them in bold relief, except when under excitement, or in the defence of moral principle, or the cause of virtue, or in doing what he considers to be his duty; with firm. only full, may be too easily led away, and too ready to ask and to follow advice, and too obsequious, especially if cautious. is large or very large: with large intellectual faculties, may possess talents of a high order, yet, from want of self-confidence and boldness to pretend to considerable, and in consequence of occasionally letting himself down in his expressions and appearance, and trifling with himself and with others, will have much less influence than he might have if possessed of more self-e., &c.

SMALL.—One having self-e. small, will sink into comparative insignificance in his own estimation, and be tormented with a feeling of unworthiness and inferiority; will feel too humble and submissive, and too dependent and diminutive, which will still be increased by large ven. and conscien.; will underrate himself, his judgment, his talents, &c., and therefore, be undervalued by others; will make himself too common and familiar, and associate so much with inferiors that he will fail to command general respect and confidence; will be too trifling in his manners and expressions; more apt to follow than to lead; and too modest and backward to appear well; and will not be likely to advance himself to some bold and commanding position, and maintain himself in it, even though, with large ideal. and intellectual organs, and a large brain, his talents may be abundantly sufficient for that purpose; yet, with firm. very large, will nevertheless be determined, persevering, &c.

VERY SMALL.—One having self-e. very small, with conscien. and cautious. very large, will be always dissatisfied with, and have a miserable opinion of himself, and all he does; and, with hope only moderate, fear to attempt anything which involves responsibility, lest he should fail to do all that may be required of him; will feel ashamed

to hold up his head, or look his fellow-men in the face; and be always condemning himself.

LOCATION.—The faculty has three divisions. The lower portion gives independence; the middle part gives self-love; the front part gives dignity. Self-e. is located on the mesial line of the head, about half-an-inch above the union of the lambdoidal sutures, and directly back of firm.; or, in the middle of the superior-inferior portion of the head, at an angle of about forty-five degrees with the plane of the base of the skull. Approbat. is located on the two external sides of it, in the crown of the head, between firmness and continuity, in the superior parietal lobule, on the parietal bone, behind the fissure of Rolando, on the decline at the back head.

The existence of this faculty demonstrates the position, that the feeling or principle of liberty and of equal rights, is inalienable, and inherent in the very nature and constitution of man; that, therefore, it can no more be destroyed than hunger, or love; that a purely republican and democratic form of government is the only one adapted to the nature of man, and the only one calculated to secure universal satisfaction and happiness; and that the subjugation of man by his fellow-man, is an open violation of the principles of human nature. If our rulers only understood this principle of our nature, and if all the landmarks and all the regulations of government only proceeded upon it, subjection and servitude, in all those ten thousand forms which they assume in society, would be at once abolished. By creating every man free to choose or refuse the evil or the good, God allows every man to govern himself; and, surely, then, men ought to allow one another to govern themselves, subject, however, in the latter case, as they are in the former, to those regulations which are necessary to the general good, and, also, to be “rewarded according to their deeds.”

There is no danger that this feeling will ever be extinguished; but, in case the subjugation and servitude of man, in any form, should be carried to a very great length, there is danger, ay, a moral certainty, of a revolution, and a revolution, too, attended with a violence proportionate to the pressure laid upon it. In this country, there is no likelihood, nor scarcely a possibility, of a despotic form of government, but there is danger of a moneyed despotism—of aristocratic monopolies and of the powerful tyrannizing over the weak, and because they are poor or friendless. This same love of being free ourselves, and of ruling ourselves, reaches still farther, and desires to govern others. Slowly but surely, as it were, in the insinuating, yet resistless, folds of the Boa-Constrictor, is this serpentine aristocracy subduing and subjugating, by piece-meal, particularly the virtuous and the talented poor of our country; and should things progress for sixty years to come, as they have done since the revolution, this nation, the birthplace and the cradle of liberty, will be ruled by an aristocracy, not of government, but of monopoly, of wealth, &c., far more tyrannical than any nation under heaven. But, thanks to the great Author of our being, man's nature is unalterable; the spirit of Seventy-six,

and the love of liberty, will live and will increase, and woe be to those that ride over it. The great doctrine of human rights—of liberty—of free government—of “INDEPENDENCE” will live and spread, and root up, and trample down, every vestige of tyranny, of aristocracy, and of servitude.

14—FIRMNESS.

Stability—decision of character—fixedness of purpose—desire to continue—aversion to change.

The necessity of some faculty, to which to refer that steadfastness, perseverance, and unwillingness to relinquish what has been undertaken, which are so indispensable to success, and so common a phenomena of the human mind, is too obvious to need comment; and the frequent instances of downright obstinacy, and of blind adherence to what has been adopted, and solely because it has been adopted, afford conclusive evidence of the existence of firm. as a primary faculty of the human mind.



W. WOODHALL, ESQ., M.P.—Large Firmness.

VERY LARGE.—One having firm. very large, will be likely to be obstinate; and, with self-e. large, will be unbending; and, when he has once committed himself, will turn comparatively a deaf ear to the voice of entreaty, even of interest, and all for no other reason than because he will or will not; with hope and combat. also large, will “hope against hope,” and show the most unbending determination; with self-e. large, cautious. moderate, and caus. only full, will make up his mind at once, and even upon a partial view of the subject, and then absolutely refuse to change it; will think himself willing to see his errors and listen to reasonable advice, while the doors of his mind will be barred against every thing designed to convince him; with the reasoning organs large, will be loath, and even sometimes refuse, to change, when his reason tells him that he

ought to do so, yet may be influenced by very strong motives, and very urgent reasons ; but, if the moral and reasoning faculties predominate over the selfish, firm. will seldom manifest itself in downright obstinacy.

LARGE.—One having firm. large, will be so determined, that he may be relied upon ; and unwilling to change his plans, or whatever he undertakes. One having firm. large, with combat., destruct., and self-e. large, will add perseverance to stability, hold on to his plans to the last, and drive them forward through opposing difficulties ; with self-e. large, is so sure that he is right that there will be the greatest difficulty in convincing him that he is wrong ; yet, if the reasoning organs are very large, he may listen to conclusive arguments ; with cautious. large, may seem to waver, but this will be the case only before he has fully decided, and when his fear is so active as to overcome his firmness ; with hope very large, and cautious. only moderate, may start on foot so many new projects as to appear fickle, yet the phenomena will proceed rather from an excess of hope, than from a deficiency of firm. ; with adhes. and benev. very large, may be easily persuaded, especially by friends, yet cannot be driven the least ; with the perceptive organs full, the reasoning organs very large, and cautious. large, will lay his plans for a long time to come, and pursue a preconcerted, systematic course of action, and thus effect important objects ; may take some time to make up his mind, yet will seldom change it ; will be slow in undertaking, but unchanging in executing ; and may always be relied upon ; with combat. and self-e. large, ven. moderate, and the reasoning organs only full, will not be open to conviction, and seem to be much more firm than he really is, &c.

FULL.—One having firm. full, will be much more liable to abandon his purposes, and appear to be changeable, not because firm. is absolutely deficient, but because the other more powerful faculties cause it to yield to their demands. One having firm. full, aided by large combat. and self-e., and, also, by bright hopes of success, will show a great amount of decision ; but, when hope is very large, he will be likely to become dissatisfied with his present success ; with cautious. very large, and combat. only moderate, will often fear to proceed, because he fancies there is “some lion in the way ;” with self-e. small, will be unwilling to trust his own judgment, and thus too often listen to advice ; with approbat. very large, may frequently vary his course in order to adapt himself to public opinion ; with cautious. large, and caus. and compar. very large, will generally decide and proceed so judiciously as seldom to need to change.

Firm. full, large, or very large, acts with the greatest vigour in combination with the other faculties that are most energetic.

MODERATE.—One having firm. moderate will be likely to be changeable and fluctuating in his character. One having firm. moderate, with adhes. large, will love his friends ardently for the time being, yet frequently change friends for slight causes, loving those who are last and untried the best ; with approbat. large, and self-e. only moderate, will do much as he is told to do ; with cautious.

large, will be always “halting between two opinions,” and always undetermined as to his plan of operation ; even with the intellectual organs generally large. will not be a persevering scholar : will have a thorough knowledge of no branch of science.

SMALL.—One having firm. small, will begin many things yet complete very few ; may sow much, yet will not remain to reap the fruits of his labours, and thus bring to pass very little.

VERY SMALL.—When firm. is very small, the subject will be under the influences of the other faculties.

Firmness has three divisions : the lower part gives power of *Will* ; the central portion gives *Stability* ; the front part gives *Perseverance*.

LOCATION.—Firm. is located in the back part of the top of the head, on the mesial line of the head. In the brain it occupies a part of the anterior parietal convolution bordering on the fissure of Rolando. When the head is erect, a perpendicular line, drawn from the external opening of the ear to the top of the head, will pass through the anterior portion of the organ. It is usually the highest portion of the American and the English head.

“REST AND EXERCISE.”

IN a recent number of *Chambers' Journal* there is an excellent article on “Rest and Exercise.” The writer says that “personal hygiene is the science of individual health.” What a great pity that the majority of people do not think so. The health of a nation depends on the personal hygiene of the individual ; and that which contributes to the health of the individual, largely contributes on a larger scale to national health. “What we understand by health is that state which allows of some exertion of brain and muscle without any painful sense of fatigue ; but, owing to the complexity of the human body, and the varying conditions of health and strength, it is impossible to lay down any fixed rule which shall determine the amount of work the average healthy man can do. It has been found that for a healthy, strong adult, the amount of voluntary force he is capable of without injury to health in a day's work equals three hundred tons lifted one foot. According to Professor Parkes, to preserve health a man should take an amount of exercise equal to raising one hundred and fifty tons one foot ; or, in other words, walk nine miles daily at least. An appropriate quotation from Jeremy Taylor reminds us that “Every day's necessity calls for a reparation of that portion which Death fed on all night when we lay in his lap and slept in his outer chambers. The very spirits of a man prey upon the daily portion of bread and flesh, and every meal is a rescue from one death and lays up for another. And while we think a thought we

die, and the clock strikes and reckons in our portion of eternity. We form our words with the breath of our nostrils. We have the less to live upon for every word we speak.'” Hence this important fact brings us face to face with another—one which I have so often reiterated, and which needs stamping upon the mind of every parent, teacher, and adviser—namely, the necessity of grappling with and understanding the best knowledge as to how to rebuild the expended nerve-force by the right blending of food, rest, and exercise. If it is true that “the greater the energy put forth by any part of the body, the larger the amount of blood supplied,” then we must help nature to resuscitate herself, we must increase the amount from the two sources from which the energy is supplied—namely, the oxygen we breathe and the food we eat. Again, if every thought which flashes through the mind, as well as every muscular movement, is an exhibition of nerve-force, “then that re-building of nerve-force needs the best of materials to produce the best effects.”

The article further explains that the skin and the lungs are the safety valves of the body, and the latter pass through them in twenty-four hours two thousand gallons of air unfit to support life, and more than six parts of carbonic acid in ten thousand is sufficient to cause ill-health and to prevent this result; ten thousand gallons, or three thousand cubic feet, of fresh air at least are necessary every hour, day and night, for without that a healthy condition of body cannot be maintained. King Alfred's division of the twenty-four hours is referred to as a wise one, in which he devoted eight hours to labour, eight to rest, and eight to recreation. We are further told, that “one great mistake in recreation,” a point on which I thoroughly agree, “is the making of great strength in one set of muscles, instead of good, general health, the object aimed at. Our grand aim should be the culture of all our powers so as to enable us to pass through life without pain, without disease, and to preserve it as long as possible. Fatigue is due to temporary exhaustion, general or local, and by it we become aware that we have worked hard enough, but by gradually increasing the work done by any group of muscles they develop in bulk and are adapted to the extra work. The limit of size is, however, soon reached, and if the exercise is too great the muscles cease growing, and a process of degeneration sets in. On the other hand, idleness will, through disuse, lead to a like result; but it would not be a difficult task to prove that over-work does less harm than under-work, and it behoves everyone so to use their powers, whatever they may be,

that in after years they cannot look back in bitter reflection on a life half wasted.” For this debatable point we refer our readers to an article on “Overwork,” which appeared in the magazine a year ago, written by a medical student, J. M. Gray. Brain workers should bear this fact in mind, that to renew wearied powers of mind, a change of labour is often as restful as cessation from work altogether. Thus from heavy thinking to physical exercise is an enjoyable rest; or, from writing to the effort necessary in vigorous speaking, is to many men a restful change. While to the man busily engaged in manual labour, the exercise of the brain is most restful.

“It is absolutely essential for the health and happiness of everyone that they should have certain intervals of rest from their work, and by rest we do not simply mean sleep, but whatever gives pleasure and promotes health. But whatever exercise is taken it should be graduated and systematic, not violent and sudden.” How many people misjudge the amount of exercise they should take, by thinking that unless the exercise is severe and arduous they are doing themselves no good, and when they have injured their constitution they come to the conclusion that exercise does not suit them and fall into the other extreme of taking none at all. The last point that is mentioned in connection with this important subject is sleep. The writer argues that “sleep ensures rest in its highest degree, and rest is necessary for repair, as all action, whether of mind or body, involves destruction, and without sleep and rest destruction would proceed so much more rapidly than repair that our powers would soon fail altogether, as it is probable that muscular and mental fatigue are due to the waste having out-run repair. Even plants are said to sleep, and they certainly undergo changes which suggest a waking and sleeping condition. At evening flowers close, and buds fold up, not to open again until morning.” Some curious opinions are given about the quality and value of the various hours we sleep, which we find reaches its maximum depth within the first hour, and then it diminishes at first rapidly and afterwards slowly. It falls one-fourth at the end of an hour and a half; one-eighth at the end of two hours. An interesting article appeared in *Great Thoughts*, not long ago, on “How great men work,” and in this article we were introduced to the working hours of many men of letters, and told the various amount of sleep that each was in the habit of taking, showing that various constitutions require different degrees of sleep. Much depends, however, whether you can sleep easily, soundly, and awake refreshed like Mr. Gladstone. Few men could do with as little as Napoleon.

Essential as sleep is to repair mental and bodily powers, "too much dulls the intellect and weakens the recuperative faculties." John Wesley once said that a man could tell how much sleep he required by rising half an hour earlier every morning until that he found he no longer lies awake on going to bed or awakes until it is time to get up. "Intense study drives away slumber; prolonged muscular toil makes it impossible to keep the eyes open. The result in the one case is due to the circulation in the brain becoming more active with mental effort; and in the other to the increased blood supply to the muscles, producing a comparatively bloodless condition of the brain; and this latter state is supposed to be always present during sleep." To make a business of sleeping well is as necessary as to make a business of eating regularly, but in this express age he thinks he lives best who cheats nature out of an hour of sleep; who eats as he walks, and whose exercise consists in his daily run to catch his morning train.

J. A. F.

TESTIMONIAL TO PROFESSOR L. N. AND MISS JESSIE A. FOWLER.

ON Wednesday evening, March 18th, the successful competitors for the Fowler Institute Examination were presented with their diplomas and certificates by Prof. L. N. Fowler, who remarked, "It gives me very great pleasure to be able to give these diplomas and certificates to the pupils of the Fowler Institute, for it indicates, in the first place, that what has long been my wish—namely, the starting of a phrenological institute—has been accomplished; it indicates, secondly, that you have had confidence in our teaching, and, thirdly, that you have done good and faithful work to justify these awards; but friends, bear in mind that, after all, you have acquired only the A. B. C. of a great science; you have the ground work, the foundation, and now it remains largely with you as to how much progress you make in your studies. Do not think because we give you these certificates that you have attained all knowledge on phrenology—you are only on the threshold, but I bid you persevere and enter the door that will lead you to the full knowledge of the study of man."

At the close of the proceedings, Mr. William Brown, Vice-President of the Institute, in a few well-chosen words, presented to Mr. and Miss Fowler a handsome testimonial, in the shape of a large marble clock to Mr. Fowler, and a beautiful gold watch to Miss Fowler, both suitably inscribed

together with a most handsomely framed and illuminated address, signed by the subscribers, which read as follows :—
“ Presented to Mr. L. N. Fowler and Miss Jessie A. Fowler upon the occasion of the first anniversary of the Fowler Institute, founded March, 1890, for the study and investigation of mental science, in grateful acknowledgment and deep appreciation of the benefits its members have derived from their labours, and as a token of the esteem and affection in which they are held, also as an expression of the sincere and heartfelt desire that the Institute may rapidly increase in power and accomplish its chief aim,—the improvement of mankind.”

Mr. Fowler, in thanking the members, said : “ I am very much obliged for this expression of your interest in our work. I thank you all for this token. I shall take pride in it as long as I live.”

Miss Fowler, in response, said :—“ I feel too much surprised to say very much to-night, therefore you must excuse me ; but I thank you, ladies and gentlemen, for your testimonial, and for this beautiful little watch which I shall treasure as long as I live, and it will remind me of time expended in explaining the subject which to me is of so much importance. The work has been a great pleasure to me, and I have never had a class so thoroughly infused with a desire to learn. I trust we have (and I think we have) inspired all who have studied here with the responsibility of giving off that knowledge to others that they may also start in the study for themselves. It has always been a wonder why any public work has been thrown upon me, but I feel that God has called me out of my home life and placed responsibilities upon me which I trust I may always be able to fulfil. I do not feel that I deserve this expression of thanks you have given to-night, but I thank you most heartily, and I shall certainly have a constant reminder of your appreciation as the hours, days, weeks, and years pass by. I only wish I could accomplish double what I do. It is a regret that I cannot do all I want in the teaching of this great work. Although there are the hands in the front of the clock, we do not forget that the machinery behind makes them work easily ; so we shall look upon you all as the machinery to help us to place phrenology on its proper footing.”

Mr. Coleman said : “ There is one remark Miss Fowler made, upon which we must agree to differ, *viz.*, ‘ I do not deserve it.’ Had we been of this opinion we should not have put her to so severe a test, and one she was quite unprepared for, that of returning thanks. For her own sake I wished it had not been necessary, but I find I had misjudged her capabilities. There

are one or two quotations I think would not be out of place this evening."

'There is a kind of gratitude in thanks, though it be barren and bring forth but words.'—SOUTHERN.

'A man like a watch, is valued for his manner of going.'—W. PENN.

'A beautiful form is better than a beautiful face, a beautiful behaviour is better than a beautiful form. It is the finest of the fine arts.'—R. W. EMERSON.

Mr. Smith said : " Ladies and gentlemen, if there is one class of men who I have greater regard for than any other, it is the philanthropist, but there are philanthropists and philanthropists. To be brief, I would classify them as follows : first, those who help their fellow creatures ; and secondly, those who help their fellow creatures to help themselves. The man who gives food to the poor is doing a good deal of charity, but he who puts the poor in the way of getting their own living is rendering a far greater service. Now, it is to this second class that the phrenologists belong, they tell us how we can make the most use of that which nature has given us, therefore the phrenologist stands very high in our esteem ; in fact, I think, takes primary places of importance. When one considers the immense amount of good Mr. Fowler and his daughter have already done and are still doing, and of even greater influence they will have over future generations, one cannot help thinking that mere words of a mortal can but faintly express the feelings of respect, sympathy, and admiration that we have for them."

Miss Maxwell said : " None but those whose characters are themselves developing can fully appreciate and value the help of those whose characters have been developed by years of patient, earnest effort ; and none but the members can fully know the elevating influence this institute exerts upon them, not only from the practical knowledge of phrenology which they gain, but from the personal influence of Mr. and Miss Jessie Fowler. We feel that they understand us, and that is the greatest possible comfort to some of us who are such puzzles to ourselves. They encourage and stimulate us to make the most of our abilities, and help us out of our difficulties with unfailing kindness and patience. The progressing evolution of human nature is slow work. We do not become saints in a minute. We have nothing brilliant to show the world, but we hope to prove in the future, by united effort to spread the noblest of sciences, that their labours have not been in vain."

Miss Crow : " Mr. Fowler, ladies and gentlemen, I cannot let this opportunity pass without saying how much benefit I have derived from the Fowler Institute. The course of lessons

has given me the greatest pleasure, and I think that we all must feel that the Fowler Institute can give us a great deal of benefit if we will only follow out the advice and help that has been suggested in these lessons. I personally shall always look back upon the Institute with the greatest pleasure, and I sincerely hope that Mr. and Miss Fowler will both be long spared to carry on the good work that they have begun in this Institute.

Other remarks followed from Mr. W. Hull King, Mr. Samuel, &c.

THE FOWLER INSTITUTE.

THE monthly meeting of members and friends of the Fowler Institute, was held on Monday, April 13th, in the Lecture Room; when Madam Patenall, of Hastings, read a very interesting paper on "Faces." Mr. L. N. Fowler in the chair. As we hope to print this paper in the magazine, we will not give extracts of it here. It was much appreciated, and at the close brought out an interesting discussion, in which Messrs. Brown, Coleman, Samuel, and Fowler, took part. Madam Patenall willingly acceded to a request that she read a "Face," and gave two exceedingly clever delineations of a lady and gentleman present.

Mr. Fowler invited the members and friends, of the Institute on Wednesday, the 22nd of April, to hear a lecture in the City Temple, Holborn Viaduct, on "Savonarola, Monk, Patriot and Martyr," by the Rev. W. J. Dawson, who will be known to most phrenologists as the editor of *The Young Man*. But, despite his recent opposition to phrenology, Mr. Dawson is an orator and a candid man, and when he was asked by Mr. Fowler to deliver a lecture before the Institute he at once consented. It proved to be a great treat, and was listened to by a large and attentive audience; among which all those in London who are interested in phrenology were present. The chair was occupied by Mr. W. Brown, of Wellingborough, vice-president of the Fowler Institute, who, in a few apt words, introduced the reverend lecturer.

BRITISH PHRENOLOGICAL ASSOCIATION.

THE ordinary General Meeting of this Association took place at 63, Chancery Lane, W.C., on the 7th April. Mr. J. Webb, on his re-election to the office of President, then gave his inaugural address. For his subject of discourse he gave a

review of the "Life and teachings of Dr. Gall: their influence on modern physiological investigations."

Mr. Webb pointed out that present day physiologists are not willing to admit the influence that Dr. Gall has had on modern physiological discovery; though in this respect there are brilliant exceptions, notably the esteemed French physician, Dr. Nivelet, who himself complains of this in his latest work, "Gall et la doctrine," published in Paris last year; and in his last work, "Cerebral Localisation," Dr. Ferrier pays a "tribute" to the memory of Gall. Mr. Webb complained of the injury done to the science of phrenology by unqualified peripatetic professors.

He also referred to the question of "motor centres," and quoted the views of Henry Maudsley, who thinks the centres for movements of parts of the body have been too much discussed. The centres of intellection and for the sentiments are neglected, for galvanic excitation cannot be expected to aid us in this branch of the study. All that has been written on the subject of late years, confined to the pathology of the anterior lobes almost entirely, is not only favourable, but confirmatory of phrenological teachings.

A very interesting discussion followed the address, in which several members took part.

Hygienic and Home Department.

THE TALENT OF MOTHERHOOD.

AN article in the *National Review* on "The Talent of Motherhood," contributed by Arabella Kenealy, M.D., pleads for such education and training of woman as will best fit her for marriage and motherhood. "She," says the writer, "who is best able to bring her faculties to the focus of motherhood is the most highly developed of her sex; she it is who has travelled along the right lines of progress; she it is whose education has been the highest. Though her nature never undergo the test, she who is most fitted for this marvellous function is the fittest of women in all life's other womanly functions." This statement is based upon the fact that the best motherhood is of paramount importance in the progress of the race, and that upon the wisest performance of its duties the future of humanity depends. The author's observation and experience have satisfied her that an education which affords full development and cultivation of all the faculties, leaving no reserve power, can only have a bad effect upon the

offspring, whose vitality is thereby reduced and their resources exhausted, that the incessant strain of business, of professional life, or of active social exertion during the months preceding the birth of the child must necessarily involve the expenditure of nervous forces essential to the growth of the embryo, and in consequence the child is born with an impaired constitution, physically, mentally and morally.

Noting the well-known fact of embryology, that the organism in its evolution before birth passes through all the phases from the lowest to the highest through which man has passed in acquiring his human characteristic, Dr. Kenealy says: "By analogy we may conclude that the child passes later through the stages of development man has assumed since he became distinctly human. It is not difficult then to imagine, supposing the maternal power to fail, that the child's evolution may stop short, its human development be arrested on a lower plain, and an inferior type—antecedent to the age in which it is born—may be brought into existence. We are too ready to consider that if a child be born of strong constitution, the mother has fulfilled her duties; but supposing the child to be a healthy specimen only of a type lower than its parents, is there not, in fact, a further failure of parental responsibility than takes place when a child more sickly in constitution, yet morally superior, is produced."

The intimate relation between the mother and child is shown by the fact the woman often remains healthy so long only as the children to which she gives birth are sickly, the date of the birth of a vigorous infant corresponding with the decline of her strength and health, indicating that nature's effort to produce a higher blossom has sapped the very sources of the mother's vigour.

Far from being the insignificant function it is commonly regarded, that of motherhood is one by which every fibre of woman's nature is strung to the tension of a higher note, and her faculties are strained to the effort. During a period when her physical and mental condition is fraught with such momentous consequences to her offspring and to society in general, any pursuit which strains her attention and absorbs her energies, preventing her meeting fully the responsibilities which she has undertaken, should be avoided; for it is inimical to good motherhood, is incompatible with the higher qualities in the offspring. While woman should not seek marriage as a means of support, yet when love draws her into married life, she should be ready to give up for a while to some extent that independence which is inconsistent with mother—power—with the faculty of good motherhood. The

writer does not ask that women be relegated to the position which she held in the past, but that, in the excitement of new independence, she shall not forget her great trust—the well being of her children and through them of the race.

According to Dr. Weir Mitchell, this writer says, only about one American woman in a hundred is physically fit for motherhood. She adds “We who from the restlessness and overwork of our lives to-day sit with the spectre of nerve exhaustion ever at our board, are rapidly approximating to the physical condition of our American cousins.” Multitudes of constitutions are being wrecked by physical and mental overstrain, by over-education, which exhausts nerve power and demagnetizes the blood, as the sallow skins, nerveless faces, lustreless eyes and heavy anæmic lips, sufficiently attest. When girls are coming into womanhood their powers are overtaxed, health of mind and body is lost, spontaneity and originality under a high pressure system are crushed out, and womanhood in its immaturity is dwarfed. The remedy and relief must be sought in the education that develops and cultivates the natural faculties, instead of substituting for them “neuter attributes artificially formed.” Dr. Kenealy holds that the function of motherhood will in the future be regarded as “immeasurably superior to those small talents of tongue and hand which are now considered as of so much greater worth.” The talent of motherhood will, she believes, be more than any other coveted by woman and honoured by man.

The paper is thoughtful and suggestive. The reference to the arrestation of the development of the child while it is in a stage below the point which under favourable circumstances it would reach, has not hitherto been considered in the discussions of antenatal conditions. As far as it goes the paper is well reasoned and sound, but it does not go far enough. The “talent of motherhood” in a high degree of cultivation must concern itself not only with embryological conditions and development; it must wisely select the fathers of the children upon whom so much thought and care are to be bestowed. No power of motherhood can overcome the defects of imperfect fatherhood. Physical, intellectual, and moral health in the father is not less, is perhaps even more important, than all the care and precaution of which Dr. Kenealy speaks. Is enough known in regard to the physiological and psychological characteristics and conditions in both the father and mother, the combination of qualities necessary to the most perfect marriage, and the best offspring, for it to be the basis of any method of selection better than that which now prevails? Much less is accurately known on

this subject than should be, than will be in future ; but what is known of the laws of heredity, should be sufficient to make women, who aspire to the highest motherhood, include physical health and mental and moral soundness in the fathers of their children as among the most indispensable conditions of marriage and parentage. And in the good time coming, men who assume the responsibilities of fatherhood will be more sensible than many are now in selecting those who are to be the mothers and teachers of their children.

A MOTHER was giving her boy a bath, and in rubbing him hit a sore finger. She said, "Oh, that is too bad, I'm sorry," but the little fellow said, "You used to kiss me when you hurt me, but now you never do." Sure enough. The mother was thoughtful for a while and she knew that since her last baby had come this one had been left to himself too much, and she tried to think how she might do more in the future for this almost a baby himself, and still not rob the little wee baby of all. She did try, and although her life was a busy one, the children all found sympathy with her. There is something wonderfully sweet in the sympathy of a mother, and it is always appreciated, no matter how old the children may be. The grown-up woman with children of her own likes the tender attentions of her own mother, and sometimes thinks nothing would be so gratefully received as it.

Notes and News of the Month.

LADY HENRY SOMERSET has consented to speak at the Annual meeting of the Congregational Total Abstinence Society, to be held during May at the City Temple.

REV. MR. BROWNE, of the Congregational Church, Richmond, Melbourne, is expected in England shortly on a six months' visit. Mr. Browne was one to welcome Miss J. A. Fowler to Australia, and took the chair at one of her lectures.

THE size of an adult Englishman's head is said to average No. 7. The heads of Portuguese average from 6, 7, 8, to 7 ; those of Spaniards are a little larger, and those of Japanese exceed the English average. Germans have round heads, Malays small ones.

"MRS. KEAN," writes Miss Terry, in the *New Review*, "was my principal mistress in the most difficult art of clear articulation. 'A, E, I, O, U, my dear,' she used to say, 'are five distinct vowels, but don't mix them all up together as if you were making a pudding. If you want to say, "I am going on the river," say it plainly, and don't tell us you are going on the rivah.'"

ENGAGEMENTS OF THE FOWLER INSTITUTE.—May 5th, Miss J. A. Fowler's Reception of American and Australian Delegates to the British Women's Temperance Association. May 6th, Lecturette, Mr. L. N. Fowler. May 11th, Members' Meeting, Paper by Mr. H. S. Ward, of Bradford. May 20th and 27th, Lecturettes.

“WOMEN as Public Servants,” by Louisa Twining, in *December Nineteenth Century*, and “Responsibilities of Women with regard to Public Life,” by Mrs. Hugh Price Hughes, in the *Methodist Times* of April 9th, are both worthy articles which deal with the individuality of women in positions of Church and State. Read them.

MR. FRED. WALKER, of Camberwell, Melbourne, is about to visit England on a much-needed vacation; he is one of the most successful teachers of Melbourne, and many a young man has been started on a prosperous career through Mr. Walker's guidance and training. It was through his influence that Miss J. A. Fowler was enabled to introduce into the State schools light gymnastics and Swedish drill during her recent visit to Melbourne.

AS announced in the April number of the PHRENOLOGICAL MAGAZINE, a Labour Bureau has been opened by the Fowler Institute, to help people who are seeking employment, and also to aid heads of firms, schools, &c., to secure suitable individuals. We hope in time that this department may become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C.

THE death is announced of Dr. Pressencé, a man in whom all countrymen united in honouring and admiring. France will find it difficult to reproduce another such noble-minded Senator. He possessed a versatile mind. He was a brilliant historian, as well as a thoroughly reliable one. As a preacher he charmed all who heard him. His wife is an authoress of repute, and as a minister among the poor of Paris is almost worshipped. The family are showing the most worthy results of heredity.

THE Annual Meetings of the British Women's Temperance Association will be held at the Memorial Hall, May 27th, at 7 o'clock p.m. Lady Henry Somerset will preside. The speakers will be Mrs. O. Chant, Mrs. Josephine Butler, Sister Lily of the West End Mission, and Mrs. Woodbridge, U.S., a delegate. Mrs. Mary Davies, is expected to sing during the evening. Owing to the crowd of last year, friends are asked to come in good time. The Annual Conferences will be held on Wednesday morning and afternoon, May 27th.

EXTRACT from a letter written to Miss Fowler, from Mr. W. W., a State schoolmaster in Melbourne,—“I was very pleased to receive from you a copy of the PHRENOLOGICAL MAGAZINE. I read with

much interest your article on 'The Intellectual Equality of the Sexes,' with which I agree most cordially. To show that my agreement is disinterested, I may say that I arrived at this conclusion before I recognised your signature at the foot. Now that educational advantages are more equally distributed between the sexes, women are showing their capacity to acquire knowledge and use it effectively. This is very apparent in our State schools, the Dux being as frequently a female as a male. We often talk about you, and wish you were in Melbourne. No doctor has been of so much benefit to my daughter as 'Dr.' J. A. Fowler."

ACCORDING to the Philadelphia Press, Dr. William Pepper, of the Pennsylvania University, is at the head of a movement to form a commission to examine the brains of great men after death. The work has been going on for some time, and Dr. Pepper is daily in receipt of answers to letters sent to celebrities not only in this country, but abroad, in furtherance of the scheme. A roll of names is kept in a book, and as the answers come the writer's name is checked off with his assent or refusal. The scope of the plan of the Commission includes men great in letters, warfare, statesmanship, art, discovery, money getting; in fact, whoever has lifted himself by achievement conspicuously above his fellows will be asked to allow these men of science a glimpse of the grey matter, to determine, if possible, what peculiar brain conformation, if any, they possessed, led to eminent success in their careers. Dr. Pepper attaches great importance to the result of these investigations. While the general outline of the plan has been determined, there still remains much to be accomplished as to details. These will be arranged within two or three weeks, Dr. Pepper hopes, when he will make the matter a subject of a paper in a medical magazine. To a Press reporter, Dr. Pepper said, "I consider the work that the Commission has before it one of vast importance. I hope soon to have all the arrangements in shape. Within two weeks I will have the officers of the Commission named, and possibly will have heard from some one of our European communications."

WHAT wonders love can do! How the most trivial duty, the meanest, the most loathsome, touched by love's fine hand, becomes a service all reverent and beautiful.—*George Dawson.*

IF you want knowledge you must toil for it, if food, you must toil for it, and if pleasure you must toil for it. Toil is the law. Pleasure comes through toil, and not by self-indulgence and indolence. When one gets to love work his life is a happy one.—*Ruskin.*

A MAN is a great bundle of tools. He is born into this life without the knowledge of how to use them. Education is the process of learning their use, and dangers and troubles are God's whetstones with which to keep them sharp.—*Henry Ward Beecher.*

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

THE Norwich Phrenological Society have removed to more commodious premises, and are steadily increasing in numbers, owing to the energetic efforts of their president and secretary. We wish them every success.

MR. ALGENON MORGAN delivered his first lecture on Phrenology, in Guernsey, on the 4th of April. The first part of the lecture was devoted to the anatomy of the brain, after which the characters of several of the most remarkable men of modern times were dwelt upon by the lecturer.

MISS JESSIE A. FOWLER lectured on "Phrenology" before the Church of England Y.M.C.A., Leopold Rooms, St. Bride Street, E.C., on the 4th of April. The lecture was listened to with great interest throughout, and elicited frequent applause. The examinations at the close of the lecture proved very satisfactory.

L. N. FOWLER.

L abour and love, thy motto has been ;
 N ature thy study. If could be seen,
 F rom here to heaven, the line it would reach
 O f all of those that thou did'st teach
 W hat best to do and why. Well done !
 L et us but follow in life's run,
 E 'er age is reached we then shall reap
 R eward, but not thy share to keep.

March 13th, 1891.

—M. F. I.

WHAT WEARS OUT LIFE.—It is the part of an indiscreet and troublesome ambition to care too much about fame—about what the world says of us ; to be always looking into the faces of others for approval ; to be always anxious for the effect of what we do and say ; to be always shouting to hear the echo of our own voices. If you look about you, you will see men who are wearing life away in feverish anxiety of fame, and the last we shall ever hear of them will be the funeral bell that tolls them to their early graves.

Temperance Notes.

MR. AND MRS. MCLEAN, from Melbourne, are at the present time visiting England. Both are hearty workers in the Temperance cause.

ABSTEMIOUS MILLIONAIRES.—The personal habits of these great and good men, the Wall Street bosses, are reverently touched by a writer in the *New York World*. "The massing of millions," he says, "teaches a powerful temperance lesson. Not one of the self-made millionaires is a 'drinking man.' John D. Rockefeller never permits strong drink to pass his lips. A mere sip of wine for the sake of courtesy is the extent of the indulgence of William Waldorf Astor. Jay Gould has tasted wine not over two or three times in his life, and then not because of a desire for it. The Vanderbilts are equally abstemious. Collis P. Huntington does not even drink coffee. His strongest beverage, as related, is tea. Russell Sage once in a while takes a spoonful of Bourbon whisky in a glass of water as a tonic. Not one of the leading millionaires uses tobacco, and they all eschew profanity."

JUVENILE SMOKING.—Excellent common sense on the whole directed the proceedings at a conference recently held in the Town Hall, Manchester, to consider the expediency of arresting the prevalence of juvenile smoking. According to the medical officer of health for the city this habit is practised by 80 per cent. of the Lancashire boys, and his rough calculation may not be very far from an accurate statement of facts. Anyone, or rather everyone who daily meets with that presumptuous atom of manhood, the boy cigarette-smoker, must have been astonished at the general distribution of the prodigy. Equal, if not greater, is the surprise excited by his diminutive size and exceedingly tender age. Some years ago it was the boy of twelve, fourteen, or sixteen that opened our eyes. Now it is the six or eight years old, the literal infant who prolongs his still recent privilege of suction in a fashion undoubtedly hurtful, by perverting at a critical period the sensitive processes of nervous action and nutritive change. The Manchester conference discussed various possible correctives of this mischievous practice. Among these we may mention education of a homiletic character, to be carried out in Board schools. Another and more practical suggestion advised ministers and teachers to set the example of abstinence in their own persons. As a last resource, it was proposed that the aid of the law—restricting, as in Germany, the right to use tobacco to persons over sixteen years of age—should be called in to strengthen the gentler measures already referred to. As regards the wisdom of this latter step there would seem to be some question. We are not of those who favour the unnecessary multiplication of petty laws. There is, in cases of the kind in question, no power which in our opinion is either so natural, so safe, or so effectual as that of judicious home training, and we are not hopeless of yet seeing its influence applied far more widely than at present.—*Lancet*.

WHY CANON FARRAR SIGNED THE PLEDGE.—My reasons for taking the pledge were partly general and partly special. First, I became convinced that the use of alcohol in any form was not a necessity. I saw that whole nations have lived and flourished without it. I believe that the whole race of man had existed for centuries previous to its discovery. I was struck by the indisputable fact that in England 20,000 inhabitants of our prisons, accustomed to it all their lives, and the majority of them brought into prison directly or indirectly by the use of it, could be, and were, from the moment of their imprisonment, absolutely deprived of it, not only without loss, but with entire gain to their personal health. Men enter prison sickly and blighted, are deprived of drink, and leave prison strong and hale; and women who, when incarcerated, are hideous to look upon, after being made compulsorily sober by Act of Parliament, recover the bloom of health and almost of beauty. Next, I derived from the recorded testimony of some of our most eminent physicians, that the use of alcohol is a subtle and manifold source of disease, even to thousands who use it in quantities conventionally deemed moderate; and from the testimony even of many who discountenance total abstinence, that all the young, and all the healthy, and all who eat well and sleep well do not require it, and are better without it. Then the carefully drawn statistics of many insurance societies convinced me that total abstinence, so far from shortening life, distinctly and indisputably conduct to longevity. Then I accumulated evidence that drink is so far from being requisite to physical strength or intellectual force, that many of the greatest athletes, from the days of Samson onwards, "whose drink was only of the crystal brook," have achieved without alcohol mightier feats than those which have been achieved with it; and many of the world's wisest, even if they have not, said Pindar, have yet drawn out a better inspiration from other sources than can be drawn chemically from the fumes of wine. Seeing all which and much more, seeing, too, in the Holy Scriptures God's own approval of His Nazarites, who, as the prophet Jeremiah tells us, were purer than snow—"They were whiter than milk, they were more ruddy in body than rubies, their polishing was of sapphire"—I saw, or thought I saw, grounds sufficient, and superfluously sufficient, to make me an abstainer.

INEBRIETY AND CRIME.—At the annual meeting of the Society for the Study of Inebriety, held recently in the rooms of the Medical Society of London, Chandos-street, Cavendish-square, Dr. Norman Kerr, who presided, delivered an address on "Recent Criminal and Civil Cases complicated with Inebriety, and the Need for a Reformed Jurisprudence." He commented on several recent criminal trials in which intoxication had played a part. He referred to the Winesham murder of a mother by her son as illustrative of alcoholism in both parents being transmitted into a transformed inheritance of mental instability and defective control. The guilty though temperate son was acquitted on the plea of insanity. The converse of this altered

transmission was exhibited in the person of the accused in the Liverpool cab tragedy. The sentence of nine months with hard labour passed at the Old Bailey in October last on a drunken mother for causing her child's death by neglect, was contrasted with the refusal of Lord Young, in a similar case, even to hear the prisoner's counsel plead, and to send the case to the jury. In this latter case, the intemperate mother, who had been labouring under delirium tremens, was discharged, on the ground that excessive drinking was not a crime, and that delirium tremens was a disease. Mr. de Rutzen's dictum at the Westminster Police-court, when sentencing Samuel Davis to hard labour for one month for assaulting a constable when drunk, that the being maddened by a very little liquor was no excuse for getting drunk, was confronted with Baron Pollock's ruling in a case at Leeds that the last person to know his own weakness (as to alcohol), was he who had a weak mind; he could not argue as doctors could do for him, and believed himself as strong in mind as those about him. The jury followed Baron Pollock's ruling. Alcoholic trance was illustrated by the case of John Hoare, who, generally an affectionate father, cut his boy's throat, and had no knowledge or recollection of the act, and who at the Central Criminal Court last February received a light punishment. Several cases of homicidal inebriety were cited. Dr. Kerr highly commended the course recently pursued by Sir Peter Edlin at the County of London Sessions in binding over two alcoholic kleptomaniacs to appear when called upon on condition of their entering a Home for Inebriates for twelve months. Dr. Kerr concluded by submitting two practical proposals. In the first place he suggested that in all criminal trials in which the alleged criminal act has been committed by the accused when under the influence of liquor, or has been committed by an inebriate, there should be an investigation into the previous medical history of the prisoner. There should also be an inquiry into the family history so as to elucidate the heredity with especial reference to inebriety, insanity, and other affections. This two-fold inquiry should be entrusted either to a medical expert or to a mixed committee composed of a legal and medical expert acting conjointly. The object of this investigation should be to ascertain how far the accused had been cognisant of his alleged criminal offence, and as to whether, if so cognisant and so competent, he was able to resist the criminal impulse. In the second place, he proposed the appointment of a Mixed Commission of judges, counsel, solicitors, and medical experts, for the consideration of the question of dealing with inebriates who have been convicted of a criminal offence. This inquiry should have special reference to the best procedure to be pursued, whether (1), if penal, by cumulative punishment or otherwise; or (2), if curative, by medical treatment for a diseased condition, with due provision for classification, occupation, hygienic measures, and elevating influences.

Book Notices.

The Strand Magazine contains a humorous article by Sir W. Lawson on "On the Stump for the Pump." It is well illustrated, and contains a good portrait of the great man himself.

Woman: Her Destiny and Maternal Relations (New Edition, 18th thousand). This valuable little work is one of the best and most popular of the late Mrs. Fowler's writings, and should be in the hands of all, both married and single. There are very few works on the subject of which it treats which so thoroughly and so instructively cover the ground it does. Its price—6d.—places it within the reach of all

AMONG other valuable matter, we draw the attention of our readers to the articles which are appearing in the *American Phrenological Journal* on "Sketches of Phrenological Biography," by Mrs. C. Fowler Wells. Those of Gall, Spurzheim, and Combe were particularly interesting. The number before us treats of Mr. Deville and his labours in connection with Mr. Spurzheim as well as by himself in making a valuable collection of casts of noted people in all professions and ranks of life. There is also a highly interesting editorial on "Laura Bridgeman's Brain;" it being based on a recent report of Dr. Donaldson, published in the *American Journal of Psychology*.

ANOTHER book on Temperance. This time it is Mr. Frank R. Cheshire's *Scientific Temperance Handbook*, for Temperance teachers and advocates and for senior classes in schools. The book is published at the National Temperance Publication Depôt, 33, Paternoster-row. Instead of depending upon authority, as most writers on Temperance do, Mr. Cheshire goes to science for his arguments. An opinion is only an opinion; but a fact of chemistry, of physiology, of biology is a thing which no argument can overturn. Mr. Cheshire enforces his lessons on Temperance by illustrations drawn from the chemistry of air, water, beer, and spirits, and from the phenomena of stomachic, biliary, pancreatic, muscular action, &c. "Nearly, if not quite, half the sum spent by the country in the purchase of alcoholic intoxicants comes from the pockets of working people, whose folly in this matter is the most fruitful source of poverty and distress. . . . The money spent in drink is equal to the cost of bread, butter, and cheese, and about three times the amount expended in woollen and worsted goods. It is nearly twice the total receipts for all passenger and goods traffic on all the railways, and more than the rents of all the farms and all the houses in the United Kingdom." That, certainly, is a strong and startling way of putting it. The book is well illustrated.

Help, the supplement to the *Review of Reviews*, contains Mr. Stead's views of "How to fight the Taproom;" also an article on the "Helpers' Conference at Bradford," with an excellent portrait of the energetic Secretary of the Bradford Branch—Mr. H. Snowden Ward. At the Conference, Mr. Stead gave a powerful address on "The Citizen Christ." For the need of such Conference, he referred (1) to the strike-wars which convulsed individual communities; (2) to the extension of opium and alcoholic shops in India, whereby the natives were demoralized in order to fill the Treasury of the Government; and (3) to the condition of the poor. What was wanted was to establish a federating hexus between the existing organizations to secure common work for a common end. This was what was proposed to be done by the Association of Helpers; and he expressed the belief that the Christian Churches could do a great deal to solve all these questions if they were united. Mr. W. S. Caine made a practical speech in support of the movement. He closed by saying, "If we could have in all the constituencies bodies of earnest men who would act on political questions apart from party politics, then, I think, questions which affected Christendom could be brought more rapidly to the front, and settled with a speed that would astonish all." Will our readers think this matter over, and write to us for particulars, for it is a vital one. "Live men and live women" are wanted in all districts to arouse interest in what will in time become a powerful organization.

Correspondence.

To the Editor of the PHRENOLOGICAL MAGAZINE.

I BELIEVE this science of phrenology should be used more; often it would save time, trouble, expense, and stupid blunders in educating children.

I remain, yours truly,

Highbury, N.

M. H.

SIZE OF BRAIN AS A MEASURE OF POWER.

To the Editor of the PHRENOLOGICAL MAGAZINE.

SIR,—In continuation of my letter which appeared on page 435 of the Magazine for October, 1886, and as regards the Hindoo head, which is estimated by A. G. H., to be "as the head of a man to that of a boy."* To this I took objection.

Now, during the last, or sixth, "Indian National Congress," which was held in Calcutta in December 1890, people from all parts of India were gathered together, and I availed myself of this very favourable opportunity to take measurements of the heads of those who were delegates to the Congress. Amongst these there were Hindoos,

* A. G. H. said: "The average European head is to the average Hindoo as the head of a man to that of a boy."

Mahomedans, Parsees and Christians. The following is only of the first, taken indiscriminately and not picked out for my purpose:—

4	heads	...	..	...	20 inches each	=	80 inches.
5	"	...	...	...	20 $\frac{1}{4}$ "	"	" = 101 $\frac{1}{4}$ "
6	"	...	...	...	20 $\frac{1}{2}$ "	"	" = 121 $\frac{1}{2}$ "
8	"	...	...	...	20 $\frac{3}{4}$ "	"	" = 166"
16	"	...	...	...	21"	"	" = 336"
13	"	...	...	...	21 $\frac{1}{4}$ "	"	" = 276 $\frac{1}{2}$ "
13	"	...	...	...	21 $\frac{1}{2}$ "	"	" = 279 $\frac{1}{2}$ "
8	"	..	...	...	21 $\frac{3}{4}$ "	"	" = 174"
10	"	...	...	...	22"	"	" = 220"
6	"	...	...	...	22 $\frac{1}{4}$ "	"	" = 133 $\frac{1}{2}$ "
7	"	...	...	...	22 $\frac{1}{2}$ "	"	" = 157 $\frac{1}{4}$ "
2	"	...	...	...	22 $\frac{3}{4}$ "	"	" = 45 $\frac{1}{2}$ "
2	"	...	...	...	23"	"	" = 46"

100 heads measuring in all 2,137 inches.

Consequently, the average measurement is 21.37 inches.

Here is the plain fact. Does this in any way corroborate the gratuitous assertion of your correspondent?

I may go a little further, and, with boldness, say that the brain power of the Hindoos, I mean moral and intellectual in particular, are in no way inferior to many nations on the face of the globe. But of course circumstances alter cases, as to their manifestations in a high degree. There is ample proof of what I say recorded in their history.

Yours faithfully,

R. B. Doss, M.B.P.A.

THE FUNCTION OF INDIVIDUALITY.

To the Editor of the PHRENOLOGICAL MAGAZINE.

SIR,—My letter, which Mr. Morgan refers to, fairly represents what I wished to convey. The trivial errors which have crept in are due largely to the absurd way intellectual men sometimes write, *i.e.*, in a hurry.

I did not state what was the function of the organ of individuality. I asked certain questions merely. I suggested individuality might not be a single organ. We have seen organs in evolution. Individuality has been evolved out of "educability." So it is still to be fully ascertained if the organ of individuality is the organ of one and only one faculty of the mind.

I further asked, "are we sure?" Phrenology may have reached its finality in Mr. Morgan's mind, and others, but not in mine. I am still a student myself. Up to the date of writing my letter, Mr. Morgan was altogether silent as to his definition of individuality. His articles contained a series of criticisms on Spurzheim and others—showing these writers either did not know what individuality was—or if they did, they lacked the necessary acumen to define their meaning. Since writing my November letter, Mr. Morgan has been good enough to express, eventually, what he esteems the function of individuality to be.

In no sense did I, or do I, attach the meaning "conscious perception" to individuality, which Mr. Morgan thinks I do; hence his criticism.

It is possible to suppose "individuality is a compounded organ." The functions attributed to it by certain writers, based on years of observation, were not written, and could not be wholly or finally accepted, if individuality was a single organ having a single function.

The cerebral structure of the organ, its extent of area, and the positive fact that the area allotted to individuality actually covers four distinct cerebral masses—two on each hemisphere—seems to indicate its functions are not one.

These functions combined prompt the individual to observe, to take a conscious insight to his surroundings, to note objects as such. Observation is, in my opinion, a much more satisfactory term for this faculty than individuality. Observation, the "conscious perception" objected to, remembers things and facts observed—perceived—by action and conscious effort.

At some future day I may submit a paper on "Individuality" to the MAGAZINE. Permit me to subscribe myself still a disciple of Combe.

Glasgow.

Yours very truly,
JAMES COATES.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

F. M. (Southampton).—The photograph of this gentleman indicates an ardent mind, subject to considerable excitability. He appears to have great tenacity of mind, independence of spirit, considerable pride and consciousness of his own importance. He is very sensitive about everything pertaining to his character. He is generally respectful, and subject to the powers that be. He will not submit to interference, has a good perceptive intellect, is quite wide-awake to what is going on around him, and appears to be able to do business accurately, to plan and lay out work, and to show method and system in what he does. He has the capacity to be an artist or scientific man. His intellectual powers are so well balanced that he can do a variety of work, and be equal to any ordinary emergency. His sense of order, love of music, and consciousness of time, are sufficient to enable him to be a musician. He is capable of exhibiting a prominent degree of energy and force of mind in anything in

which he is interested. He is very sensitive, cautious, and anxious whether he succeeds or not. He is on the look out for defects and dangers. He has quite a strong emotional nature ; is capable of being enthusiastic. He has the elements of a speaker, and would not make a mistake if he put himself forward before the public as a lecturer or speaker. It would be venturesome to state what he is best fitted for, because much depends upon training.

A. T. (London).—The photograph of this lady indicates a predominance of the mental temperament. She is very much given to thinking, and is much interested in intellectual pursuits. Has more of a reasoning, thinking, teaching kind of mind than she has mere perceptive power. She would sustain herself in study, thought, teaching and writing better than in house work or shop-business. She is somewhat irritable in her disposition ; being very sensitive she is liable to feel any opposition or coldness towards her, but she appreciates very much the approbation of others, and is willing to do almost anything to make herself acceptable to her friends. She is not proud, but ambitious. She needs more confidence in herself, more hopefulness and buoyancy of spirit, more vitality and warm blood. She must get in love with herself, be interested in such things as will entertain her pleasantly, live for the sake of living and enjoy life, and exchange thoughts and feelings with others in a familiar, social manner. She requires considerable outdoor life and exercise, and should visit more than she is inclined to ; must breathe deeply, inflate the lungs, bathe often, and encourage gymnastic exercise.

H. P. (Tollington Park).—This photograph indicates a strong constitution, which is equal to great endurance. She must have come from a long-lived, strong family. She is thoroughly in earnest and faithful. She has the qualities for good common sense, and takes right hold of whatever she does in earnest. She is not necessarily brilliant, showy, or particularly easy and versatile in her manners, but is reliable. She has order and method in doing things, remembers places, forms, and could easily learn a trade, where she had to cut out and fit dresses, and probably would show some interest in art. She is methodical in doing her work. She appears to have a favourable balance of power between the body and the brain. If she should devote herself to intellectual culture, she would show more originality and capacity to think and plan than she would be gifted in making a display of her powers. She is decidedly energetic, and if necessary, forcible. She is capable of manifesting great determination and will-power. She is fitted first for a wife, companion, and manager of her house affairs ; secondly, she would do well in business ; thirdly, as a nurse, and one to have the charge of those who cannot take care of themselves, but culture would make a great difference with her. She would appear to a good advantage in art and mechanism. She would manage a house, and show herself equal to some responsible trade.

KARL.—You have a predominance of the motive and mental temperaments. You appreciate an active life; are in your element when you are pushed a little in business. You will not show off well as a scholar, for the want of more perceptive intellect and a larger development of language, but you have a reflective intellect, are comparatively sound in your judgment, and original in your ideas; comprehend principles easily, and understand yourself, but your memory is defective with reference to stories and scholastic studies generally. You are characterized for having a mind of your own, for being able to think and comprehend subjects, are apt in explaining and in teaching; you have taste and imagination. You appreciate perfection, and find it difficult to be suited with a half-handed mode of doing things. You appear to have versatility of manner. Your imitation would allow you to adapt yourself to many changes of circumstances. You will retain youthfulness of mind into old age. You prefer mirth and witty authors. You have a spiritual cast of mind, are interested in subjects of a material nature. You appear to have a strong moral consciousness which has a regulating influence on your conduct. If you follow your own inclinations you would prefer to keep in some intellectual or moral sphere rather than be in an ordinary business. You need a wife who is lively, free in conversation, warm-hearted, and full of magnetism.

T. R. D. (Holywell).—The head of this gentleman is unusually high, and larger at the top than the base. His tendencies from early childhood, were to study, read, and guide other people. He is constitutionally a leader, a master-spirit who prefers to think for himself, if not for others. He has more intellectual and moral power than physical force, and the force that he has comes more from the strength of his will, and the importance of the occasion than from mere impulse. He appears to the best advantage when he can explain to others, and infuse into them his ideas. He has more to say than he has language in which to express himself. He does not care to talk for the mere sake of talking, but is more condensed in his style of talking than he is copious and ready. He is rather too theoretical and abstract; not sufficiently practical or adapted to every day affairs and business. He can enjoy fun if it comes in the right way, but usually he is in earnest and means all he says. He is not good at anecdotes, only as they illustrate a principle. His moral brain indicates a strong tendency to the spiritual. He feels the full force of moral truth. He is not over hopeful, still he has a very distinct idea of the future and of man's obligation to his CREATOR. He feels more deeply than he expresses, in actions or words. He is slow to wake up, but thoroughly reliable. He is cautious, and takes all necessary care to be successful and avoid mistakes. He comes from a long-lived family, and probably will live to a great age.

M. B. (Bristol).—The photograph of this lady indicates a fair balance of power between body and brain. She is active in mind, and equally so in body, and prefers an active life. She is decidedly

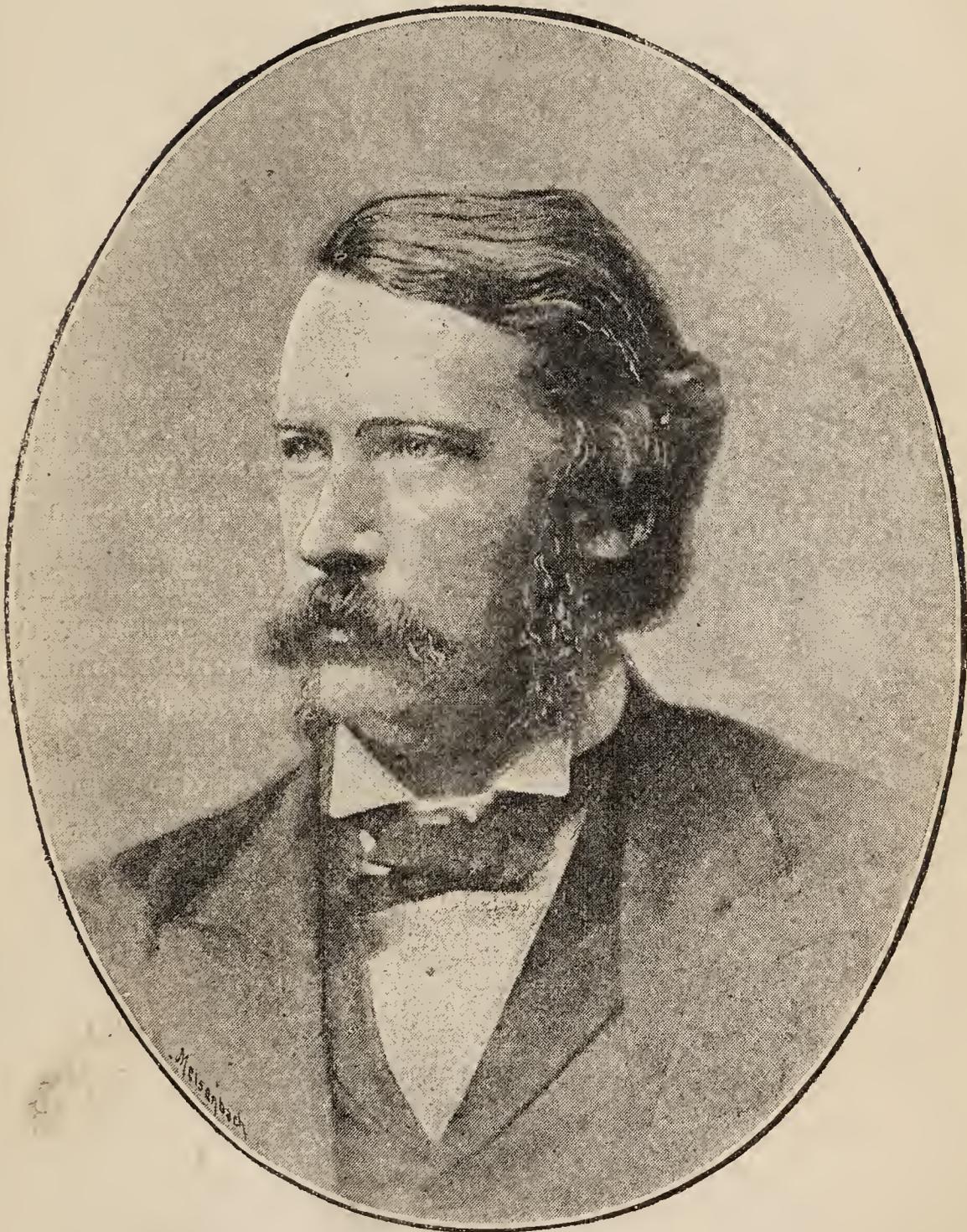
in earnest in all her movements ; is not contented to slide along through the world in a careless way. She is in her element when she has an important, urgent motive to labour for. She is capable of more than ordinary interest in others, delights to be where she can promote the happiness of others ; she would make a good nurse ; she is naturally lively and companionable. It affords her as much pleasure to tell what she knows by way of instructing others as it does to receive information. She is more happy when she is doing something for others than when she is simply the recipient of favours. Her one great desire is to be useful, and do good. She exercises a uniform influence over others ; she makes friends wherever she goes. She has considerable love for music ; could easily learn a trade. Could succeed as a teacher, and need not be afraid to figure on the platform, for as soon as she becomes accustomed to it she will be able to tell what she knows in an acceptable way. She would make a very devoted wife ; her ambition and benevolent disposition will prevent her from living an idle, quiet life. Would make a good sister of charity, or to be engaged with church labours and missionary operations. She is generally well when she has something to do ; she must take care of herself first, and others afterwards.

T. A. M. S. (Chesterfield.)—This lady's photograph indicates a live subject, and one that can enjoy life. She is full of animation ; is equal to go through severe trials of constitution. She is a thoroughly practical, utilitarian woman ; she is definite and direct in her conversation. She has great powers of observation. Is particularly interested in what is going on around her, and has a good memory of facts and circumstances. She can do new things, and adapt herself to many changes. She does not give her mind to abstract subjects, nor is she a theorist, but is very apt in noticing discrepancies and inconsistencies, and is quick to discern the characters and motives of others ; she may be a little impetuous at times, but she can make a mistake and rectify it while others are going about without making any mistakes. She would do well to mind the sick, because she is so inspiring and full of health. She delights to be employed, and could not live an idle life. She is not timid, nor does she worry about things, but goes right ahead. She has strength of mind and a tenacious will. If thrown on her own resources, she would do better than if she were dependent on someone else. She will do her share towards supporting the family ; probably, the greatest fault she has, is that she is rather too ambitious, not sufficiently cautious and thoughtful, but is very knowing, sagacious, kind, firm, and self-reliant.

To teach how many insects there are in the world, and observe the spots on the sun, to write novels and operas, can be done without suffering ; but to teach men their welfare, which entirely consists in self-denial and in serving others, and to express powerfully this teaching, cannot be done without self-denial.—*Tolstoi*.

THE
Phrenological Magazine.

JUNE, 1891.



PROFESSOR G. J. ROMANES, LL.D., F.R.S.
(From a Photograph by Barraud.)

THE organization of this gentleman is decidedly favourable for an elevated tone of mind, and more than ordinary fulness in the development of his intellectual lobe. He is most favourably balanced with reference to his physical and mental qualities. With

such a cultured mind he is capable of exerting a very extensive influence. He appears to be alive all over ; hence must show a clear and active intellect. He should be characterized first for his power of observation and ability to acquire knowledge ; secondly, for his power to retain what knowledge he accumulates ; thirdly, for his power of eloquence and ability to tell what he knows in a free and easy style ; fourthly, for an uncommon amount of ability to describe, illustrate, and make his subject plain ; fifthly, for his remarkable intuitive power and clearness in discerning character and motives. His first ideas, thoughts, and impressions, are his best ; and when he deviates from those he does not improve on his subject. He has a great fondness for facts, which he likes to draw from his own experience, and is specially conscious of what is going on around him. His head is unusually high, which indicates more than an average amount of moral power. He is catholic in his friendships, liberal in his views, and humanitarian in his feelings. He is not naturally a sectarian, nor does he take narrow views of life ; he blends sympathy with will and decision ; he is easily affected by the joy and miseries of others ; and his own happiness depends largely on the happiness of those around him. He has a superior order of dignity, and places a high value on himself, and cannot trifle or let himself down. He is able to command respect, as well as to call out affection. He places a high value on time, and never has a moment to waste. He has a great disposition to travel, see and experience for himself. He is particularly fond of experiments. He seldom forgets any important facts. As a speaker or writer he would show a fulness of mind that few would be able to equal. He is particularly apt in illustrating and giving facts. He makes every subject perspicuous, even to simple minded people. He has rather strong imagination, enough to fill out his subjects, and take broad views of things. His fondness for history and biography must be very great. Few have so much versatility of talent, and so much command of the knowledge they possess, as he has. He has superior gifts as a speaker, and can tell what he knows in a free, fluent style. He takes strong ground and maintains his opinion. He is not a half and half kind of a man, but whole-hearted whichever way he goes. He will make friends wherever he goes, and few enemies. He possesses a full degree of force and resolution, and never shirks his duty. He does other people's work rather than leave his for others to do. His physiognomical organization indicates affection, domestic disposition, and love for others. He does not want to live to enjoy himself alone, but delights to exchange thoughts and

feelings with others. His is a rare and most favourable organization to illustrate phrenology and physiognomy.

PROFESSOR G. J. ROMANES was the son of the late Rev. Professor Romanes, Principal of one of the Aberdeen Colleges, who was a powerfully-built Scotchman. His son, G. J. Romanes, was born at Kingston, Canada, nearly forty-three years ago. He travelled pretty well all over Europe as a boy; and entered Gonville and Caius College, Cambridge, where he intended studying for the medical profession. In the second year at Cambridge, he began the study of natural science, and soon gained a scholarship in zoology, and a little later second class honours in natural science. He then began experimental science, first at Cambridge, and afterwards at University College, London. He soon wrote some brilliant papers on the physiology of jelly-fish, star-fish, and sea-urchins, and the evolution of nerves in the embryos of sharks. No one before had thought of experimenting upon such lowly creatures as jelly-fish, but Mr. Romanes realised that in order to understand nerves, we must begin at the beginning, as well as study them fully developed. He is one of our leading evolutionists, and has taken up Darwin where Mr. Darwin left it, and is carrying forward the work of tracing the path by which men's faculties may have been evolved from pre-existing qualities in the higher animals. As Mr. Romanes was an intimate friend of Mr. Darwin's, he had the best opportunities for studying his mind and method of work. To Mr. Darwin's experiments Mr. Romanes has added a logical psychological analysis, which in certain fields is of great importance.

In 1875 and 1881, Mr. Romanes delivered the Croonian Lecture before the Royal Society, and in 1881 was elected F.R.S. His researches have been made popularly accessible in a volume on "Jelly-fish, Star-fish, and Sea-urchins," in the "International Scientific Series." His next work in the same series was on "Animal Intelligence." It is a rich store of carefully authenticated stories of animal intelligence throughout both vertebrate and invertebrate kingdoms, with a critical statement of the amount and kind of intelligence manifested in each class, or by each important animal. Mr. Romanes and his late highly gifted sister had perfected the qualities necessary to draw out the best that is in animals, and lived with them on terms of friendship and mutual intelligence that lend interest to many narratives in the book. "Mental Evolution in Animals," and "Mental Evolution in Man," or the first volume of "The Origin of Human Faculty," are his latest works. Mr. Romanes has also done other

work. He has just completed a three years' course of lectures at the Royal Institution as Fullerian Professor of Physiology. This course, entitled "Darwin and After Darwin," is, it is said, to be published in two volumes.

As a lecturer or public speaker, Professor Romanes is always impressive, speaking as he does with firmness and strength, and possessing a fine, clear voice, and a tall, powerful frame.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(*Continued.*)

SPECIES II.—MORAL AND RELIGIOUS FACULTIES.

Man has always been considered "a religious animal." It will hardly be denied that, aside from his "love of money," and the means employed to obtain it, religion of some kind, and religion in some form, have constituted, and still constitute, one of the leading, not to say all-absorbing, objects of human contemplation and pursuit. Scarcely a single nation or tribe of men has ever been known to exist, whose religion did not enter into, if not even constitute, the very texture of all the habits and the character of that nation or tribe. Take away the religion of the Hindoo, of the Asiatic nations, of the Ethiopian race, of the tawny sons of our western wilds, of the European nations or of their descendants in America, or, indeed, of any other "nation, or kindred, or tongue under heaven," and, with Micah, they would at once exclaim, "Ye have taken away my Gods: what have I more?" And, so long as the nature of man remains unchanged, there is no possibility of his being less religious than he always has been. We have to fear only that his religious doctrines will be erroneous, and his religious life and practices therefore incorrect; or, in other words, that his moral faculties will make him immoral. To avoid this evil, and to secure one of the greatest of blessings, namely, a correct religious belief and practice, let him fully analyze his religious faculties, and adopt those practices which they clearly point out.

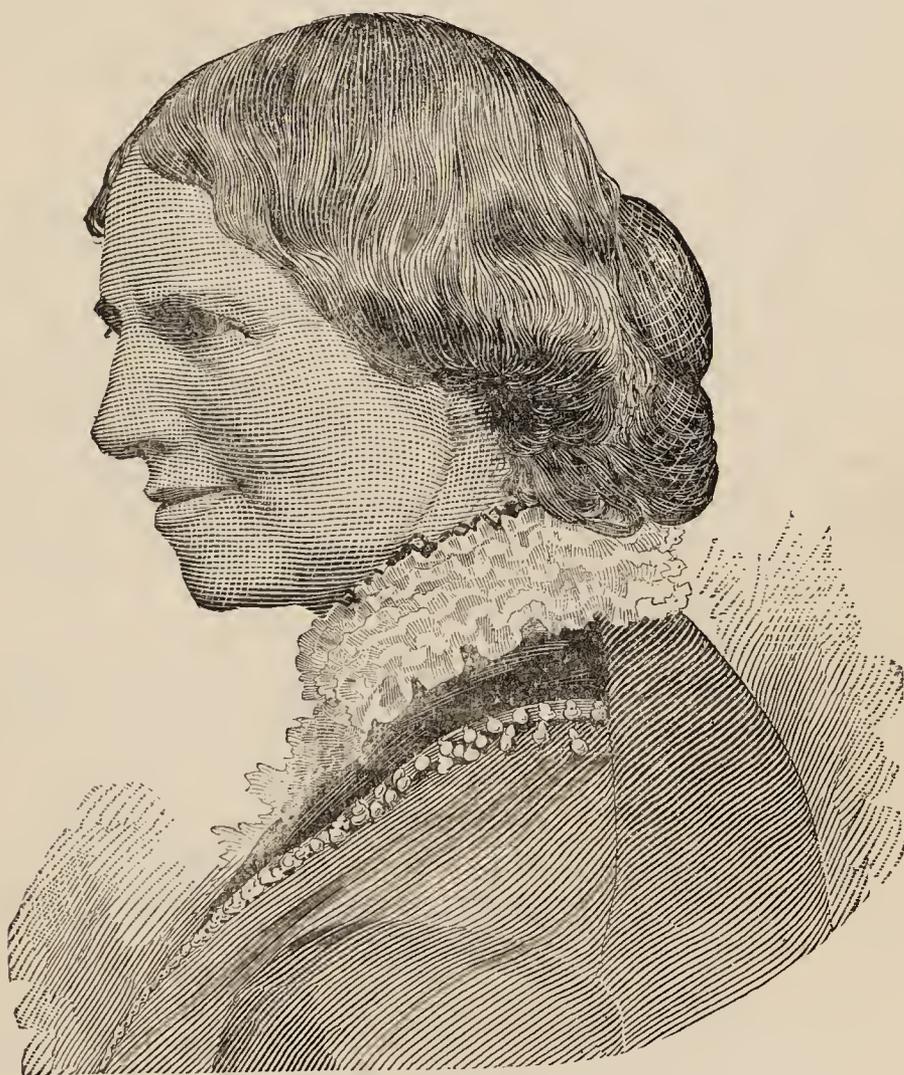
Now, reason teaches us that the nature of man must necessarily be in perfect harmony with the moral government of God, and with the moral constitution of the universe; and, if phrenology is true, the morality it inculcates must necessarily be in perfect harmony with the nature of man: so that, upon the principle that any two things which are each like a third, are, therefore, like each other, it follows that the moral principles of phrenology must be in perfect harmony with the moral principles and constitution of the universe, because each is in harmony with the nature of man. And, as the moral government of God must be in harmony with both the moral character and attributes of the Deity, and also with the natural kingdom, it follows

that phrenology, if true, must be in perfect harmony with the natural and the moral government and attributes of the Creator of the universe. And, if revelation is also true, its doctrines and precepts must be in harmony with those taught by phrenology.

The authors are free to acknowledge that they have more hope that their fellow-men will be brought to a correct knowledge of the only true religion, and, also, to a right understanding and a proper application of revelation, through the instrumentality of phrenology, than by any other means now in operation.

15.—CONSCIENTIOUSNESS.

Moral principle—sense of justice—regard for duty—feeling of moral accountability—perception of the right and the wrong feelings and conduct.



MISS CLARA BARTON.—Large Conscientiousness.

Man is a moral and accountable agent—he is governed by moral laws, and is capable of exercising feelings which are virtuous and vicious, and, as such, rewardable and punishable. How often do men, when they are conscious of having done wrong, feel guilty and condemned, and deserving of punishment? This cannot be the result of education, nor of circumstances, for, without a faculty for exercising this class of functions, men could no more be taught to feel guilty than they could be taught to see without eyes, or to breathe without lungs. And since this class of functions is always

found to be manifested in proportion to the development of a given portion of the brain, it follows that it is performed by a distinct faculty of the mind, or by a mental power which is innate.

If there were no such thing as right and wrong, as virtue and vice, as morality and immorality, why should the great Author of Nature tell us that some things are right, and others wrong, by implanting in our very nature this moral tribunal of right and wrong?

VERY LARGE.—One having conscien. very large, will make morality and duty the pole-star of his life, and the only guide of his conduct; will not, for the world, knowingly do wrong or injure another; frequently experiences the feeling of remorse for things that are even right; bitterly repents when he is apprehensive that duty has been violated or neglected, and feels miserable until he is sure that all is right again; is even unnecessarily exact in all his dealings; is constantly tormented by the goadings of a guilty conscience; and, when he has failed to fulfil any promises, feels unhappy, even though to have fulfilled them was impossible.

One having conscien. very large, with benev. and ven. large, will experience the liveliest emotions of gratitude to his bountiful Creator for favours received, and with adhes. large, to his fellow-men for acts of kindness; with approbat. acquis., &c., only full, will sacrifice ease, property, happiness, and friendship, if not everything else, sooner than violate his conscience; and will make everything in which he is concerned bend to his ideas of duty; with moderate or small self-e., shrinks from public responsibility; with ven. and cautious very large, and hope and self-e. very small, studies divine attributes with the most profound awe, and himself as sinful in the extreme; and be driven to actual despair and religious melancholy.

LARGE.—One having conscien. large, will have a clear moral eye, and a ready perception of what is right and what is wrong, both in himself and in others; will consult duty rather than expediency, and pursue the course which he considers right, even though it may be in opposition to his interest; will endeavour to be faithful in the discharge of his obligations; will often feel unworthy; be ready to acknowledge his faults, and condemn himself for them; will strive to lead a moral, virtuous, and upright life.

One having conscien. and firm. large, will be particularly decided and determined in every case of duty; will take a firm stand upon the side of moral principle; and, with combat. also large, will possess great moral courage, great boldness in resolutely opposing whatever he considers to be wrong or unjust; with large destruct. and self e., will be inclined to severely censure whatever he considers wrong in others; with firm., caus., and compar. large, will regard the claims of justice as of primary importance, and discharge them at almost any hazard; can be induced only with the greatest difficulty, and by the strongest temptations, knowingly to violate them; experience deep remorse when he is sensible of having swerved from the path of duty; and, unless self-e. is very large, will readily acknowledge his faults; with adhes. and benev. large, secret only moderate, and destruct. and

combat. only full, will mildly, yet faithfully reprove his friends, so as to do them the greatest amount of good, and yet injure their feelings as little as possible ; with conscien. large, and secret. small, will find fault with others when they do not conform to his own standard of duty ; with caus. and benev. only full, will set up himself or his doctrines as the only correct standard of truth and rectitude, and never fly from persecution in the cause of virtue and benevolence, but will boldly meet and face all opposition ; will not forsake his ground ; will drive forward moral, and religious, and benevolent enterprises with great energy ; and, if compar. and caus. are very large, will be admirably qualified to distinguish himself as a moral and religious leader ; to fill stations of responsibility and trust, where judgment and talents are required to be combined with integrity and energy of mind and character ; with large selfish propensities, and only full firm and reasoning organs, will struggle hard against his "easily besetting sins," yet be often overcome by them, and alternate between sinning and repenting ; with very large cautious., where he is not certain what his duty is, will be so fearful of doing wrong as often not to act at all, and thus fail to do right ; and with large ven. will be filled with dread and awe while contemplating God's character and works, have great fear of incurring His displeasure, and of being visited with His judgment ; and, with hope small, little expectation of pardon, but, with hope large, will show strong Christian faith, and be solaced by hopes of pardon through a Redeemer, yet experience occasional doubts ; with philopro. large, will love his children, yet their moral character and conduct will be the chief objects of his anxiety ; and with large concent., will take original views of subjects, and be unable to leave any subject of moral inquiry or research until he has run it out in all its bearings ; with large combat., compar., and caus., will delight in discussing religious and moral questions, &c. ; will be just, obliging, and faithful to his word, and, with only full combat. and destruct., will be amiable ; with approbat. very large will experience a morbid sensibility to shame, and, with large ven., and only moderate self-e., will often suffer intolerably from mingled feelings of guilt and unworthiness.

The functions of the other faculties are often mistaken for those of conscien., yet a close analysis will point out a radical difference between them ; and, since those who have the least conscien. are the least sensible of their deficiency, and, also, of the functions ascribed to it, they will be likely to give themselves credit for much more conscien. than they actually possess.

FULL.—One having conscien. full, will recognise the claims of duty ; feel his moral obligations, both to God and man ; and, unless his temptations, or, in other words, the solicitations of his stronger faculties, overcome the remonstrances of conscien., will be honest and faithful, and live a virtuous, moral life, yet his conscien. will have a great deal to struggle with, and sometimes lose the ascendancy.

The manifestations of conscien. full, with such an organiza-

tion as would be favourable to virtue and formality, or with the selfish faculties under the control of the moral and reasoning faculties, especially if placed in circumstances calculated to promote virtue, will be likely to possess a high standard of virtue, and of moral feeling and principle; but, with the selfish faculties generally larger than conscien. and the other moral and the reasoning faculties, especially if placed in circumstances calculated to urge him into excesses, or to create defects, will possess conscien. too feeble to turn the current of his stronger passions into a virtuous channel, or to supply his defects. With large acquis., adhes., and secret., and only full caus. and self-e., may frequently take the advantage of strangers, and be even dishonest in his pecuniary transactions with mere acquaintances, yet will never wrong a friend, and will be likely to be honest in all his transactions where love of gain does not entice him astray; with only moderate acquis., and large destruct., combat., approbat., and secret., may defame his rivals without a strict regard to truth, yet possess a moral character unexceptionable in other respects, &c. Accordingly, we find many persons to be perfectly moral in their general character, yet addicted to some "easily besetting sin;" and this one fault is too often allowed to throw into the shade all their virtuous qualities.

MODERATE.—One having conscien. moderate, will experience few compunctions of conscience, and justify himself; will consider the moral qualities of actions far less than he will their effects upon himself; will frequently indulge his other faculties to excess, and, also, fail to do his duty, and will not be very particular to govern his feelings and his conduct by any fixed standard of moral principle; will consult expediency rather than duty; and be less sensible of his faults, less open to conviction, less clear in his discernment between right and wrong, less correct in his reasoning upon religious subjects, the character of God, and the moral relations of man to man, and of man to his Maker.

One having conscien. moderate, with very large self-e., and large selfish organs generally, will be likely to make demands upon others as his interest may dictate, without sufficient regard to what really belongs to him; and with large self-e., adhes., and benev., and only moderate secret., may be perfectly honest and unexceptionable in his moral conduct, yet will be so from feelings of kindness or friendship; will govern his conduct by principles of nobleness, and do the manly thing, yet will seldom do right from conscientious scruples; with large approbat., will do right when to do wrong would injure his reputation, and do what is popular without thinking or caring whether it is right or not; with large adhes., will show much tenderness of feeling, which may be mistaken for conscien; with small marvel., and without a strict, religious education, will be likely to be irreligious, if not sceptical; with large secret. and approbat., will be likely to do wrong when there is little risk of detection; and will be deceitful and hypocritical, yet with ven. large, may even profess religion, but will be a Pharisee; with large reasoning organs, may reason clearly and

forcibly upon all subjects disconnected with morality and duty, yet will not appreciate the force of moral truths, &c.

SMALL.—One having conscien. small, will have but little idea of right and wrong in the abstract; will have but little concern whether his character conforms to its requisitions or not; will have few conscientious scruples, and perhaps ridicule those who have; will lack that regard for pure justice, that desire to do right, and that tenderness of conscience which this faculty alone can impart, and be nearly destitute of moral discrimination.

VERY SMALL.—One having conscien. very small, will deny the doctrine of rewards and punishments, and the whole system of moral accountability; be a stranger to the feelings of responsibility and repentance; and, being unrestrained by the influence of conscien., do just what his other faculties dictate.

The faculty of conscien. does not decide as to what is right or wrong, nor create that moral standard by which the feelings and the conduct are tried, but merely arraigns them before such a tribunal as may have been settled by the combined influence of the other faculties, of education, of circumstances, &c. Suppose, for example, that two individuals, A and B, possessed an equal share of conscien., while A possessed very large acquis., and B only small acquis. Let both be placed in given circumstances, and the conscien. of A will allow him to take an unjustifiable amount of money, and even to demand it; while the same degree of conscien. in B, would not allow him to take the same amount, even in case it should be offered to him.

The above example solves the otherwise inexplicable phenomena, that the diversity of opinion as to what is right and what is wrong, and as to what constitutes the test and standard of virtue and of vice, that a very conscientious man may be a very wicked man, and be even made the more wicked by his perverted or "seared" conscience, and that a man with but feeble conscien. may be comparatively virtuous, &c.

The decisions of conscien. alone, then, form no criterion as to what is right or wrong; yet, in conjunction with the full development and unperverted exercise of all the other faculties, it constitutes a great moral formula by which every feeling of the heart, and every action in life, may be tried, and its moral character determined. So that phrenology, in fact, teaches us, "what most we need to know," what is right and what is wrong.

This faculty, then, while it actually prevents the truly conscientious man from committing as much sin as he would probably commit, with but feeble conscien. makes him feel the more guilty, and allows those who have but little conscien., and are therefore the less restrained from committing sin, to live on, comparatively insensible to their faults, dead to the reproach of a guilty conscience, and justified in their own eyes.

Conscien. has been shown to be merely the judge of sinfulness, and not its executioner.

Now, by proving that the principle of accountability, which necessarily implies accompanying rewards and punishments, enters into the very nature and constitution of man—that men are punishable for their sins, and punishable in proportion to their guilt,—and that conscien. inflicts the lightest punishment upon those who are the most guilty, phrenology proves that there is some other punishment for sin than the goadings of a guilty conscience, which, taken in conjunction with the fact that those who sin most often suffer least in other respects, and that the righteous are often severely afflicted in this life, brings us to the inevitable conclusion that these rewards and punishments, which must be inflicted somewhere, are reserved for administration in another state of existence.

In children and in women this organ is generally found to be much larger (as the faculty is much stronger) than in men. Indeed, in children below ten years of age it is almost invariably large. We may hence conclude that it constitutes a leading feature of the human character, and that its deficiency is mainly owing to a want of culture. This faculty has three divisions: the superior division gives Justice; the middle gives Integrity; the inferior division Circumspection.

LOCATION.—Conscien. is located upon the two sides of the posterior portion of firm., situated in the brain on the superior or postero-parietal lobule. Its protuberances are at right angles with those of firm., and parallel to those of hope. Its development can generally be determined without difficulty.

MEDICAL WOMEN.

“The old order changeth, yielding to the new,
And God fulfils Himself in many ways.”

At a *Conversazione* held for medical students this winter, the principal speaker remarked to a lady before the formal meeting commenced: “How is this, I came to speak to medical students, and there are ladies here?” When told that the ladies present were medical students, he was surprised and delighted. Now, this paper is only for those who know nothing about medical women, and to whom the movement forwards of women’s work in this department is a novelty, for unless that be the case, they will exclaim, like the children in a Sunday school class, “Please we know that already, Ma’am.”

Still, there may be left here and there one or two to whom it is not “Piper’s news” that the medical profession opens to women a wide and useful field of labour, for which they are eminently adapted.

Certainly, the profession is now open, but the door was not opened without a struggle, of which the salient points shall

here be noted as briefly as possible ; and to enable one to understand fully the state of affairs, the main clauses of the Medical Act of 1858 must be mentioned, they are as follows :—

“After January 1, 1859, the words, ‘Legally qualified practitioner’ . . . shall be construed to mean a person registered under this Act.”

“After January 1, 1859, no person shall be entitled to recover any charge in any court of law for any medical or surgical aid, advice, &c., unless he shall prove upon the trial that he is registered under this Act.”

“After January 1, 1859, no certificate required by any Act now in force, or that may hereafter be passed, shall be valid, unless the person signing the same shall be registered under this Act.”

“Any person who shall wilfully or falsely pretend to be, or take or use the name or title of a physician, doctor of medicine, implying that he is registered, shall, upon a summary conviction for any such offence, pay a sum not exceeding £20.”

The same Act vested the power of granting degrees or registerable qualifications in nineteen bodies, contained in the United Kingdom and Ireland, and in those solely, so that degrees of Universities and Schools outside the British Isles were utterly valueless as far as any plea could be based upon them for admittance to the register ; but when the Act was passed there was a clause providing for those who had been in practice over five years. And under this clause Miss Elizabeth Blackwell was registered—the first of our country-women who obtained a medical degree. This pioneer, in 1844, applied to the 13 medical faculties of America, and was refused by 12 of them ; sometimes with a reason given, sometimes not ; but one acceded to her application, that of Geneva Medical College, Western New York. There the faculty, after deliberating over her novel request, decided to leave the matter in the hands of the students, and the latter passed a unanimous resolution that she should be admitted. In 1849 she graduated, and coming to England, practised for some years, and was registered by the General Medical Council, London, 1859.

The second female name on the British register is that of Mrs. Garrett-Anderson. In 1860, Miss Elizabeth Garrett, after applying to many other bodies, and being refused, applied to the Society of Apothecaries, London, and they, after consulting counsel, found that they could not legally refuse to examine any candidate who should comply with their conditions ; the conditions in her case they made as difficult as possible, for as they would not admit her to the public

classes, she had to pay very heavy fees for private tuition ; but at last, in 1865, she took the L.S.A., and became enrolled as a registered practitioner. In 1870 she took the degree of M.D., at Paris, but brilliant as her success at that examination was, it is only as L.S.A. her name stands on the British register. But the Society of Apothecaries did not at all approve, or the medical faculty generally, that women should thus invade their lordly state ; and they determined that the door by which Miss Garrett had entered the profession should be open no longer. They therefore passed a bye-law that no candidate should be eligible for examination who took private tuition ; at the same time they rigorously excluded all women from the public classes. This was the state of affairs in 1869, when five ladies applied to the University of Edinburgh for permission to matriculate as medical students. After discussion and consultation, which lasted for months, permission was granted, with the consent of every governing body of the University, viz., the Medical Faculty, the Senates, the University Court, the General Council, and the Chancellor. For a time all went well, and the ladies—who had separate classes, although the same teachers as the men—had no let or hindrance, until in the chemistry examination Miss Edith Peachey had the fortune (?) to come out second on the list. Now, to the five who stood highest on this list a bursary was awarded, and the right to use the chemical laboratory ; but Miss Peachey was informed that, although she might win the bursary, she could not have it, but that it belonged to the man below her on the list. From that time the ladies met with marked opposition : the professors refused to teach them ; the students mobbed them in the streets ; and their coming and going caused such a commotion that the tradespeople in the vicinity had to put up their shutters to prevent their windows being broken. Bad as their treatment was, the ladies would have persevered steadily in their work if the professors would have taught them, but this they absolutely refused to do, and when the ladies applied to the University authorities, the authorities suddenly discovered that they had exceeded their legal rights in admitting them to matriculation at all. In March, 1872, the ladies brought an action of declarator against the Senate, and the case was in July, 1872, decided by the Lord Advocate (Gifford) substantially in their favour. Against this decision the Senators appealed to the Inner House, and after deliberations continuing over nearly a year, judgment was given against the ladies in June, 1873, by seven judges, while five decided in their favour. This judgment was given on the

ground that in 1869 the authorities had exceeded their authority, and therefore now owed no responsibility to the ladies whose fees they had pocketed, and whom they had accepted as *Cives Academicæ Ediensis*. The ladies now might have taken their case to the House of Lords, but they wisely forebore further litigation, and appealed to Parliament. But it is slow work bringing measures before Parliament, and various bills were brought forward, but not passed, before Mr. Russell Gurney introduced a Bill in 1876, called the Recorder's Bill, empowering the British Medical Examining Bodies to examine women. This measure passed and became law by the end of the session. But this measure was permissive only ; all the bodies now might examine women if they chose so to do, but none were obliged to do so.

The ladies, meanwhile, who had found Edinburgh so unfriendly to their aims and aspirations, came to London, and there, by the advice of some influential medical men, started the London School of Medicine for Women, taking an old-fashioned house in Handel Street (then called Henrietta Street), Brunswick Square, and securing the services of a splendid staff of teachers—men who were recognised teachers at other medical schools, and stood high in the profession, yet were willing to take the part of a weak minority against an overwhelming majority. But not with the foundation of the school did their troubles end, for none of the examining bodies would recognise the newly-founded school, and examine their students. But at last the King's and Queen's College of Physicians, Ireland, had the generosity to open their doors in 1877 to women, and three of the ladies who had applied to the University of Edinburgh in 1869 at last became legally qualified and registered practitioners.

But besides a Board, to examine a hospital at which the lady students must walk at least two years, was absolutely essential, and the hospital must contain not less than 150 beds. To start such a hospital was not in the power of the ladies or their friends ; and yet without it the Recorder's Bill, the school itself, and the opening of the King's and Queen's College of Ireland, were of no avail. At last, however, this difficulty was surmounted, and the wards of the Royal Free Hospital, Gray's Inn Road, were opened to lady students, at a time when there was a strong feeling against ladies studying medicine in medical circles ; and the general public, if not bitterly opposed, was certainly not in favour of the movement. Ever since the hospital has been connected with the school in Handel Street ; and right well deserves its name of Royal Free, for the only passports that patients need are those of

poverty and sickness, while all the students who have walked there must ever have a tender spot in their hearts for the place in which they were mainly equipped for their life work. At present the hospital is greatly in need of funds, and all those who sympathise with the progress and welfare of women in general, and medical women in particular, might show their gratitude in a practical manner by sending a donation to the Secretary of the hospital.

In June of the same year (1877) the London University opened all its degrees to women, and therefore the degree of M.B. and M.D., and by degrees other bodies followed suit.

At the present time the bodies at which women can be examined are the following:—Apothecaries' Hall, London; College of Physicians and College of Surgeons, Edinburgh; and Faculty of Physicians and Surgeons, Glasgow; Conjoint Colleges of Physicians and Surgeons, Ireland; Fellowship of the Royal College of Surgeons, Ireland; University of London; Royal University of Ireland; and last year (1890) the University of Aberdeen.

Students can study at London (30, Handel Street), where there are 107 students attending the school and hospital. Amongst the new students of this year is Rukhmabai, the lady who was sentenced by the Bombay Courts to imprisonment for refusing to carry out a marriage contract made for her in her childhood, and whose case excited so much public attention that it may be said to be the starting point of the action in respect to child-marriage, now being taken by the Viceroy of India and the Legislative Council. After Rukhmabai has completed her curriculum at the London School of Medicine for Women and the Royal Free Hospital, she hopes to return to Bombay to make use of the training she has received amongst her Hindoo sisters.

In Edinburgh there is a school for women under Dr. Jex Blake; and also classes in connection with the College of Surgeons, to which women are admitted. Last October St. Margaret's College, Glasgow, was opened to women; there is also a school for women at Dublin.

The London School has had a remarkable series of successes at the Universities open to women. In April Miss E. L. Fleury passed the final examination of the Royal University of Ireland. She was declared to be first in order of merit in the First Class of the Honours Examination, and was awarded the exhibition of £40. In 1887 she obtained an exhibition of £20, and in 1888 another exhibition of £20.

At the Intermediate Examination in Medicine of the University of London, last July, Miss A. F. Piercy gained

triple first-class honours. Miss Piercy was awarded the gold medal and exhibition for *Materia Medica* and Pharmaceutical Chemistry, one of the two gold medals for Anatomy, and she was bracketed with two gentlemen in the first-class honours in Physiology and Histology, no gold medals or exhibition being awarded for this subject. At the same examination one lady took honours in Anatomy, and another in Physiology.

In November nine students went up for the final M. B., and all of them passed; a result which none of the larger medical schools for men obtained. There are now 97 registered medical women educated wholly or partially at the London School of Medicine for Women, and the Royal Free Hospital; two of these have died, Miss Fanny Butler, L.K.Q.C.P.I., and L.M.²., at Srinaghue, Kashmir, India, October 26th, 1889; and Miss Prideaux, L.K.Q.C.P.I., and L.M., M.B., and B.S., London; besides that there are 16 registered medical women, who have not been students either at the London School of Medicine for Women, or the Royal Free Hospital. There are Medical Institutions for women and children, officered wholly or partially by registered medical women, in London, Bristol, Edinburgh, Birkenhead, Birmingham, Manchester, and in India. Hospitals managed entirely by women at Bombay, Madras, Kashmir, Lucknow, Benares, and in many towns besides the above named, dispensaries for women and children. It would be tedious to go over the list of appointments now open to women. The way certainly now is open to women who wish to enter the medical profession; but is there any work awaiting them after the final examination is passed? There is most emphatically a wide field—to say nothing of the poor at home in the crowded districts of London and other large towns, there are the millions of India; and there all the women are cut off almost entirely from medical aid, unless it be rendered by a woman; even where the males of a family might permit such a thing, the force of custom is too strong among the female population for them to avail themselves of such a permission. In Patna some years ago a Mahometan gentleman called in the Government doctor to see his wife; but she, after complete recovery, so suffered from the taunts and sneers of the women constantly about her, that she committed suicide; if a single lady practitioner had been in that densely populated city, such a tragedy need never have happened.

From every missionary who has been in India, you hear of the dire need of Indian women for medical attention in their periods of illnesses. The mortality among Indian women

and children now is not very much less than it was when the girl-babies were put to death by their parents. In a letter, from the native member on the Board of Directors of Jaffna College, to Miss Leitch, missionary to Ceylon, now in England, the following statements are underlined :—“The need of a Medical Department in Jaffna for the relief of women and children is a crying need.” “It is an undeniable fact that hundreds of women and children die every year, humanly speaking, for want of proper medical treatment. The Tamil women would prefer to die by disease rather than subject themselves to medical treatment by male doctors in certain diseases.” “Let no time be lost. As soon as the necessary arrangements can be made, please apply to the Society to send out lady doctors.” Another native member of the same Board writes : “A lady doctor will certainly be a great boon for our country.” A native practitioner, also writing to the same lady, gave an account of the barbarous treatment of women there during their confinements. One case he describes : “The woman was tied to the roof of the house by a single rope, and kept standing. She was supported by other native women. The room was very small, and, as no ventilation was allowed, very hot. The poor woman and her friends were in a profuse perspiration. She was held up in this position three days and two nights. She was not at all allowed to rest or lie down. The women who held her up were allowed to rest, but she was not. No wonder that with such treatment the death-rate among native women is so fearfully high.” After giving further details of the barbarous treatment to which the sick are subjected, the writer finishes with the following statement : “The population of the province is about 316,000, and taking the births at 3 per cent. there must be some 9,480 births every year, and yet there are no trained midwives to assist in ‘such cases.’ Such treatment, alas ! is not confined to Ceylon, but, with slight variation, is practised over the whole of India. No wonder that years ago an Indian lady beseeched Miss Beilby to petition the Queen of England to send out medical women to India ; and very difficult, if not quite impossible, it was to make her understand that Her Majesty could not create medical women and send them out by command. But when Miss Beilby returned to England, she saw the Queen, and through her was started the National Medical Association for the Relief of Indian Women under the Government, and they need far more women than are ready now to go out. Years ago, the number was estimated at 2,000 ; at present, the number of registered medical women in India is twenty-two—twelve

connected with Missionary Societies, the others holding posts more or less connected with the Government."

In China there are three qualified medical ladies at work, but many more are needed. In North Africa there is a great work waiting for women, if they will only prepare themselves for it; truly "the harvest is great and the labourers are few."

Mrs. Craik, in one of her stories, puts the following words into her heroine's lips:—"When I was a girl I used to fancy that had I been a boy and could choose my profession, of all professions I should choose a doctor's. There is something in it so grand, and yet so useful. He has so much power in his hands. Such unlimited influence over souls as well as bodies. Of course it would be a hard life, nothing smooth or pleasant about it, but it would be a life of interest, with endless opportunities of usefulness. I don't mean merely of saving people's lives, but of putting their lives right both mentally and physically as nobody but a doctor can do. Hardly even a clergyman could come so near my ideal of a perfect existence." "He went about doing good." Is it fair that one half of humanity should be shut off from endeavouring to attain to such an ideal by the monopoly of a favoured few, or the narrowness and prejudices of an unenlightened public? Mrs. Craik, in an article which appeared not long before her death in the *Women's World*, while strongly objecting to the entrance of women into public life, and most of the professions, made an exception of the medical. There, if anywhere, a woman's tenderness, love, and pity, can have full scope, and can be exercised by use, not dissipated by mere day dreams and crushed out of existence by a life of selfish ease and comfort. There are some women still living to whom their house seems everything; their clothes, food, &c., the most momentous things in the universe; but most women, now-a-days, have wider aims and greater aspirations.

"To scorn delights and live laborious days" is not a hardship, but a privilege and joy. Besant, in one of his novels, speaks of the blessed life as if it merely consisted in food enough to eat, warm clothing, and shelter from the elements. But is it not more blessed to give than to receive? There are few noble minds to whom the bread of dependence is sweet; and as in this country there are more women than men, even if every man became a husband there would be a large majority left, who must either support themselves or be supported by some male relative; but even if the question of support need

not be considered, every unmarried woman must desire some life work.

“Get leave to work,
In this world 'tis the best you get at all.”

—*E. B. Browning.*

And if work is the best thing we can get—and I think there is no doubt about it—certainly we should be allowed some choice in the work, and not, if we are girls, wish that we had been boys, so that we might have been free to choose a profession, and add our mite of usefulness and strength to those of our fellows who are labouring and have laboured for the common good.

During the present century, a great deal of nonsense has been talked about the sphere of women, and probably will be ; but all logical and right-minded people must, I think, be willing to accept the following dictum from John Stewart Mill, whom, I would like to remind you, is as clear as a sun-beam, as cold as an icicle—“We deny the right of any portion of the human species to decide for another portion, or any individual for another individual, what is, and what is not, their ‘proper sphere.’ The proper sphere for all human beings is the largest and highest they can attain to. What this is cannot be ascertained without complete liberty of choice.”

Certainly the sphere of the medical profession is one of width and height, but it can be attained to by women ; has been attained, and very worthily filled. Perhaps the thought that such would be the case may have lain latent in the minds of those who most strenuously opposed the movement, for if they had acted on their expressed convictions, they might have given the earlier pioneers sufficient rope to hang themselves instead of putting every possible hindrance in their way, and using all their power and influence against them. A lecturer recently said to a class of men students that a great deal of badly-paid and disagreeable work was done by medical men, and he thought it would be well if the women were to do some or all of it. That is modern chivalry ; let the women do the badly-paid and disagreeable work ; but the honours, dignities, and emoluments, be reserved for the lords of creation.

Why should not a woman be in the estimable position of a physician who, having studied nature from his youth, knows the properties of the human body, the diseases which assail it, the remedies which will benefit it, exercises his art with caution, and pays equal attention to the rich and poor ?

Are there any moral or physical qualities needed for such a profession that she is inherently deficient in ?

Physically speaking, some men say there is ; but the energy and strength of Dr. Elizabeth Blackwell might make many a young girl blush who is too exhausted by a game of tennis or a ball to do anything useful.

Huxley says there is no reason why a young woman of average health and intellectual ability should not study for and practice in the medical profession, not with detriment, but positive good to her health ; especially if, when a student, she mixes sufficient play with her work. The healthy outdoor exercise, the varied interests, will keep at bay the nervous prostration from which so many of those who do nothing at all suffer.

Have women sufficient nerve ?

That question I shall let an old writer answer for me in verse.

“ Women are timid, cower and shrink
At show of danger, some folks think.
But men there are who for their lives
Dare not so asperse their wives ;
We let that pass, so much is clear,
Though little dangers they may fear.
When greater perils environ,
Then women shew a front of iron ;
And gentle in their manner they
Do bold things in a quiet way.”

The last two lines applies well to the medical women of to-day, who are as gentle, retiring, and modest, and as unassuming, as the rest of their educated and refined sisters ; if now and then there should be an exception to this rule, it should in all fairness be laid down as due to natural idiosyncrasy, not the study of medicine.

To study the works of God in a humble and reverent spirit, can have no bad influence on the heart or mind of man or woman. We need to remember “*honi soit qui mal y pense.*”

Are women, generally, willing to put confidence in women doctors ?

Many women are, not all ; the ladies in small provincial towns, with old-fashioned prejudices, are not at all likely to do so. The poorer women in large towns appreciate women doctors ; many a patient at the Royal Free gives as her reason for coming there, when living nearer another general hospital, that she dislikes the men students, and gladly comes a greater distance, so as to be treated by ladies.

Also, a patient will frequently ask if being seen by a lady student is not enough, so that she may not see a gentleman.

Again, the success of the New Hospital for Women in the

Euston Road, is proof that amongst the poorer classes, especially the respectable poor, there is a demand among the women for doctors of their own sex ; for at that hospital the patients pay sixpence or a shilling, according to their circumstances, and yet, every afternoon, the out-patient department is crowded, although they are within a short walk of three or four hospitals at which there is no entrance fee.

I should like to add, there are some so-called schools or medical colleges where they profess to educate women as doctors, but such institutions are a delusion and a snare ; they do not require their students to be registered, nor do they give them a medical education in any sense of the word ; these institutions are, alas, connected with missionary work, and the poor victims, after a two years' course, in which they may get a mere smattering, are sent abroad to work in India, and there get on as well as they can. It is sad to think that people, who wish to forward the coming of the Kingdom, should give their money to the performance of such a farce. For work in India we need the best trained and the most thoroughly educated, not women who would not be allowed to practise here without incurring a severe penalty. The Israelites of old offered for God's service a lamb without blemish and without spot ; but those who send out unqualified women as medical practitioners are certainly offering up the halt and the lame ; some of the ladies so sent have returned to England to be properly trained, a proof that they felt themselves incompetent to cope with the arduous duties that met them on every side.

J. M. GRAY.

THE PHRENOLOGY OF THE FUTURE.

BASED ON CHRISTIAN PSYCHOLOGY AND THE
ETHICS OF THE BIBLE.

(CONCLUDING ARTICLE.)

FROM replies received from Australia, Ireland, and elsewhere, it is not quite clear that the writers apprehend the scope and tendency of the articles which have lately appeared in the PHRENOLOGICAL MAGAZINE on Christian Psychology, and Bible Ethics, as an attempt to extend the foundation of the phrenology of the future. The schools of philosophy could not advance a step beyond the point already arrived at. Where Aristotle and Plato stopped, the Bible has taken up the Ariadne thread, which, if followed out, through the

labyrinthian windings of the Baconian methods, will lead to the full presence of the true philosophy of man. A God-marked-out psychology, can alone explain the real meaning of many passages in a God-inspired revelation. Christian Psychology and Bible Ethics are departments of human knowledge over which the Bible claims supreme control ; the one, shewing up the mechanism and tripartite nature of man ; the other, pointing out the heavenly-mindedness required of such a being to his Creator. The facts of science, inspiration alludes to, just as they appear to the senses—nothing more. Hence, the truth of Sir W. Hamilton's celebrated maxim, that "no difficulty emerges in theology which has not previously emerged in philosophy ;" and it is owing to the psychology of the Bible being overlooked by the early fathers, the schoolmen, and divines in general, that disputes, and logomachies have sprung up, of 2,000 years duration, which might have been avoided, had they been viewed from a different standpoint. Scripture statements should be examined through the spectacles of Christian Psychology, as sketched out by the Creator Himself, if revelation is to speak out the meaning originally intended. Phrenologic science alone, of all the mental philosophies current in the world, is the only one which moves on lines that can bring about harmony between created man, and the revelation intended for his guide.

Geology has proved, with the certainty of a geometrical demonstration, that the earth has required millions of years ere it could arrive at its present state of development. During all that time, although countless have been the numbers, and innumerable the species of animals which have roamed its surface, and swam its waters (and fossils tell a strange tale of marvels of life in that long-gone primeval gloom, and countless earth-throes of a past eternity) ; yet, the Divine Record, and that is our only source of knowledge on such a point, declares that only two orders of intelligencies have appeared to claim the sovereignty of this earth : viz., the devil and his angels ; Adam, and his posterity. In the one case, increase in numbers was by special creation ; in the other, by "*ex traduce*," as Tertullian puts it. One Spirit at last rose above the rest. Allegiance to the Creator was the test of enjoying life eternal, or of enduring death everlasting. All went on well for a time, till "pride and worse ambition" could no longer brook subjection, when the decree went forth from the arch-fiend, that it was "Better to reign in hell, than serve in heaven." With that defiant utterance, the devil and his angels fell from their high estate, and endless ruin was their doom.

At length, in the counsels of the eternal, the creation of another form of being was determined upon ; not one of pure spirit alone, but of a being, composed of matter and spirit ; this was man. His mode of creation is sketched in the fewest words possible, in Genesis ii. 7, and this account is all we know of the nature of man, and the manner of his creation. The words are, "And the Lord God formed man of the dust of the ground, breathed into his nostrils the breath of life, and man became a living soul."

In this sketch, drawn out by the Creator Himself, the composition of man is shown to be threefold, and not dual, or twofold. First, there is animal life from the dust ; secondly, spiritual life by emanation from the Deity Himself ; and, lastly, by the transfusion, or inter-blending of flesh with spirit, a new product—*a tertium quid*—was evolved, different from either of the constituent elements, viz., the human soul, which serves as the nexus or intervening link between flesh and spirit. When this previously modelled dead form became, in a moment, a living soul, with a tendency towards evil, if body and soul worked in harmony, or towards good, if soul and spirit sought one common object—God—and His holy service. In other words, if the soul's tendencies inclined towards the animalism of the body, all the bad aspects of man would appear, as now manifested in this wicked world ; but if, on the contrary, the soul's tendencies leaned towards the spirit, and was athirst for God and holiness, then would be manifested Christian life and conduct, the very opposite of that which the working of soul and body brings about. The fact is, the real object of parsondom, of every clime and in every age, was and is intended to produce the harmonious working of "spirit" with "soul," rather than of "soul" with "flesh," throughout the whole circumference of all the "isms," and "creeds," and "superstitions," now known to the different peoples of the earth.

The ancient schools of philosophy, having never heard of a "Pneuma," the disciples of Plato and Aristotle were, *per necessitatem*, Bichotomists, or believers in two natures only, soul and body, and not in three, according to the psychology of the Bible. Plato once guessed that man might possibly be a tri-fold being, but it was only the guess of a genius without proof. The ancient schools of philosophy, not having heard of a Bible, could not carry the analysis of human nature any further than the psychic, or soulish. Nothing, however, could surpass what Aristotle and Plato have written of the dual nature of man ; and had no new light been seen in the spirit-heaven, the last page in the philosophy of human nature would

have been written, and man been known just as the philosophers of Greece and Rome have depicted him : but, an obscure people in Palestine had seen a star hovering over their little patch of sky which led the way to a cradle in which lay a baby—God ; and this circumstance, at once, altered the course and aspects of events, and gave, and will continue to give, a different colouring to the march of human progress through all time ; but, to proceed.

The human pair were created at first in full manhood and womanhood—as to physical excellency, intellectual and moral power, and God-like potentialities, for the enjoyment of immortal life. The spot selected was a lovely one. Eden it was called. Every sense was charmed, and every object was redolent of joy. The whole range of the garden was theirs. They might eat of every tree, save one, and this was God's test of their power to obey. The arch-fiend knew what was going on, and had already descended from his aerial heights, and was in sight of the innocent pair. He knew the test, and woman was at once selected as the object of the arch-fiend's allurements. He laid the bait, it took, and he was successful. Eve fell, and with her, Adam also. Satan knew that traducianism, and not creationism, would be the law of propagation, and, consequently, by this stratagem He—Satan—would be king and ruler over countless millions of fallen human beings, as well as of his own horrid fallen crew besides.

How much man lost by the Fall, it is hard to say. Billions of human beings will have lost eternities of happiness. Before that sad event happened, spirit, soul, and body were in harmony ; afterwards, Discord sounded its tocsin, and confusion reigned supreme. Children born "*ex traduce*" after the pattern of the child-Christ, was an impossibility—nay, not even after the first-born of Adam and Eve. Death was stamped upon man's animal nature, and the soul lost much of its intellectual vigour ; so that even a mighty Aristotle, so says an old divine, was only the rubbish of an Adam, and Athens in all its glory but the mere Hut-beginning of a paradise. The "Pneuma," the God-part of man, had lost its power, and become a mere sort of fluttering conscience, a witness for God, in accusing or excusing our thoughts. Though not depraved *per se*, yet, in consequence of the Fall, it is almost dormant in action, and will remain incapable of regaining imperial rule in this life unless quickened by the Divine Pneuma—the Holy Ghost.

Although many enlightened divines may not be aware of the importance of a correct psychology, as such, yet they must perceive the tremendous necessity of the rise to power of the

enfeebled pneuma in regard to the Redemption of the world, and the avoidance by man of the penalties of the second death.

How strange it is, that the factor, the Pneuma or Spirit—the God-inbreathed part of man—is hardly ever alluded to as a psychologic part of human nature; and if it is, the words spirit, and soul, are used as synonymous, or tautological terms. This confounding of the meaning of words arises from an imperfect psychology inter-blending with an ill-understood theology. Dr. Arnold, the Bishop of Gloucester, Cardinals Manning and Newman, have inter-weaved their Christian views of the tripartite nature of man into their theological writings, and so clearly and accurately too, that we shall quote Cardinal Manning as a specimen of the three other divines alluded to.

Cardinal Manning, in one of his Oxford sermons, writes thus:—"Great as the knowledge is that some men void of God's presence have attained in natural, and human, and even revealed truths, yet there is something perceptibly wanting in them. They maze us with the light of their speculations, and then astonish us with a purblind ignorance of some self-evident and vital axiom of truth. There is evidently some stupendous breach in their intellectual system; some want of continuity in its perceptions, or some faculty related to particular kinds of truth wholly wanting. And this is, in fact, the true solution." Yes, truly! The faculty wanting, in fallen human nature, is the pneuma—God's monitor or witness; and the psychical man understands not the things of the Spirit of God, because his own spirit has not the power to discern them.

As divines, in the English and Romish Churches, and in others also, are beginning to advocate the threefold nature of man, viz., spirit, soul, and body; and as the old schools of philosophy, and the writers on mental science, for the last few centuries have advanced no farther than "Sense Perception" and the "Intellectual and Moral Faculties," and, of these, with very imperfect notions of their functions; and, as neither soul nor spirit can manifest itself in this life but through a medium coarser than itself (see Isaac Taylor's "Physical Theory of Another Life"), it behoves phrenologists to carry their organology and rationally conducted inductions into the hitherto unexplored regions of the Spirit, or Pneumatic domain, and for them to try to discover the organ, or atom, or molecule of matter, by which this divine part of man manifests its fallen functions during its lodgment in earth-life in its present larger material organization.

The discovery of the organ of the God-element in human nature—the pneuma ; its function and its object ; its reflective influences in tending to restore the correct meaning of many ill-understood passages of the Bible ; its being, in good men, the presence chamber of the Deity Himself ; and its power of doing away with many dogmas deduced from the Bible by divines who philosophized in what they thought an “Orthodox Sense ;”—these views, and similar ones, are what is meant by “The Phrenology of the Future.”

This is the new field which modern phrenologists are politely and respectfully invited to explore. Fresh laurels may be won in this new sphere of labour—“*doctarum hederæ præmia frontium*”—if the Newtonian method of working on, and of patiently waiting for results be followed, and are diligently carried out ; yet this is not all. Since man has a tripartite nature—a something more than mere body and soul—surely it is not asking too much of the phrenologists of the present day, to take one other step, a final one,—for there is no other left to take,—viz., the investigation of the organ of the “pneuma” and its functions, in order to complete the physiological and psychological study of man, so resolutely begun by Gall and so valiantly carried on by his followers, amid an opposition of transcendent intellectual power, and finesse :—surely, within sight of being able to bring out a conclusion so brilliant and beneficial, not only to mental science, but to that of an advanced Theology, phrenologists will not hesitate to buckle on the armour to gain a grand New Truth, and once more to enter the battle-field for a final victory over the errors of ages.

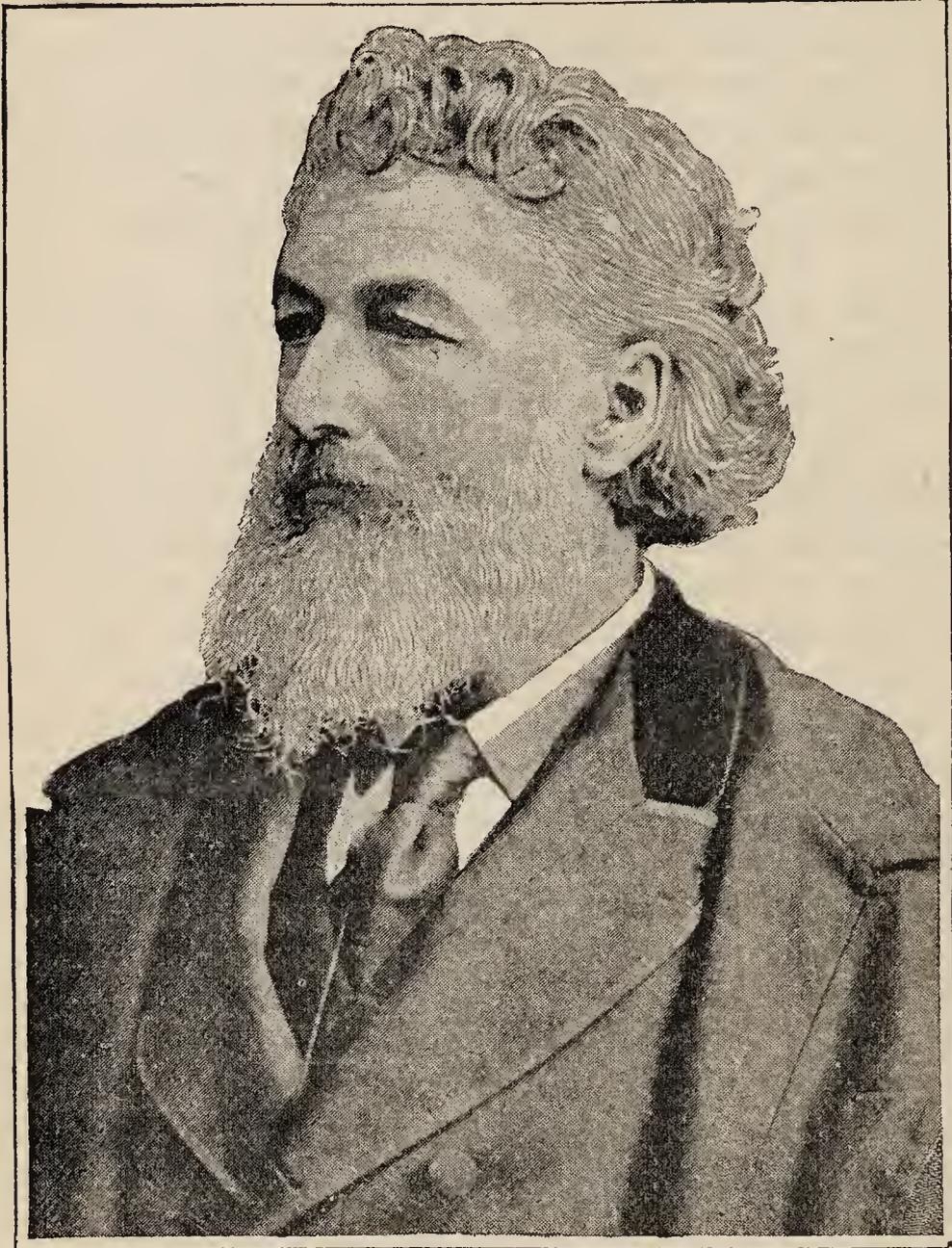
The names of Gall, of Spurzheim, of the two Combes, of the two Fowlers, of James Simpson, of William Scott, of Dr. Charles Caldwell, and of Professor Joseph Rodes Buchanan, of America, and with many other distinguished savans of our own country, will be handed down, with honour, to an admiring posterity, as those who have laid broad and deep the foundations of this SCIENCE OF THE SOUL.

Now, with an additional object of phrenological study and investigation,—the divine pneuma aiding, and assisting, and quickening the dormant human pneuma, almost powerless to act of itself—man will be able to enter on a brighter career of being, having more glorious conceptions, more gorgeous images of fancy, loftier aspirations of a grand invisible future, and of an eternity of existence, for which, the rise to power, of a God-quickened pneuma has destined man to look forward to.

SAMUEL EADON, M.A., LL.D., PH.D.

MEN AND WOMEN OF OUR TIMES.

SIR FREDERIC LEIGHTON has a predominance of the mental temperament, with all the organs and functions necessary to give a fully-developed body and mind. He came into life with all the qualifications to succeed in his calling. He is more wide-awake to the duties of the day than



SIR F. LEIGHTON.

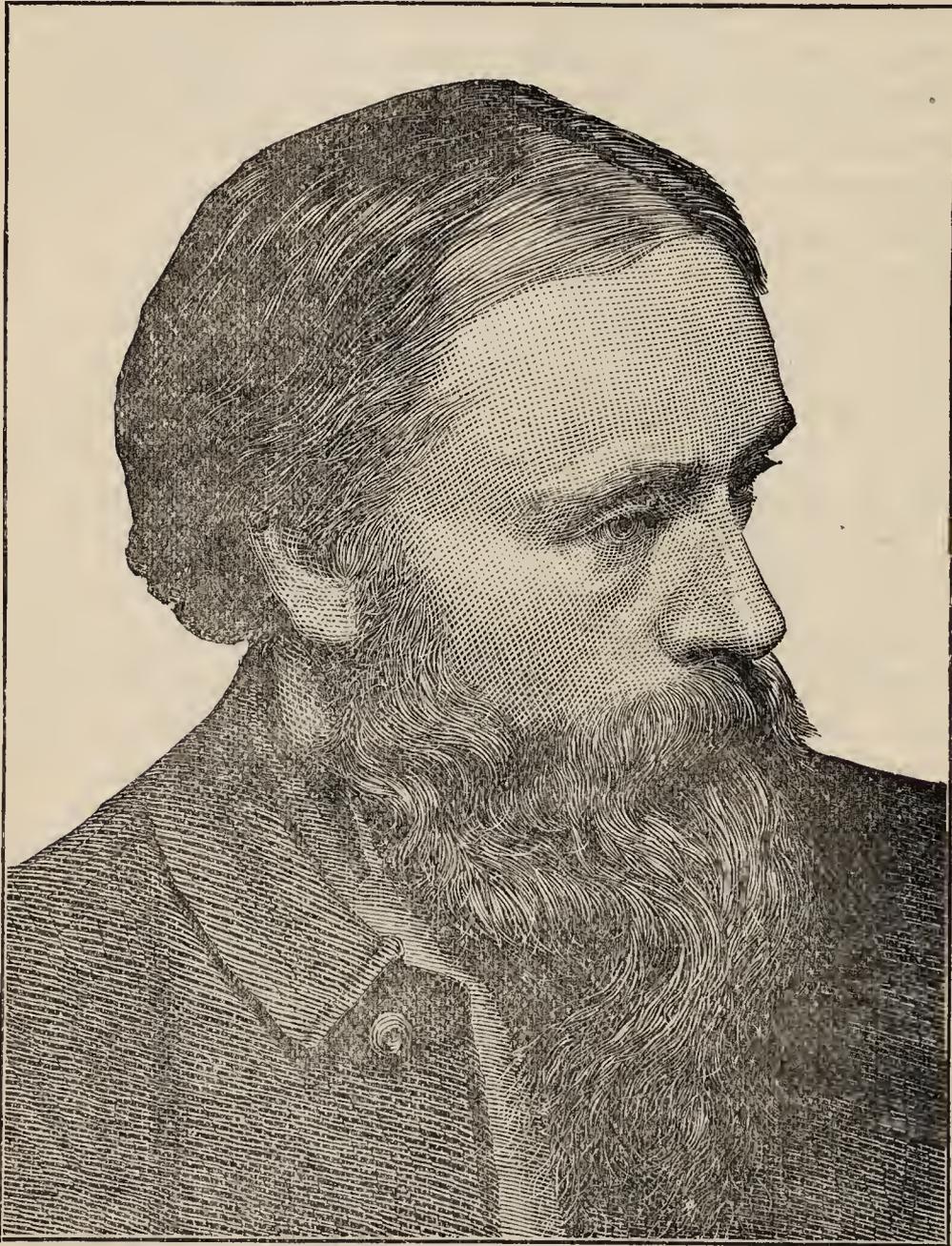
(From a Photograph by Messrs. Fradelle & Young.)

most men. His character is positive, his knowledge is distinct, his powers of discernment are great, and he has a tenacious memory of his own experiences and of all that is going on around him. He is remarkable for his quick and correct perception; for his judgment of things, and his superior intuitions of character, motives, and truths. His mind cul-

minates with great rapidity on any given subject. He is practical, discriminating ; sees excellencies and defects at once. He may be social and enjoy company, and he is able to entertain company, but he has generally too much solid thought and positive knowledge to entertain merely for the sake of it. Mere fun is out of place with him. He is very general in his sympathies, cannot be very sectarian in his feelings or take narrow or contracted views of subjects. He possesses more than ordinary force of character ; delights to be continually busy. He has great propelling power. He has a magnetism that draws people around him. He is also like his mother, and there is great sympathy between them. Still he is firm and rather positive in his character ; yet he is easy, polite, and affable in his intercourse with society. What some people call pride in his case is culture and elevation of mind. He has a broad head in the temples, giving ingenuity in contrivance and versatility of talent. He has artistic taste, and is particularly fond of beauty whether in art or nature. He is particularly adapted to perceive what is of value and what is perfect in artistic work. Specially fond of the sublime in nature. Rather inclined to use extravagant language in the expression of his thoughts and conversation. He is full of hope, and decidedly interested in all subjects of a spiritual nature. His mind delights to examine subjects behind the curtain before they come to light ; hence has much to think about and occupy his mind.

MR. BURNE-JONES, A.R.A., has a predominance of brain power and nervous force. Has scarcely enough animal life to supply his brain. He is liable to become absorbed in that which leads to reflection. He is lost to the external world, comparatively speaking. He cannot mix up in a promiscuous way. He enjoys himself alone ; and does not care to be disturbed. His power is intellectual and moral. He has not so much animal power and push as many, and he seeks society as a matter of inspiration, rather than for mere social enjoyment. In certain things he has a remarkable observing and critical power, for his perceptive faculties are unusually large, but his observation is not connected so much with material things as with mental qualities. He has a first-rate artistic eye, and is a thorough student of nature. He philosophises rather too much to be an orderly, practical man. He is very fond of experiments regarding the study of nature, and is philosophical about everything he sees. He is exceedingly persevering, steady, and reliable in all his movements. He would appear to much better advantage if he were not so

much absorbed in one thing, and more interested in large subjects; yet his power of observation will help to render him all the more proficient in his profession or studies. He has



MR. E. BURNE-JONES, A.R.A.

(From a Photograph by Mr. F. Hollyer, Pembroke Square, Kensington.)

superior powers of mind that will enable him to make a mark on the page of history, that will last longer than his contemporaries generally.

MISS LYDIA BECKER had a very fully developed brain and a well developed body. Her intellectual powers were specially available. She was remarkable for her ability to find out everything going on. News came to her direct, for her mind sought it in the right channels. She had the capacity to draw people to her, and was a great magnet. She had the

talent to make people tell her all they knew, hence gained her knowledge easily. She had a superior faculty of telling others what she knew herself; her talents were so available that she appeared to the best advantage with the knowledge she had. Her mind was particularly alive and conscious of what was taking place around her. She was in every way qualified to be an editor and leader of public opinion. She had a high degree of the vital temperament, was warm-hearted, social, companionable, and deeply interesting where interested at all. Her sympathies were strong and effective when once called out. She was strong in her prejudices, likes,



MISS LYDIA BECKER.

and dislikes, but as a friend was whole-hearted. Her social nature was easily brought into action, and for the time being was distinctly manifested, but she had not so much of that womanly love and affection as belong to many of her sex. Her head indicated more fondness of society as such, than to be exclusive or devoted. She was high in the crown of her head. Firmness was one of her strong characteristics. This, I remember, was one of her highest developments of brain thirty years ago. Self-esteem was large. She had a proud bearing in society generally. Approbativeness was decidedly active. She appreciated the good opinions of her friends, and embraced every opportunity to make friends. She possessed great energy of mind, more than an average amount of tact

and power of management, and would have made a Superintendent of Police. She had all the animal or executive forces for a business woman, and more than ordinary power to look after her own interests. She had favourable powers to contrive, and was quite ingenious and versatile ; was fond of art, beauty, and perfection wherever she saw it.

ORION.

PHRENOLOGY IN THE LIGHT OF MODERN SCIENCE.

PROF. G. T. ROMANES described some time ago an experiment made by Prof. Möbius which struck me as illustrating forcibly the state of the minds of many human beings who acquire certain thoughts during the first half of their lives and stick to them for the rest of their existence, though science may have proved them false ; I refer in particular to that very large number of men who raise objections against phrenology, which they have either thought out for themselves, or, as is more frequently the case, have acquired from their elders, whether parents or teachers, and stick to these objections to this very day, unconscious of the fact that science has of late proved them to have no foundation. The experiment which Prof. Möbius made proved that a pike requires three months to establish an association of ideas between particular kinds of prey, and the fact of their being protected by an invisible wall. This fact was proved by the pike repeatedly dashing its nose against a glass partition in its tank in fruitless efforts to catch minnows which were confined on the other side of the partition. At the end of three months, however, the requisite association was established, and the pike, having learned that its efforts were of no use, ceased to continue them. The sheet of glass was then removed ; but the now firmly established association of ideas never seems to have become disestablished, for the pike never afterwards attacked the minnows, though it fed voraciously on all other kinds of fish. From which we see that a pike is very slow in forming his ideas, and no less slow in again unforming them ; thus resembling many respectable members of a higher community, who spend one half of their lives in assimilating the obsolete ideas of their forefathers, and through the other half of their lives stick to these ideas as to the only possible truths ; they can never learn when the hand of science has removed a glass partition. For seventy-five years science and phrenology were divided by a partition ; for the last twenty years they have been united.

Every principle of Gall's doctrine is now the property of either physiology or psychology. To demonstrate this fact is the purpose of my essay.

Whereas, to John Stuart Mill, "mental phenomena do not admit of being deduced from the physiological laws of our nervous organisation," consequently the faculties do not depend on brain-organs, it is universally accepted, at the present day, that an organic state is the physical correlate of a mental state; in other words, as the conditions of the brain-organs, so the manifestation of the mental faculties.

Who would dare to repeat at the present day Lord Jeffrey's assertion that the brain is not the organ of the mind? Gall's discovery that men do not create faculties, they are born with them, and these faculties are the results of heredity from a long line of ancestors, is to-day not only recognised, but studied to the utmost limit. The laws of heredity are made to account for not only mental forms and innate ideas, but even for the very consciousness of each individual. Terms like "organ," "cell," "centre," "neural tremor," "muscular reaction," are employed by psychologists as well as physiologists. On all sides the importance of the connection between psychical and physical states, and the correlative evolution of the nervous organisation, together with the mental organisation, is impressed upon the student.

Another fundamental principle of phrenology is very clearly defined in modern physiological text-books. It is, "that the highest development of brain-matter is found in the hemispheres, convolutions, or grey surface of the brain, which is the material base of all mental and moral activity. This portion of the brain, which may be called the seat of the soul, is not a single organ as was formerly supposed, but consists of a number of thoroughly differentiated organs, each one of which possesses certain functions, yet is in the closest possible connection with all the others." This is the declaration of a non-phrenological writer on the brain—Dr. Althaus—yet over and over again the phrenologist must listen to such objections, even on the part of medical men, as that there are no differentiated organs in the brain as phrenologists are pleased to map out, or there are no mental faculties connected with the grey matter of the brain, or, all that we know of centres are motor-centres, but no thought-centres, and so on. In this respect clearly resembling the pike, which, when it had once acquired a certain association of ideas, stuck to it.

Phrenologists usually refer to their standard authors, *i.e.*, Gall, Spurzheim, and Combe, particularly to the latter, when defending the principles of their doctrine. But surely modern

physiologists and pathologists defend these equally well. The frontal lobe is the seat of the intellectual and moral faculties. So says the pathological text-book. "Patients have now and then recovered from the most fearful injuries to the anterior lobes, and yet been able to go about and to attend to the ordinary routine of certain occupations; but it has always been shown, on close examination, that there had been a profound change in the character and behaviour of such persons, and that their temper, and their mental and moral faculties, had become deteriorated." In physiological books, the experimental destruction of the anterior lobes in animals is said to cause loss of attention and intelligent observation, loss of memory; the animal becomes dull and apathetic. Electricity produces no effect when applied to the frontal regions, thus showing that such faculties must be located there as have no connection with muscular action. Take "Causality," "Eventuality," or "Time."

But how is it, even a phrenologist sometimes asks, that a certain faculty will only act in one place, not in another? Why should cautiousness be in the region underlying the parietal eminence; why should it not be sometimes in the centre, or at the back of the head? Indeed this argument was frequently brought forward. Modern scientists give a very definite reply to this enquiry. They say, that a nervous discharge—as takes place, for instance, during the emotion of fear—is always connected with a given group of nervous centres, and subsequent discharges take place along the same routes, and become the more easy the oftener they are repeated. The more frequently you allow yourself to be frightened, the more timid you will become, for the nervous action becomes facilitated, and it will be more difficult for you to resist it. We may commence by stealing a pin, we may learn to steal a sovereign, and end in being unable to resist thieving altogether. We may indulge in "drink" so frequently that the bibative centre gets into a state of inflammation, or the whole brain gets affected, and results in the loss of all reason.

Does the shape of the skull harmonise with the conformation of the brain? Certainly it does. Every convolution of the brain can be traced with exactitude on the skull, and just those thicknesses which our opponents thought obstacles in the estimation of the size of the brain, as the frontal and parietal eminences, are guiding us in judging the growth of the different lobes. Numerous anatomists have investigated the matter most carefully, for instance, Sir Wm. Turner and Dr. Reid; and the criminal anthropologists of France, Italy,

Germany, and Austria, claim to be able to detect the deficiencies and excessive development of particular convolutions from the outline of the skull. Every conscientious phrenologist must admit that there are difficulties in estimating the size of the different organs, and the inexperienced are liable to great errors, but these obstacles do not prevent an estimate being made; they are not so great as not to be overcome by careful observation and practice. In German text-books it is no longer uncommon to find the fact stated that exercise has the same effect upon the brain as it has upon the body; it enlarges the parts exercised in size; they acquire greater firmness and fineness of texture, and thus become more suited for the performance of their special work. Müller, Engel, Waitz, say: "All this leads us to the view that the shape of the skull is everywhere essentially dependent on mental culture, and changes with it." Another authority says: "The judicious exercise and cultivation of the mental faculties during youth, or at least of such as are most obviously developed, will actually gradually increase the dimensions, and improve the qualities, strength, and powers of the brain, and generally all the organs of the intellect, in like manner as the muscular powers are by their due exercise strengthened and improved."

Men were unaccustomed at one time to see the difference of development between the highest and lowest existing human brain, and those who did notice the difference attached no importance to it. To-day, however, not only are size and development most accurately observed, but it is asserted that a low organisation of brain goes together with low mental functions, and a highly developed structure with great intellectual and moral capacities. What was once the domain of phrenology is now the property of mental science, whose professors observe, as Gall has done, the physiological manifestations in animals, in children, in idiots, in savages, mounting up by degrees to the highest and most recondite parts of consciousness. What phrenologists have described as the language of the faculties, has been investigated and expounded by such a genius as Charles Darwin, besides Duchenne, Piderit, Mantegazza, Gratiolet, and others.

Thus every principle of Gall's system becomes gradually the property of mental science, and I believe the time is not far when even the different faculties will be most accurately defined. Before long, all physiologists will come to see, as Ferrier has already recognised, that the brain cannot consist of motor-centres only. A centre for wagging the tail; a centre for the advance of the right foot; a centre for twitch-

ing the eyes ; these are all—in the opinion of some narrow-minded men—that are needed for the manifestation of that wonderful gift of creation : mind. Such centres as these may suffice for those who raise those very antiquated objections against phrenology, but certainly every man who thinks for himself is no longer in doubt that there are special brain-centres for the manifestation of the different fundamental faculties.

One of the men who have done much for the destruction of that glass partition which separated phrenology from science, is Professor Benedikt. One would think from his writing that he is a phrenologist, had he not definitely expressed that he does not believe in it. Without entering into the reasons for his disbelief, let me finish this essay with a quotation from his works, a quotation which shall bear testimony to the fact that the general principles of phrenology are now universally recognised. He says :—

“For us naturalists there is no doubt that man is the highest summit of the animal kingdom, not merely in a purely anatomical sense, but also in a physiological, and in a further physiological, namely, a psychological sense. We have no doubt that man in his psychological relations does not merely reach this summit in a partial development, but that *all the psychological elements of the animal kingdom are present in man*, and occupy qualitatively and quantitatively the highest grade of development. Hence we come to the manifold mixtures of character, as they denote races, breeds, members of certain epochs and of social relationships, and again within these great groups also special groups. Who does not recognise in the peacock spreading his feathers, and in the winding serpent, in the lion and the fox, in the bee and the farm horse, in the bull and the tiger, the types of human characteristics, as if they were exercises of nature for human types? Science however knows, on the other hand, with what wonderful consequences, even into their minutest forms, the general idea of genus, species, and individual, corresponds to the construction of the animal body. Even from single teeth, and even from the smallest bones, the zoologist distinguishes the genus and the species in prehistoric animals ; and not only their external form, but also their food, their mode of life, and the climate and the nature of the soil. He is able also from these single elements to pronounce upon the character of the animal ; whether it was carnivorous or frugivorous, bloodthirsty or gentle ; whether it preserved its existence by superior force in attack or in defence, or by stratagem, rapidity, or invisibility. But to those zoologico—

anthropological elements, from which we are able to draw remarkable conclusions as to the construction and the existence of the animal, belongs *the skull, from the formation of which we are able, with the assistance of other known elements, to draw the safest conclusions as to the psychological character of its possessor.*"

BERNARD HOLLANDER.

INSTITUTE LECTURE.

ON Wednesday evening, the 22nd inst., there was a large gathering at the City Temple to hear the Rev. W. J. Dawson, of Glasgow, deliver his lecture (under the auspices of the Fowler Institute) on "Savonarola ; Monk, Patriot, and Martyr." Beginning at the birth of the great preacher and patriot, the speaker, in an eloquent manner, traced the steps of the Reformer, his convictions, his entry into the monastery—where, even among the Carmelites, the word was not shut out—his fierce denunciation of wrong, his conflict with Rome, and his martyrdom. The lecture, which showed that Savonarola was as much a Protestant as Luther himself, was listened to with the greatest enthusiasm. At the close, Mr. L. N. Fowler examined the heads of two gentlemen selected from the audience ; the descriptions were verified by the gentlemen themselves, one of whom stated that he was examined by Mr. Fowler sixteen years ago, and ever since he had been profiting by the advice he then received, and recommended every young man to go to him for similar advice. A hearty vote of thanks was given to the chairman, Mr. Wm. Brown, of Wellingborough, and to Dr. Parker and the Deacons for the use of the Temple.—*News and Notes.*

THE FOWLER INSTITUTE.

"OUR Work" was the title of a paper read by Mr. Tompkins at the monthly meeting of the members of the Fowler Institute, on Monday evening, May 11th, Mr. L. N. Fowler in the chair.

The paper was, as its title indicates, of a practical nature, and many valuable suggestions were given applicable to the advance and welfare of phrenology in general and the Institute in particular.

There was a good attendance of members, and at the close the paper called forth many interesting remarks. Further particulars of forthcoming meetings will be found under the Notes of the Month.

Hygienic and Home Department.

GIRLS AND WOMEN.—What in the midst of the mighty drama of life are girls and their blind visions? They are the yea or nay of that good for which men are enduring and fighting. In these delicate vessels is borne onwards, through the ages, the treasures of human affection.—*George Eliot.*

THE woman's part should be to cultivate the affections and the imagination ; the man's the intellect and their common soul. She must teach him how to apply his knowledge to men's hearts. He must teach her how to arrange that knowledge into practical and theoretical forms.—*Charles Kingsley.*

KEEP THE BODY UPRIGHT.—An erect bodily attitude is of vastly more importance than most people generally imagine. Crooked bodily positions, maintained for any length of time, are always injurious, whether in the sitting, standing, or lying posture, whether sleeping or waking. To sit with the body leaning forward on the stomach, or to one side, with the heels elevated on a level with the hands, is not only in bad taste, but exceedingly detrimental to health. It cramps the stomach, presses the vital organs, interrupts the free motions of the chest, and enfeebles the functions of the abdominal and thoracic organs, and, in fact, unbalances the whole muscular system. Many children become slightly humpbacked or severely round shouldered by sleeping with the head raised on a high pillow. When any person finds it easier to sit, or stand, or walk, or sleep in a crooked position than a straight one, such person may be sure his muscular system is badly deranged, and the more careful he is to preserve a straight or upright position, and get back again, the better.

CULTURED GIRLS.—It is sometimes thought if a young woman has graduated at a college, and travelled in Europe, she must be cultured ; but some such young women are the most uncultured of persons. One need not be rich, or educated, or travelled, in order to be cultured ; but only be sure that all sides of her being grow in harmony. Then, though she is limited in capacity, she shall be beautiful. Culture does not mean music or French, but womanhood. Very few can be rich, a small number educated ; but culture is for all. Be determined to know something, even a little of the best history, the best poetry, the best biography, the best of art, the facts in science, and the best thoughts of the best minds—ten minutes each day, five or six solid books a year, not mere stories. The best in style and sentiment is as cheap as the poorest. There is no excuse for reading trash, when the standard works on all subjects are as cheap as the poorest ; no more than for walking in the mud when a clean sidewalk is provided. Not extensive, but select reading, gives culture. Gather a little standard library of your own ; you will respect yourself, and others will respect you for it. Keep a scrap-book, fill it with the best things. Nothing reveals a young

woman's line of thought more than her scrap-book. Read and think ; read a little and think much ; read when at leisure, think when at work. A thoughtless, selfish, snappish, cross, fretful, overbearing, and dictatorial young woman may take the prize at school, may excel in music, and travel round the world, but the more she knows the less culture she has. The commonest country girl with good health, an open brain, and a warm, unselfish, patient, self-controlled disposition, is a hundred-fold more cultured than the boarding-school graduate who is fractious with her mother, cross with her sisters, or knows too much to associate with working girls. Disposition is culture. Health is the soil, intelligence the branches, and disposition the leaves, buds, and blossoms—the robe of living beauty, fragrance, and sweetness with which a young woman is to clothe her life ; for without heart culture the finest mental culture is like a tree with nothing but cold, leafless limbs.

A WAYSIDE LESSON IN HYGIENE.—Temperance talkers would do well to season their addresses with more scientific information. Many people care more, alas, for the dictum of science than for the Decalogue and Sermon on the Mount combined. They must be shown, beyond a peradventure, that alcoholic drinks and tobacco are two sworn foes of a clear brain, and, moreover, men must be made to understand that, by the changeless law of inherited tendencies, their children begin where they leave off. These men must be taught to consider and mend their ways, not only in regard to their personal example, but their object-lesson methods, so to speak. For instance, a father brings home candy to his child instead of a picture book or an illustrated paper, forgetting how delighted a child is with Mother Goose, and rabbits on the wall. Everlastingly the father educates the stomach rather than the brain, both by his example and the inferences of his words and remembrances. The boy goes out upon the street after breakfast—it's a cigarette, a glass of cider, maybe an apple, a few peanuts, and then a greasy dinner. The worship of the stomach is the thing taught all the day long. Men around him are chewing, smoking, spitting, drinking—men who ought to be heartily ashamed of themselves for setting this example before decent little boys just from their mother's side. Look at the little girl. How much better chance she has to grow up clean and sweet. Her mother's example is wholesome, and the stomach is accustomed to the three meals a day rule ; the salivary glands are not dried up by tobacco, creating an unnatural thirst ; the temptation to treat is altogether absent ; the little girl is happily exempt from the ambition "to do as pa does," and has a fair opportunity to grow up into a reputable adult life. Dr. Richardson wisely says that if humanity were not recruited from the comparatively normal and pure blood of the woman, our Anglo-Saxon race would, at the present rate of deterioration, rapidly become extinct. Already the proportion of girl graduates from the public schools is at the rate of one boy to a dozen girls. They take the honors, too. The boot is on the other foot

these days. No wonder we hear less about the inferiority of woman's brain. I have been giving a course of scientific lectures to the professors in ——— Medical College, and, talking with them of this very subject, they told me young ladies stand the "quiz" much better than the men. The reason is the girls don't dry up their brains with smoke till they fairly rattle like peas in a pod. They conserve their power by regular habits, good digestion, and plenty of sleep, so that their brains are clear and free to perform the best work. On the contrary, many of the young men go out evenings to saloons, billiard halls, theatres, and haunts of infamy. The girls save themselves up for study—the boys go out on a lark, to see the folly of it for themselves.—W.F.

Notes and News of the Month.

PROFESSOR ROMANES and others have now established that nerve and muscle are only the specialised parts of an original simple contractile protoplasm, the nerve being connected with a nerve centre, where impressions are received from different parts, and from which the stimulus is sent to the muscle.

IN the jelly-fish there are only the rudiments of a nerve system; and in them he traced a wonderful series of lines of transmission of energy in certain paths, which being intensified become nerve tracks in protoplasm, and slightly higher in the scale become filmy nerves.

IN Professor Romanes' latest work, "The Origin of Human Faculty," he has, he believes, proved the possession of the genesis of nearly all the human faculties, except that of thinking in words, in various animals, and also of several elements of conscious morality. He also found that certain animals could acquire general ideas, such as "cat," "dog," quite apart from a mental picture of a particular cat or dog. He found also that infants pass through just such a similar state—as when they see any man as "papa," before they have learned to distinguish. In various ways he identified the higher stages of animals' minds with the lowest of children. He came to the conclusion that the human voice originated from some species of higher ape, which varied slightly in nerves, so as to be able to utter articulate words, and, of course to remember them and frame general ideas from them. This theory has naturally found strong opponents, and it is by no means generally accepted.

MR. GLADSTONE attributes his power of sustained work to two things—he always sleeps like a top at night, and he always takes on Sunday an absolute rest from the business of the week. Most of Mr. Gladstone's home life is spent in his library. The books he cares most for are books on theology and good biographies. Of all his many books he knows where to find every one, and nearly every one

is minuted and note-written by Mr. Gladstone's own hand. He is a man who knows how to fill up the corners of his time, and this, together with his regularity of habit, is largely responsible for the immense amount of work he gets through. His constancy of application is as great now as it was twenty years ago.

A CURIOUS NURSE.—In India, where the elephant is treated by his mahout almost as one of the family, the grateful animal makes a return for the kindness shown to it by voluntarily taking care of the baby. It will patiently permit itself to be mauled by its little charge, and will show great solicitude when the child cries. Sometimes the elephant will become so attached to its baby friend as to insist upon its constant presence. Such a case is known where the elephant went so far as to refuse to eat except in the presence of its little friend. Its attachment was so genuine that the child's parents would not hesitate to leave the baby in the elephant's care, knowing that it could have no more faithful nurse. And the kindly monster never belied the trust reposed in him.

PEOPLE are slow to believe in centenarians nowadays, and demand strict evidence on the point of age. Registration returns were not in past times kept with sufficient care to supply clear proof; and in the absence of public records from remote periods, it is not yet possible to verify absolutely the ages of very old people. Still, the Registrar-General for Ireland has been able to satisfy himself that his returns of centenarians are fairly reliable. His tables show that last year 195 persons—97 males and 116 females—died at the age of 100 years or upwards. He made special inquiries into these cases. It was found, he says, in almost every instance that, so far as the Registrars could ascertain, the age was correctly stated, and in many cases historical references were given as collateral proof that the entries were reliable. The good old age of 95 was attained in Ireland by 662 persons—306 males and 356 females.

BRAIN-WOUNDS.—At a meeting of the American Surgical Association held in Washington, Dr. D. Hayes Agnew, of Philadelphia, discussed the medico-legal aspect of wounds of the brain and thorax. The study of the subject was suggested by a recent case which occurred in Newport, in which a coloured man was found dead under the breakfast table. He had food in his mouth, and a wound of the head and the heart. The question was as to the possibility of these wounds being self-inflicted. Dr. Agnew, after a thorough examination into the subject, states that injury to the brain is not necessarily followed by loss of consciousness or paralysis. Numerous instances have occurred in which, after injury to the heart, the individual had performed many acts. He concluded that it is possible for a ball to enter the brain without destroying consciousness, although for a moment it may cause mental confusion, and that a suicide may shoot himself in the head, and after a moment shoot himself in the heart.

In the particular case which gave rise to the discussion, it was demonstrated that the deceased had been murdered, his son-in-law confessing to the crime.

THE MOST FAMOUS MEN OF THE DAY.—An American paper called *Once a Week* offered prizes to readers who should name the most famous men and women living. According to the favour shown in the replies the editor gave his decision, and he has awarded the first prize to the correspondent who drew up the following list:—Statesman—W. E. Gladstone. General—Count von Moltke. Novelist—Robert L. Stevenson. Poet—Lord Tennyson. Painter—Meissonier. Actor—Mr. Irving. Vocalist—Adelina Patti. Lawyer—Sir Charles Russell. Historian—E. A. Freeman. Scientist—Tyndall. Doctor—Pasteur. Composer—Verdi. Engineer—Ferdinand de Lesseps. Inventor—Edison. The greatest living man of all—Wm. E. Gladstone, “because he is the champion of the cause of humanity; his life work the elevation of ideas among men, among nations; his physical nature being purified through inspiration to that degree which perfects his conceptions of man’s duty to others, which gives him courage to reveal them, and intellectual and moral force to illustrate them.”

Book Notices.

Physiognomy and Expression (Walter Scott, London).—With the above title a work has been written by Paolo Mantegazza. In a short preface the author professedly “takes up the study of Expression at the point where Darwin left it, and modestly claims to have gone a step further.” As this is no light task, it should at least ensure a careful perusal to see with what success it has been accomplished. As indicated by the title, the book is divided into two parts, the first of which treats principally of the Anatomy of the Face, and gives evidence that the author has devoted considerable study to the *genus Homo* in all parts of the world. There is apparently, however, but little, if any, new light thrown on the subject; Part II., or the Expression of Emotions, being considerably the more important. Here the author treats at length of the various parts played by the different features in the expression of the emotions. He goes so far as to adduce expression to the clothes, mentioning the “Senorita of Euterias, who, besides all the garments of European ladies, wore twelve *enaguas* (petticoats),” thereby possessing “a rich dictionary of possible movements with which she knows how to express a thousand gradations of modesty, grace, and coquetry.” This, we think, is opening up debatable ground, as it would be ungallant to suggest that the European lady does not already possess all facility of expression that could be conferred by twelve additional petticoats; moreover, many parts of the present attire are sufficiently absurd and unnecessary without further

suggestion. The author may be taken to be a heretic to the doctrine of phrenology, inasmuch as he professes "a profound scepticism towards all physiognomical statements which are based on anatomical characters, and not on expression."—F. S.

Temperance Notes.

AT a recent meeting which took place at Tooting, Miss J. A. Fowler, Hon. Sec. of the British Women's Temperance Association, scientifically showed how alcohol interferes with the powers of the mind, by weakening the will, confusing the intellectual powers, diminishing consciousness of moral responsibility, intensifying the imagination, and goading on the animal propensities. Miss Fowler further developed the subject of her lecture by likening the brain to the windows of a cathedral, and the body to its timbers and ceiling. It is the brain that is the apparatus of sense, thought, reason, and responsibility, and alcohol is first attracted to it after it has entered the circulatory system. Every ship has a rudder to guide it. In man the will is the rudder, and when that is wrecked by alcohol, and the energy of the mind has become disorganized, a person loses his responsible relations with his family, with society, and with God; and it is this fearful fact that gives to Government, and society, and the churches, their tremendous interest in the question.—*B. W. T. A. Bulletin.*

A RECEPTION TO LADY WORKERS.—On Tuesday, May 5th, a most interesting gathering took place at the Fowler Institute, Ludgate Circus, on the occasion of a reception to Mrs. Wheeler Andrew and Dr. Kate Bushnell, evangelists of the World's W.C.T. Union, who are on a tour to the various branches of the Union around the world, and to Mrs. William McLean, president of the Melbourne branch. The invitation was given by the Hon. Sec. of the B.W.T.A., Miss Jessie A. Fowler, who presided, supported by Lady Henry Somerset, president, and Mrs. Auckland; Dr. Dawson Burns, United Kingdom Alliance; Mr. J. T. Rae, National Temperance League; Mr. Charles Wakely, United Kingdom Band of Hope Union; Mr. Wm. Mate, Western Temperance League.—Refreshments having been served, Miss Fowler, as hostess, gracefully welcomed the company, and Lady Henry Somerset, as president of the Association, gave an address of cordial and eloquent welcome to the special guests, dwelling upon the cosmopolitan character of all Temperance work, and the special encouragement drawn from the more active participation of women. Brief welcome addresses were also spoken by most of the gentlemen named above, and by Mrs. Auckland.—Mrs. Wheeler Andrew, in reply, referred to her editorial work in connection with the *Union Signal*, and to the fact that the World's Women's Union was represented in thirty different countries, from most of which delegates would probably attend the Boston Convention in the autumn. She

gave some interesting particulars of the scientific temperance instruction given in the schools through the efforts of Mrs. Hunt. Extracts from a letter from Mrs. Love, president of the Victorian Branch, were read, and Mr. McLean, on behalf of his wife, gave an account of Temperance work in Victoria done by women. Dr. Kate Bushnell followed with the story of her call by Miss Willard to go "round the world;" of her work as a missionary in China, and spoke earnestly of personal responsibility as a backbone to national effort on behalf of Temperance and social purity.—An exceedingly helpful meeting was concluded by a vote of thanks to Miss Fowler, proposed by Mr. Wm. Noble, seconded by Mr. Duncan Milligan, and supported and put by Mr. Amos Scholfield.

The Labour Bureau.

A Labour Bureau has been opened by the Fowler Institute, to assist people who are seeking employment, and also to aid heads of firms to secure suitable employeés. It is hoped in time that this department will become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C.

A MODELLER is wanted by a first-class firm.

AN ARTIST is asked for who can draw ready sketches for journalistic work.

A LADY desires the post of private or business secretary; is well educated, and has had the experience of a writer for many years.

A LAD of mechanical talents is anxious to learn manufacturing jewelry.

A LADY'S OUTFITTING BUSINESS (well-established) is wanting a partner, to take the place of the one just leaving on account of ill-health.

A YOUNG MAN is anxious to enter the stationery business.

A LADY is seeking the situation of a companion.

IN our next issue will appear "Reminiscences of L. N. Fowler," by Mr. Lamont; "The Face," Madame Patenall; "The Life and Work of Dr. Gall," by Mr. Webb.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

M. A. (Bedford), is particularly earnest, sincere, and thorough. She is reliable, and acts out her real character. She may wish to

appear well, but does not care to lead in the fashions and be the subject of much talk, but prefers to go right into business, or into domestic life, and fill her place in a quiet and masterly manner. She has a substantial base to the brain, which gives energy and force of character; is one of the last in the company to give out, and she prefers to make a finish where she has made a beginning. She is very favourably qualified by nature for a wife and mother, for a house-keeper or a nurse, for one to superintend business and manage other people. She will succeed as a general manager and planner; she loves order, and practices it. She is quick of observation, has a good business memory, is systematic in her mode of doing things. She has plenty of common sense, is pleasant in her style of conversation, but does not try to be witty. She is more harmonious in her powers, more uniformly healthy and able to meet her task, than persons generally are. She needs a husband with a favourably balanced temperament and tone of mind; one who is comparatively bright, wide-awake, and clear-headed, but he must live a temperate life, and be a consistent man; one who will stay at home when not in business rather than be at the public-house, or go to places of sport. She is naturally industrious and economical. She is not easily deceived as to character, for she has quite an intuitive mind. All things considered, it is a very desirable organization.

C. H.—The photograph of this gentleman indicates more than ordinary mental capacity. He is quite original, takes in ideas easily, and is very much given to reasoning and arguing. If all things are favourable he should be educated as a professional man, especially a lawyer or statesman. He has a strong will, great perseverance, and quite a distinct consciousness of his own abilities. With ordinary encouragement he will make a good speaker, linguist, and grammarian. As a man he will show considerable energy and industry. He should educate himself as though he were going to live to be an old man, for the chances of long life are in his favour. He will never be very rash, imprudent, or careless of himself. He may sometimes get too much work on his hands, for he will not only have his own work to do, but much that belongs to others. He must cultivate his perceptive faculties, and interest himself in practical improvements, science, and verbal knowledge. His brain is developed in the superior portion rather than in the basilar. He will not care to live an outdoor life, or do much physical work; but he has great ability as a lawyer or statesman.

B. J. B.—The photograph of this lady indicates more than ordinary physical ability. She has a powerful frame, is naturally muscular and active. She is capable of enduring much labour; she seldom wearies with work. She has great will power and determination of mind. Her resolution and physical strength will carry all before her. She will seldom call on others for aid. She is characterised for power to think, plan, and lay out work; and, if necessary, could do the work of two ordinary individuals without any strain. She comes from a long-lived family. She is enthusiastic; throws her whole soul into

everything she does. She is full of fun, and can enjoy mirth as well as anyone. She is comparatively ingenious, but is particularly available in her intellectual powers, and must have everything done according to some plan.

ALPHA.—The photograph of this gentleman indicates a powerful constitution and remarkable hereditary tendencies. He has a strong hold on life. The family must have lived to be old. His physiognomy indicates great power to enjoy and endure. He is exceedingly ardent, tenacious, and a great lover of power. It will be difficult to subdue a spirit like his. He could sustain himself with credit on the battle field, in politics, and in any place where will, determination, planning, talent, and power to organize, are required. He is quite original; seldom at a loss for means to accomplish his ends. He is very intuitive in his discernments of character and motives, and when necessary, has much suavity of manner. He has a lively sense of wit and humour. He is methodical in his work, and systematic in carrying out his plans. His memory, for the most part, is good, but his scholastic memory, and memory of common occurrences, is not anything extra. He has abilities as a speaker, and properly trained in that direction could become almost a "number one" as an orator. He has great forethought and sagacity. He will do to go among men where a guarded, suspicious man is required. He is naturally qualified to take the leap. He has presence of mind in times of danger, and has the ability to concentrate his mind, and avoid the exposure of it in his countenance. He will never be led or driven; he may be influenced through reason; but whoever tries to get the advantage of him, will try it but once, for he will be the master spirit if possible. The surest way to get along with him is to be perfectly frank and candid, and not show any trickery or under-handed movements.

E. H. (Hounslow).—The photograph of this child indicates that her mind is rather prematurely developed. She is more staid than children of her age usually are. She has much general uniformity of character, is disposed to take charge and responsibility, is a kind of mother to the babies, has a practical intellect, knows much for one of her age, has good powers of observation, and more than ordinary common sense. She will show neatness, order, and system as she grows older. She will easily learn to do different kinds of work. She will be a good scholar, learn to read and spell, and do different kinds of work that require common sense. She has an intuitive mind, knows what to do without being told, has a nursing disposition, will be full of sympathy where there is any distress; has not a timid mind, but is exceedingly sensitive. She is confiding and disposed to trust others. She will be industrious, and want to be employed. Others will early learn to trust and have confidence in her abilities; and yet she never will be of the forward, impertinent, showy kind.

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MR. W. S. CAINE.

THIS gentleman has a warm, ardent, emotional temperament, having a high degree of the vital and the mental; hence he is magnetic, very susceptible, and well-nigh enthusiastic in what he takes hold of. His head indicates a kind of mind that comes directly to the point; he is definite and distinct in his utterances; has more of the disposition to concentrate and present his ideas in an

intuitive light, and he presents his thoughts in a self-evident style that requires no argument to explain.

The centre brain, from the root of the nose upwards, is very distinctly represented ; he deals in facts ; he has to do with men and things ; he is much interested in all kinds of human actions. He has excellent powers to describe and illustrate ; has a good memory by association, one thing bringing to mind another ; he delights to deal with men, and he knows how to take persons according to their natural disposition. He is not so copious in language as he is forcible and clear, for he has just words enough to explain himself, but not an over-abundance.

His memory of his own life and experience is excellent ; he seldom loses sight of any important facts, and he is great in his study of human nature. He has rather strong imagination, especially to take broad, large, and liberal views of subjects, and he is ingenious in presenting his ideas. He should be remarkable for his sympathies ; for his interest in humanity ; he cannot bear to see suffering. When he once becomes interested in persons or in a cause that he has espoused, he throws his whole energy into what he does, and he generally carries his audience with him, or is capable of doing so, because of the amount of magnetic power he has. He has an energetic mind ; is full of force, spirit, and resolution ; he is a man of action if not of impulse. He enjoys anything that is beautiful and perfect—he wants to make everything as perfect as possible ; he is quick to detect defects and faults.

He has a spiritual nature, hence he talks much about unseen things, as well as things seen and tried. He is disposed to predict and prophecy how things will turn out, for he lives in the future, and acts with reference to future consequences. He has several of the elements of the orator, and when he becomes sufficiently roused to his cause as to forget himself, he is more oratorical than otherwise.

He is inspiring in his style of talking ; he starts the mind of his hearers, and stimulates them to action. He is very steady, firm, persevering, and tenacious, without being obstinate and self-willed. He is warm-hearted, decidedly social and companionable ; he makes friends wherever he goes, both among ladies and gentlemen. He is friendly, affectionate, and domestic.

He is well qualified to be an agent, to have to do with a variety of men and society, for he generally succeeds in pleasing wherever he goes. He can be very amusing and rather witty under favourable circumstances, for his mind is warm, impressible, and rather excitable. In short, he will be known

for an all-round kind of man, equal to almost any emergency ; always ready to answer any question as soon as it is asked. He hits the nail on the head every time, and knows what to say and when to stop. His great feature is to understand human nature, and know how to appeal to it.

L. N. FOWLER.

FACES.*

IN a paper addressed to fellow-students of human nature, it would be invidious on my part to assume in any sense the attitude of an instructress. I shall not attempt, therefore, to retail physiognomical text books on this occasion, so much as try to make a few free remarks, in the hope of eliciting comments and suggestions, calculated to throw more light upon the subject.

One of the few things in this world that nobody doubts is that faces express minds. Indeed, everyone believes this so truly as to be led to act upon what they believe. They like or dislike, approve or disapprove, trust or distrust, according to appearances. Why so much has been thus staked upon appearances the majority do not quite know ; that is, they have no particular reason they can give, and no system to refer us to. Hence their faith in faces, like any other faith lacking a basis of knowledge, is very assailable and of little or no practical use.

The question needing to be dealt with is, Can such a basis be found ? We hold that whatever is universally instinctive is philosophic, and that what is philosophic must be truly scientific. In other words, truth, in the deepest recesses of the mind, is intuitional. As evolved by the intellect it becomes reason, and so far as it can be dealt with by the outward senses it is knowledge of a materially scientific character.

In seeking physiognomical facts there may, nay, there must be, difficulties—many and formidable ; it is difficult accurately to distinguish the essential from the accidental, and the inherited from the acquired. Then certain diseases (small-pox for instance) work great facial spoliation. Again, the influence of climate, diet, education, and vocation are often more arbitrarily influential than may be easily allowed for. The position even in which the face is placed as regards light

* A paper read before the members of the Fowler Institute by Madame Patenall, of Hastings.

and shade may often influence an estimate. And, furthermore, there is ever the necessary, as well as the hypocritical, secretiveness of human nature confronting us.

The truth, nevertheless, remains, that every face is an individuality because its owner is. That similar minds, so far as they ever become manifest to us, look through similar faces; while minds different have countenances different to the same manner and degree.

Lavater's opinion, as quoted by Cowper, is, no doubt, true, "that faces are legible as books." But books are legible only to such as have good eye-sight, and who have learned to read them. Then, as there are books and books: some shallow, some deep, some interesting, some dry, some valuable chiefly for their bindings, and others for their contents, so it is with faces. Hence, the comprehensive study of the one, as of the other, forms a subject for a life-time.

And why not? Does Nature pour out all her secrets at once and to every passer-by? No, certainly! We speak of the face of the heavens, the face of the earth, and the face of the mornings; but oh, how little is revealed in the figure of speech! And human nature is profounder than any other, and like the infinite.

Faces, after all, were intended to be concealing as well as revealing surfaces, in which we see at best the soul but as in a mirror. Thus to read them thoroughly, we shall need eyes within and without; need to know not only the text books, but something of the soul of things.

Perhaps our danger lies in trusting too much to impressions, or too much to given rules; so if we go between and take nothing for granted we have heard or read except as our experience verifies it, and everything by such means obtainable to make experiment with, we shall escape, at any rate, the errors arising from a biassed or too hasty judgment.

We may find help, perhaps, if we think of the questions that most naturally arise in our mind whenever we look upon or try to recall a face that has particularly impressed us. Are they not some such questions as these?—What sort of a man was he? What was he or she like? How did they look? In these three questions we have, I think, the three fundamentals for face reading.

What "sort" of face, that is of what substance and form is it? By substance we here mean the quality of the various materials composing it—the kind of bones, the kind of flesh, the kind of blood suffusing its capillary surfaces, and of membrane or skin o'er-spreading all. All who have paid

attention to this point will know there are all the degrees of difference in the quality of these constituents of the organisation in different faces, and that herein we have one touchstone for the testing and estimate of mind and character. Coarseness, hardness, or looseness of the substances and structure, going invariably with coarseness of being; and fineness, softness, and the exquisite, being accompanied with its correspondent of given measurement in the scale of evolution. What we here need, of course, is an educated touch and consciousness, to sense these things; to be able to detect and discriminate contradictions between the quality of one class of organs and functions and another, the result of a double parentage; so as to allow for healthy cheeks, or counteraction in the individual constitution and character, and to be able to point out in what way a change as regards quality may be sooner brought about where that is necessary. Whether it be chiefly by bodily or mental habits, by social or moral modes of training, or all of these more equally. One thing is certain here, and this is our demonstrable fact, as well as a motive power for human reform: that quality of character and organisation is alterable by way of certain modes of treatment applied.

Form, or the shape of face, is dependent upon the arrangement of the stuffs; and character is most easily readable under this head, perhaps, by a knowledge of the anatomical and physiological system of the temperaments. We shall soon find thereby, that a round, full, fleshy face means vitality, warmth; and its accompanying versatility. A face square, bony, or more angular, more compact strength in constitution and character. And the slender, and more finely chiselled, comparative delicacy, and high mental talent as a speciality. While the face combining them all gives the balance of power, physical, mental, and moral; or power of every kind. In judging of that aspect of form which imparts particular shape, it may be well to take first the feature unduly prominent, as that will often supply the keynote of character. Let us never mind where we begin so long as we have something pronounced and certain to begin with. Let us look for and give attention to what the face has, rather than hold to a pre-conceived opinion of what it should have. You cannot read a face very well from what it lacks.

The books supplying the artists' rule of harmony and proportion of parts tell us that the line of profile should be nearly perpendicular, and the space about equal between the ground plan, for the forehead, the nose, and the mouth and chin. We need, however, to be able to take this in at a

glance, so as to determine in a moment from whence any disproportion arises. Also to remember here that the law of latency comes in with regard to very young children and aged persons, neither of which are among the proper subjects for physiognomical delineation.

Our second point raised was that of "Similitude," or what the face is like comparatively. Whether we accept fully Mr. Darwin's theories or no makes little difference to the fact that the faces of "many" men and women are something like, and the faces of "some" strikingly like, those of certain of the lower animals. So much so, that the most ordinary observer remarks at once that the individual has a face like that of a horse, a dog, a sheep, or a certain species of bird, as the case may be ; and whenever this is so, we may be sure the traits of character and disposition, in a modified, or an intensified sense, correspond. For myself I always settle the question as to what animal, if any, a person is like at first sight, and that seems at once to register the stage of evolution at which they have organically arrived, hence, to give a starting point from which you may begin to work with them. When no semblance of any lower animal is recognisable, why then, as Tennyson puts it, we "move upward, working out the beast," and the face, instead of being but semi-human, is the "human face divine."

Expression was our third fundamental. How do people look? The term expression might have been used to cover the whole ground, but for the custom of restricting it to active expression only. Speaking broadly, faces are expressions, passive and active, nothing more nor less—passive expressions, strictly speaking, being physiognomy, or a knowledge of the face at rest ; and active expression, pathognomy, a knowledge of the face in motion. The former, doubtless, forms the best foundation for making of face reading an exact science, for the most accomplished deceiver, by the power of an evil will, can force no more than a transient simulation or appearance of goodness into the face, which the solid, unalterable parts give the lie to.

Every feature no doubt, both in its active and passive expression, possesses a significance of its own, but as I have had less opportunity for testing what ears and cheeks signify, I await information on these points from others more experienced, and confine myself to the three more typical parts of human face—eyes and eyebrows, mouth and chin and the nose.

The nose, the most prominent of the features, is indisputably that which makes or mars the beauty of the countenance,

and which gives force and character to the rest. So well acquainted are we with the signification of the typical noses—the Roman indicating power; the Grecian beauty, loving art; the Jewish commercialism; the snub comparative weakness; and the celestial, or upturned, inquisitiveness,—that we need not here and now dwell on these further. In the main we shall, in practice, find all this reliable whenever we can get the type of nose pure; which is but seldom. On this account, to judge of character from the nose alone, would, while Shakespeare, Franklin, and Hogarth had not typical noses, and Richard Cromwell and James the First possessed veritable snubs, land us in dilemma. In the active expression of the nose, there is very much significance; and we shall do well to attend to the movements of its point if it has one; to the shape in palpitation of the nostrils at their wings. We can do nothing from strong thought and feeling, without drawing on our breathing power, of which function the nostrils are as it were the gateway.

The mouth, together with the chin, is as incontestably the finest facial interpreter of the loves and feelings—the chin revealing their more passive, and the nervous, mobile lips their more active traits. In the latter we shall need to look for the presence or absence of a fair share of fulness without coarseness, for constraint without tightness; and for shapeliness, mobility, and harmony, between the upper and under lip; if the upper overlaps the under slightly all the better, as that deepens the loves in their sentiment; nor must we forget that if one's mouth repulses us, the barrier to love and close friendship is impassable. On the nature of the smile almost everything depends. The few have attained to the possession of a natural, that is a true and purely loving, therefore, beautiful, smile; which streams over the face like sunshine across a landscape, leaving no part of itself unvivified, while it warms into quickened life and love the latent feelings of others. To have seen and felt this smile, is never to mistake for it the forced smile of artificiality, and still less that of icy sarcasm or ill-concealed malice.

The chin is intensely human. No animal possesses a chin in more than the merest rudiment. In its shape we may read the wills of the loves, whether they are steady, permanent, intense, absorbent, generous, exclusive, etc.

We have reserved our notice of the eyes and brows till last, because we esteem this part of the countenance most significant of all.

The forehead, as part of a face, is as important to consider as is the heaven stretched in solemn majesty over the under-

lying earth. Lofty greatness has ever been associated with a nobly-formed forehead. "It is not only the fine form or extraordinary beauty of the face," says Bulwer, "that gives a man of power, intellect, and nobility his charm; it lies especially in the free, firm, open, and yet wise and thoughtful expression of the forehead." The forehead is that part of the face wherein the lower animals are so deficient as in their chins. Why? Because other things being equal, the height, breadth, and development of the forehead stand in direct proportion to the amount of frontal cerebrum. Of course, height, breadth, or prominence of forehead merely is little to go by in the matter of intelligence. There are many bulging and lumpy foreheads, the result of rickets or pathological degeneration of the organism. Speaking generally, a forehead should be not too high, too low, too round, nor too square. For all furrows and wrinkles of the brow and about the eyes, as also about the mouth, we refer the student to Mr. Darwin's invaluable work on "Expression in Animals and Man."

The human eye itself, next to the brain, is the greatest physiological wonder. Indeed, it has been thought by some to be a brain in itself, of finer organism. Its imperial eminence above all the other senses give it dignity and power, and its spherical form, which is the only perfect form Nature knows, aids its movements, so as to make it even as an organ almost soul-like in its glance. As an instrument for the soul's expression it is far more accurate than any other feature, giving the promptest and surest indications of mental motion and emotion. What the eye expresses, words are powerless to convey; this is one of the appearances which must be seen in Nature, and more fully realised afterwards by the aid of a powerful remembrance or imagination. The merest hints can be given along the line of its colour, form, setting, and movement. We have the blue eye of affection, the warm, golden, brown eye of frankness in feeling, the grey eye of sincerity and of intellect, and the darker eye of strength and passion; according to its degree of darkness. The round, seeing eye, and the longer eye of contemplation and reflection. The full eye, expressive of oratorical power, with impressionableness; and its opposite, eyes with long, sharp corners turning upward and outward, with thick-skinned lids, are indicative of genius and the sanguine temperament. Speaking of genius, however,

"He alone can claim that name,
Who talks or writes with fancy high and bold, and daring flights."

Such an one was Henry Ward Beecher, and he had such an

eye. Everyone has a look peculiar to himself; hence we speak of the soul of the glance, which is in no two cases alike. The determination and singleness of devotion to a noble purpose, which a superficial observer might take for sternness, looked out from the eye of Dr. Livingstone, explorer and Christian missionary. The lion of the African jungle knew what he meant by his look, and so did the Native—one reading there his strong power, and the other his true and tender love. Then we have the characteristically kind look, and the cruel look, the look hopeful and prayerful, and the look dull, stupid, irreverent, sorrowful, or despairing. We see, also, laughing eyes and crying eyes. To sum them up, do not trust the eyes too narrow or oblique, too wide open so that they show the white all round, nor too forward, nor too deeply set; especially if the light of these latter is phosphoric. Nor eyes lustreless or else piercing wild, nor eyes ever rolling and restless. But the tranquil, powerful, mildly penetrating, calmly determined, warmly genial, and spiritually aspiring eyes; which are never very round, nor entirely open; never very deeply sunken, nor very far projecting; never obtuse, oblique, nor downward at their corners. That show no fear in them, and no hate and anger, except at sight of meanness and oppression. Trust such eyes, they are in possession of great virtue, and their owners companionate with angels.

We have yet to mention in a word the taking advantage for face readings of what Lavater calls “those precious moments” of unforeseen, and therefore unprepared for, meetings; also moments of farewell. Of great emotion, and great tranquility. Moments preceding a burst of anger, and the moment when it subsides; especially at the entrance upon the scene of a third person whose good opinion is desired. In all of which moments the hypocrite will be less able to dissimulate than in any other. In becoming adepts in face reading many surprises are in store for us, but alongside of the occasional revelations calculated to make the pure heart sick, we may place the reflection that this study will yield more and more that is satisfactory as our moral and spiritual evolution proceeds. Seers tell us of a time in the far past, when the people were such that their face was a perfect correspondent to the quality of their animus or mind. And poets, who are the prophets of our own time, sing of a golden age to come, when, without becoming a prey to knavery on the one hand, or prying, mischief-making curiosity on the other, we shall be able to look as we think and feel without let or hindrance. When we shall be able to send the

soul out in full swell, and act towards each other no longer as strangers in Our Father's world, but like children at home. Indeed, the bud and promise of this is with us alway, in the ever surviving freedom with which the thoughts and emotions of little children, and the few adults child-like sincere, pass into full facial expression. Yes ! oh yes ! the good time is coming, but when ?

When will it be that men shall kinder grow
 In human intercourse ; and not thus savagely
 Spring upon each occasion to o'erthrow
 Their fellow-travellers through mortality ?
 Fate hath apportioned us enough of woe
 In this brief journey ; from within derived,
 And from the elements, in which we sicken,
 Grow weak and die : let not man be deprived
 By man of that poor solace which doth quicken
 The flagging heart, and the o'er-laboured brain,
 And temper to endurance, when self-stricken,
 Or time and storm warn transient things refrain.
 Sting not thy brother insect till he perish,
 A life brief as thine own vex not but cherish.

DRS. GALL AND SPURZHEIM.*

GRADUALLY Gall arrived at the conclusion that there is a connection between the talent and the external sign ; and, as verbal memory had an external sign, so might other mental qualities have external signs also. He pursued the study with the greatest diligence and care. He rightly judged that the brain was the seat of the mental faculties, and that the skull indicated its development. In course of time he found that the artistic faculties were located in the pre-frontal area. He then began the study of the moral faculties and their external signs. He found he could gain nothing from the writings of physicians or metaphysicians. The most eminent scholars had proposed theories totally at variance with each other. At that time most of them professed to believe that all men were born with equal capacities, and that their differences were due to education and other external influences. He found that what philosophers spoke of as fundamental powers, conception, perception, memory, imagination, judgment, etc., were not so ; whereas the faculties for perceiving colour, size, form, etc., though fundamental, were never spoken of as such.

* The substance of a paper read by Mr. Webb before the British Phrenological Association, April 7th, 1891, entitled, "The Life and Teachings of Gall, and their influence on modern physiological investigations."

As physician to a lunatic asylum in Vienna, Dr. Gall had great opportunities of studying the insane. He visited all kinds of asylums, prisons, schools, and courts of justice, and was a welcome visitor at the courts of many German princes. Whenever there were persons notorious for special gifts or peculiarities he visited them. Ultimately he arrived at certain views respecting the functions of the brain, which mark an era in the physiological history of that organ.

Gall's method was to observe the contour of the skull, compare it with the enclosed brain, and both with the character and talents of the person it had belonged to.

The first public announcement of Dr. Gall's researches appeared in a German journal (the *Deutschen Mercur*) in December, 1798. It was a letter written by Gall to Baron Retzer. The subject of the letter was "The functions of the brain in man and animals."

In it he wrote :—"I have, at last, the pleasure, my dear Retzer, of presenting you a sketch of my treatise upon the functions of the brain, and upon the possibility of distinguishing some of the dispositions and propensities by the shape of the head and the skull. I have observed that many men of talent and learning awaited with confidence the result of my labours, while others set me down as a visionary, or a dangerous innovator.

"My purpose is to ascertain the functions of the brain in general, and those of its different parts in particular, to shew that it is possible to ascertain different dispositions and inclinations by the elevations and depressions upon the head; and to present in a clear light the most important consequences which result therefrom to medicine, morality, and legislation—in a word to the science of human nature.

"In what manner are the faculties and the propensities of man connected with his organization? Are they the expression of a principle of mind purely spiritual, and acting purely by itself? or, is the mind connected with some particular organization? From the solution of these questions we shall derive the principle, the faculties and propensities of man have their seat in the brain."

He adduced the following proofs :—

(1) "The functions of the mind are deranged by the lesion of the brain: they are not immediately deranged by lesion of other parts of the body."

(2) "The brain is not necessary to life; but as nature creates nothing in vain, it must be that the brain has another distinction; that is to say:

(3) "The qualities of the mind, or the faculties of man and

animals, are multiplied and elevated in direct ratio to the increase of the mass of brain, proportionately to the mass of body, and especially in proportion to the nervous mass."

Dr. Gall, moreover, wrote that "the faculties are not only distinct and independent of the propensities, but also the faculties among themselves, and the propensities among themselves, are essentially distinct and independent," and therefore, "they ought to have their seats in parts of the brain distinct and independent of each other."

He proved this by shewing that "the qualities of the mind alternately act and repose; so that one after being fatigued, rests and refreshes itself, while another acts and becomes fatigued in turn; that the dispositions and propensities exist among themselves, in variable proportions, in man and also in animals; the faculties and propensities develop themselves at different epochs; some cease without the other diminishing, and even while the other increases. In diseases and wounds of certain parts of the brain, certain qualities are deranged, irritated, or suspended; they return by degrees to their natural states during the curative process."

He then adduced excellent illustrations of these facts, and shewed the weakness of the arguments used to prove that Phrenology was "materialism." After this he dealt with the "distribution of the different organs, and their developments arising from different forms of the brain," and that "from the totality and development of determinate organs, results a determinate form, either of the whole brain, or of its parts as separate regions;" and that "from the formation of the bones of the head, until the most advanced period of life, the form of the internal surface of the skull is determined by the external form of the brain: we can then be certain of the existence of some faculties, and propensities, while the external surface of the skull agrees with its internal surface, or so long as the variation is confined to certain known limits." He pointed out "that the organs develop themselves, from the earliest infancy until their final completion, in the same proportion and in the same order as the manifestations of the faculties and natural propensities," and that "the bones of the head take their different forms in the same proportion, and in the same order," and that when the faculties diminished "Nature deposits in the vacant spaces new portions of bony matter."

The last part of Gall's letter established the fact that the faculties and propensities existed of themselves. He believed that each independent faculty had its own organ, and he explained his method of discovering the seats of the organs:—

(1) "The discovery of certain elevations and depressions when there are determined qualities."

(2) "The discovery of certain qualities together with the existence of certain protuberances."

(3) "A collection of models in plaster."

(4) "A collection of skulls."

(5) "Phenomena of the diseases and lesions of the brain." And from the likelihood of being able to cure mental diseases much more readily from his researches in this direction, he thought that if men of sense would not thank him, at any rate he ought "to be sure of the thanks of fools."

(6) His sixth means for the discovery of the organs of the mind "consisted" in examining the integral parts of different brains and their relations comparatively with the different faculties and the different propensities.

(7) "The gradual scale of perfections, from the zoophyte and the simple polypus, up to the philosopher and the theosophist," from "irritable" vessels only, to those with nerves and the hermaphrodite nature; then, "beings who merit something better, who can unite and look around the world with the organs of sense."

In 1796 Dr. Gall commenced a course of lectures in Vienna, and continued them for five years. On the 9th January, 1802, the Austrian Government issued an order that they should cease—his doctrines being considered dangerous to religion. At this time John Gaspar Spurzheim was one of his pupils. Spurzheim had already matriculated at Treves University, but owing to the invasion of his country by the French troops, he had, with many others, fled to Austria. Spurzheim proved himself a helpmate to Gall, who entrusted him with dissections.

On March 6th, 1805, Gall and Spurzheim left Vienna and had a royal progress among the cities and universities of Germany. This progress from hospital to university, from palace to asylum, from courts of justice to prisons and places of execution, "contributed greatly to correct and confirm" Dr. Gall's opinions. In 1807 the two arrived in Paris, where Gall remained until his death. Their welcome to Paris was enthusiastic. In 1808 they presented a memoir on the anatomy of the brain to the French Institute. Cuvier was head of the anatomical department. He attended their lectures and dissections, and expressed himself as approving the new doctrines.

In 1813, Gall and Spurzheim separated. Spurzheim went to Vienna, and ultimately to London. For four years they had been at work on their treatise on the "Functions of

the Brain." They had issued part of it already. It was afterwards completed by Gall.

In January, 1815, Spurzheim published his *Physiognomical System*, in English. It is in this work that the faculty of language—articulate speech—was shewn to have its seat or localization in the hinder part of the third frontal convolution. This is clearly marked in the plates illustrating the work.

The *Edinburgh Review* poured contempt upon Spurzheim, and called his work "despicable trumpery."

The learned doctor, before a room-full of men of Science and Letters, with the *Review* in one hand and a brain in the other, exposed the ignorance of Dr. Gordon, the writer. These dissections by Dr. Spurzheim converted George and Andrew Combe, as well as many others.

In 1817, Spurzheim again visited Paris. He also published works on *Insanity and Education*.

In 1825 he returned to England, where a Phrenological Society had been formed, with Dr. Elliotson as president.

In 1828, Dr. Gall gave a series of lectures to the medical students of Paris. At the conclusion of these lectures he was seized with a paralytic attack, and died on the 22nd August of that year, in the 72nd year of his age. At his grave, five of his friends pronounced discourses on his learning and work, and "nothing was wanting in his glory." The most distinguished men of Paris paid homage at his grave. An impartial writer at the time said, "Whatever opinion we may form of the system of that illustrious man, it must be acknowledged that he has made an immense stride in the science of medicine and of man."

In 1832, Dr. Spurzheim visited America, where he had a flattering reception. His lectures the same year at Boston were very much appreciated, but the work was heavy, and hastened his end. He died on the 10th November, 1832.

George Combe, on whom the mantle of Gall and Spurzheim fell, was the most eminent educationist this country has ever known.

The number of illustrious exponents of Phrenology is too large to name: Drs. Vimont, Elliotson, Abernethy, Broussais, Ellis, Howe, W. A. F. Browne, J. P. Browne, Archbishop Whately, De Ville, Donovan, and Fowler, and very many in America, including H. W. Beecher.

How do Gall and his followers stand in regard to present day researches?

Dr. F. Nivelet, Vice-President du conseil d'hygiene de l'arrondissement de Commercy in his *Gall et sa doctrine*,

published last year in Paris, thinks it is time that Gall's doctrines were more generally known, and that those physiologists who have made use of his discoveries should admit the fact. On page 3 of the above work, he says: "If for so long a period physiologists had placed the seat of the emotional faculties of man in the viscera of the organic life, it was Gall who was amongst the first to localise them in relation with the intellectual faculties. For too long had philosophical prejudices separated the physiological study of man from that of animals. It was Gall who first laid one of the principal foundations of psychological physiology, on the comparison of anatomy and physiology."

On page 152, Dr. Nivelet continues: "The opinions of Gall on the organic cause of aphemia, are doubtless without the precision of Broca's discovery. But we must take into account that Gall, when founding his theory on the bony conformation of the inferior fronto-temporal region, appended to that theory, as a subsidiary matter, the morphology of the frontal and temporal lobes which rest upon it.

"Is it not remarkable that the varieties of aphasia, as known at the present day, have their pathological origin in that zone to which Gall had referred his conjectures?"

The doctrines of Phrenology are found more or less accurately stated in much of the literature of the day, and men are constantly making discoveries of facts that Gall stated to be such nearly a century ago. For instance, one of our ablest anthropologists, Francis Galton, has announced the results of his researches on the subject of twins: that those alike in appearance are alike in character and habits. In his "Inquiries into human faculty and its development," published in 1883, Mr. Galton fully satisfied himself that "the association of similar mental with similar physical characteristics" is fully proved. Referring to that work, Dr. Stewart in his "Our Temperaments," states "similar mental qualities and traits of character were observed in twins who closely resembled each other, and dissimilar in those between whom there was no resemblance."

Compare that statement with what Gall had written 70 years previously. He wrote:—"I know two twins whom it is difficult to distinguish from each other, and who offer a striking resemblance in their propensities, and in their talents." "Of two other twins of different sex, the boy resembles the mother, a woman of limited capacity; the daughter takes after her father, a man of uncommon talents. The son displays in all things the most humble mediocrity; the sister, on the contrary, raises herself in many respects

above her sex. But if a case occurs of twins whose organization is different, it is in vain that diet, education, examples, and circumstances are similar; there results no resemblance in character. In two twin girls the head and the physical constitution differ totally. In the one Nature seems to have thought only of developing the bones and the muscles; in the other she appears to have occupied herself solely with the nervous system. Thus the first is possessed of very moderate intelligence, while the second is endowed with brilliant qualities." Phren. Library, vol. 1., page 183, Boston, 1835.

Dr. Ferrier, our ablest cerebral physiologist, in his last work, "Croonian Lectures on Cerebral localisation," 1890, writes:—"Flourens, as is well known, denied every species of localisation in the cerebral hemispheres. To this conclusion he appears to have been led not more by his own experiments than by the prevalent conceptions as to the unity and divisibility of the mind, and as a reaction against the organology of Gall and his followers. To Gall, however, let us in passing pay the tribute that in his analysis he followed strictly inductive methods, and made many observations of enduring value; though his synthesis of the brain, as a congeries of separate organs, each autonomous in its own sphere, and all mysteriously inherent in some unifying, immaterial substratum, has failed to commend itself to the scientific world." Dr. Ferrier does not grasp the teachings of Gall with the exactness we ought to expect from him, yet it is somewhat reassuring that he now admits that Gall "followed strictly inductive methods, and made many observations of enduring value."

Next Dr. Ferrier goes on to prove that Gall was right and Flourens wrong. He adds:—"The experiments of Bouilland on pigeons, dogs, and rabbits, led him to conclude that destruction of the anterior lobes alone caused symptoms of profound dementia. Though the animals were able to feel, see, hear, and smell, and to execute a number of spontaneous and instinctive movements, they were unable to recognise their relations to the objects by which they were surrounded. They were unable to feed themselves, and had in general lost all reasoning powers. An animal, said he, in which the anterior lobes have been destroyed, "though deprived of a considerable number of intellectual acts, continues to enjoy its sensory faculties; a proof that 'sensation' and 'intellection' are not one and the same function, and that they have separate localities."

"Bouilland's results have, I think, received confirmation and elucidation from my own experiments on monkeys, as

well as those of Golz and Schrader on dogs and pigeons." And then Dr. Ferrier makes another admission in favour of phrenology. He states that, in 1825, the *Archives de Medecin* "recorded certain clinical facts which seemed to indicate a connection between lesions of the anterior lobes and loss of speech, thus affording some confirmation of the theories of Gall on the subject;" and adds that Dan "established the special relation of aphasia to right hemiplegia and lesions of the right hemisphere" in 1836, and that Broca, in 1861, located the speech centre in the "base of the third frontal convolution," and that these observations have been "amply confirmed by clinical and pathological research, and further elucidated by pathological experiment."

But we must not suppose for a moment that modern physiologists are agreed as to brain function. Munk supposes that the destruction of the frontal area in dogs causes paralysis of the trunk muscles, and he terms the frontal region the sensory sphere of the trunk, whereas Ferrier says that he and others "are opposed to the statement of Munk in this respect." And "Horsley and Schäfer have shewn that the centres for the trunk muscles are in the marginal convolution." Yet, in regard to the researches of Ferrier, Golz, Hitzig, Munk, Horsley and Schäfer, Exner, and others who have made similar experiments on the "motor centres," I think I can safely say that they have hardly entered into the study of the intellectual powers of the brain; and, where they have observed intellectual results, those results have invariably been in the direction of phrenology; those results have been physical phenomena only; motrocities resulting from the excitement of the motor or Rolandic area, and not from the frontal area.

Henry Maudsley, an authority on these matters, wrote but a few months ago, in the last volume of "Mind," expressing his views of the conclusions drawn from excitation of the motor areas in the brains of animals, as follows:—

"The comparative anatomy of the nervous system in the lower animals proves that creatures having no cerebral hemispheres, or having the rudiments of them, are capable of keen and bodily activity in response to the impressions made upon their senses. They possess not the various, nice, and intricate movements of the fingers and hands, the exquisitely fine and complex movements of speech, the delicate motor waves of human expression, the many scarce noticed muscular tensions that accompany different thoughts and feelings, which are man's richest possession; but in respect of the gross movements of locomotion, of defence, of attack, of escape, of

seizing of food, of propagation of the kind, they are abundantly endowed. In face of this plain and weighty fact, it is natural to ask how far the intervention of the cerebral hemispheres is necessary to the performance of the same class of movements in man. May not his spinal and sensory, with their associated proper centres, be capable by themselves of actuating similar movements in him ?” And on page 181 of the same volume he continues : “The tendency now is to make two definite localisations of so-called motor centres, and to attribute to them too direct a motor agency. Anyhow there is a mental side to their functions which requires consideration.”

That is the view generally held by intelligent phrenologists.

On page 182 Maudsley continues : “All the experiments in the world must have failed for ever to make known the speech centre in the human convolution, since its functions are special to man ; and it may well be that those portions of the 1st, 2nd, and 3rd frontal convolutions in front of the recognised motor zone, which yield no motor effects when stimulated in animals, may yet have to do with the exceedingly fine and almost imperceptible muscular tensions or movements that go along with their highest function of attention and expression, and with such associated mental operations as they are capable of ;” and “in man these pre-frontal convolutions may well have more special and complex functions than the lower animals are capable of, just as the foot of the third frontal convolution in him subserves movements of which they are incapable, namely, articulate speech.”

Though our present-day physicians and metaphysicians are so little agreed as to the functions of the brain, yet they are approaching the truth. We, however, who know something of the value of Gall’s researches, are agreed that the nearer they approach phrenological truth the clearer will be their light. The dawn is breaking. We must continue our propaganda, not only with weapons well known and trusty, provided us by the immortal Gall, but with such also as our opponents themselves provide us with, and which they so ignorantly think deadly and invulnerable.

“MEMORY VIEWED PHRENOLOGICALLY.” *

It has been my object in the present paper to treat the subject of “memory” not from the ordinary or metaphysical point of view, but rather, as I think is but right in a

* A ten minutes’ paper read before the members of the British Phrenological Association on June 2nd, 1891.

phrenologist addressing a meeting of fellow-students, to dwell mainly upon the physical or material side of the question, and to endeavour to trace the connection which we hold exists between the intangible abstract faculty of the mind and the material organ of the brain. I have endeavoured to concentrate my remarks and to clothe them in as scientific a form as possible. The conclusions at which I have arrived, and which I beg to submit to the consideration of the meeting, are the following. They are now, I believe, exercising much of the attention of scientific men ; but, perhaps, they should not as yet be dignified by any other term than that of theories.

The first is, that memory, in the ordinary acceptation of the term, is the manifestation of the activity, beyond mere nutrition, of the grey matter of the brain.

Secondly. That an acquisition of knowledge, which is memory, no matter how small, must be accompanied by an addition of grey matter to the brain ; or, to particularize, an acquisition of an item of knowledge must be synchronous with an addition of a molecule of grey matter in which the memory of that knowledge can be preserved.

Thirdly. And this proposition is, I think, of especial interest to phrenologists, that this additional molecule must be situated in a definite position in the brain according to the particular class of knowledge which it represents and in reality embodies.

Fourthly and lastly. That the persistence of a memory depends solely upon the due nourishment of the molecule of grey matter in which it inheres.

There are several other points in connection with memory upon which time will not permit me to touch at present. I can but mention them here. They are Heredity, which is a form of memory acquired by transmission from one or more ancestors.

Instinct, which is unconscious inherited memory.

The pathology of the subject, treating of the many and various forms of disease to which memory is subject.

The disintegration of the molecule of grey matter and consequent extinction of memory, and its relation to the idea of a future state.

The excitement of memory by associations.

The independent and combined action of the individual molecules, and several others.

Each of these, to be treated at all exhaustively, would require a paper to itself. As I said before, I can but call attention to them here. They all depend for their explanation

upon the four main propositions which have been before laid down, and to which I now propose to return.

The first one, that memory is the manifestation beyond mere nutrition of the activity of the grey matter of the brain, should not be very difficult to prove to the satisfaction of an audience such as the present, all of whom, I trust, are convinced that the brain, and that portion of the brain in particular called the grey matter, is the medium in which the mind acts.

All I think that requires proving is, that the mind and memory are synonymous terms, or in other words, that all that we know, all our mental actions and combinations of ideas, are based upon experience; in fact, as the old proverb puts it, that "memory is the treasurer of the mind."

I think that anyone who gives this point a few minutes' serious consideration, will see that what we call knowledge and the powers of the mind, are only accumulated memories; what we do not remember we do not know, and we can only be said really to know a thing when we have committed it to memory, and can recollect or recall it to the mind.

I qualify this first proposition with the words, "beyond mere nutrition," because, of course, all parts of the body, including the brain, take up aliment from the arterial blood, and excrete waste products into the veins.

The second proposition is that an acquisition of knowledge, which is memory, no matter how small, must be accompanied by an addition of grey matter to the brain; or, to particularize, an acquisition of an item of knowledge must be synchronous with an addition of a molecule of grey matter in which the memory of that knowledge can be preserved.

If we examine into this more in detail, we shall see that this must be so, because, if the brain is the organ of the mind, you cannot increase the mind without at the same time increasing the brain, the quality remaining the same.

It may be said that there is another alternative, viz., that the same amount of brain can contain, or be the medium for a larger amount of mind in the same manner as a sponge, if not quite saturated with water, can be made to hold more.

This metaphor, however, if examined, like many another, will be found not to be applicable here, if we analyse the mind and the brain. Mind is made up of experiences, memories, or, in other words, accumulated items of knowledge. The brain, as we know, consists of cells in one form or another, which, in their turn, are made up of molecules. These molecules are almost infinitely small, and it takes many thousands of them to make a small particle of grey matter.

such as can be seen with the aid of a microscope. Each of these molecules is now thought by scientific men to embody an idea ; and we shall find that this theory, if true, will satisfactorily account for all the phenomena connected with memory with which we are acquainted.

This proposition is fairly clear if taken on a large scale, for we know that a large acquisition of knowledge is always accompanied by an appreciable accretion of brain matter, such as can be felt by the hand, or seen with the eye. It is more difficult to show the addition of a single molecule, which is too small to be appreciated by either hand or eye. I will try to make it manifest to the mental vision.

Suppose we imagine as a simple example, two boys, each say five years old, and each having about equal mental capacity. Suppose each can count up to four but no further. Now teach both together the number five and dismiss them. If, on the next time of asking, one knows the number five, that is, can recollect it, and count up to it, whilst the mind of the other is blank on the subject and he can still count only as far as four, what we say is, that some material change has occurred in the brain of the one who remembers, and that that change is an addition of a molecule of grey matter to his brain. If it be objected that an item of knowledge, not being tangible, does not require any fresh matter to be built up to receive it, but can be contained in the mass of the brain before existing, then it follows that any amount of fresh knowledge, not being tangible, can also be contained without a fresh growth of brain matter, which is against our experience, and what we know to be true. What is true when applied to the whole mass must be equally so when applied to each particular part.

That the brain, which was already there is capable of manifesting more mind or brain power than it did before is besides contrary to what we know of the economy of Nature, which wastes neither matter nor energy ; and does not produce more brain matter than is required to contain an amount of mind existing at the time when it was formed.

The third principle is, that this additional molecule must be situated in a definite position in the brain, according to the particular class of knowledge which it represents, and in reality embodies.

To take the same example which we have previously used, the molecule in the boy's brain which embodies the memory of the number five must be added at a point in the third frontal convolution of the brain, where phrenologists locate the organ of calculation. We cannot imagine that, at the

same time that an acquisition of knowledge of numbers takes place, there should be an increase of say the back part of the brain where the social organs lie. We cannot demonstrate this at present in detail, but we all know it from experience when it occurs in considerable quantity. In fact, we do judge of the amount of arithmetical knowledge acquired during the lifetime of an individual from the size of the brain at this particular point, and, in the same manner as the memory of a number is represented by a molecule of the organ of calculation, so we may infer, granted the localisation of the faculties, that each item of knowledge has its fixed definite location.

The last principle is, that the persistence of a memory depends solely upon the due nourishment of the molecule of grey matter in which it inheres. This, I think, is almost clear on the face of it, for, if the molecule embody the item of knowledge, if it be not duly nourished, it will cease to exist, and the memory of that knowledge, not having a local habitation, must cease to exist also.

I trust that I have made these points quite clear, but I must say that I have found it rather difficult to condense so large a subject into a small compass. From the foregoing remarks we may, I think, draw the following deduction: that the powers of the mind, which are well known to develop and manifest themselves according to certain laws well known to, and codified by, metaphysicians, are intimately connected with, and in fact indissoluble from physical accompaniments, the laws of the development and activity of which can be equally well studied and explained by physiologists.

In conclusion, I trust that these few observations may suggest to those who are directing their attention at the present time to the phenomena of memory, that they should pay more attention than has hitherto been done to the physical side of the subject.

D. E. SAMUEL.

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

I.—PREDECESSORS: PHRENOLOGY IN AMERICA: COMBE AND FOWLER.

The veteran phrenologist, Mr. L. N. Fowler, is an American by birth. America, however, had no share in the discovery of the new science of mind, known under the term "Phrenology." Nor, indeed, had that great country the opportunity to play a prominent part in founding and

establishing the new system of mental science. The first fierce conflict which took place between the adherents of the old philosophy and the advocates of the new was waged in Austria, Germany, France, and Great Britain. Dr. Gall, the founder of phrenology, was a German ; Dr. Spurzheim, first the pupil and then the colleague of Gall, was a Prussian ; George Combe, the friend of Spurzheim and the successor of both, was a Scotchman.

While it is strictly true, as has been stated, that America had no share in the discovery of phrenology, our clever cousins were speedily to the fore, ready to fight for or against it, as their quickly-working minds led them. With that cuteness, which dull people call bumptiousness ; and that self-confidence, which timid folks put down as cheekiness, they came forward at once and joined in the controversy ; and they did so with a delightful hopefulness, which lightens labour quite as much as loves does. This breezy readiness to "hitch on," and lend a helping hand in the solution of a new problem, is characteristic of the American people. They are of opinion that no problem under the sun can be solved, no invention perfected, no Darkest Africa explored, unless their "I guess," "I calculate," and "I bet," be thrown in to keep matters square. And perhaps they help more frequently than they hinder. It is certain that they cleared their minds of cant when they set themselves to consider phrenology.

Phrenology was first introduced to the American public by Dr. Caldwell, of Transylvania University. This eminent scholar and vigorous writer formed the acquaintance of Gall and Spurzheim while pursuing his studies as a medical student in Paris, in the year 1806. "The clear and forcible exposition which Spurzheim made," says Dr. Caldwell, "connected with my own observations and reflections, soon produced in my mind a conviction of the truth, as well as the importance of the science." Dr. Caldwell made a resolution to vindicate that truth, and promote a knowledge of it in his own country, with all the resources he could bring to the task, and he faithfully fulfilled his vow. We hear of him vindicating the truths of the phrenological system before the medical students of Transylvania University soon after he had been selected professor of medical and clinical practice, and he continued his advocacy of the truth and importance of the phrenological doctrine during his long and honourable career. His "Phrenology Vindicated and Anti-Phrenology Exposed," published in reply to Dr. Sewall's unscrupulous attack, is a complete and convincing answer to one of the cleverest and bitterest opponents that ever the

science encountered. We have Mr. Fowler's hearty testimony that, while it was with "the few" his labour told most effectively, the writings of Professor Caldwell have had a great influence in establishing phrenology in America.*

George Combe and the American-English phrenologist became acquainted during the visit of the former to America. Mr. Fowler attended the lectures delivered by Combe in Boston, and immediately afterwards another series of lectures in New York. As each course extended to sixteen lectures of two hours each, full opportunity was afforded Mr. Fowler to compare notes with the Scottish phrenologist. In addition to these public lectures he had the privilege of private conferences with Mr. Combe, and these pleasant hours are amongst the happiest of Mr. Fowler's memories. He had then been four or five years in the lecture-field, and this meeting with Combe fired him with a new enthusiasm in the work which he had set himself to do.

Combe visited the United States in 1838, with the impression that phrenology would contribute powerfully to the advancement of civilization in that country. When he returned that impression was converted into conviction; he was further persuaded that in America, probably earlier than in any other country, phrenology would be applied to practical and important purposes. He entertained the conviction that within a century phrenology will be so applied in the United States. Half a century has elapsed since Combe's prediction, and, judging from the striking progress which has been made during the past fifty years, it seems in every way probable that phrenology will be intelligently understood and practically applied, with beneficent results to the millions of that go-a-head country, within the period predicted by Combe.†

The name of Fowler will occupy a prominent page in the history which records the intellectual development and moral progress of America. It has been as familiar as a household word to the people of this country, since he landed on our shores thirty-one years ago; but it must not be forgotten that he had been as prominently before his own countrymen as an advocate of phrenology, and as a lecturer on physiology, health, and temperance, for fully a quarter of a century. We will, therefore, flit across the "Herring-pond," and make the acquaintance of the boy, and the man whom we honour to-day, as the greatest living exponent of practical phrenology.

* Dr. Charles Caldwell was born in North Carolina, on May 14th, 1772, and died on July 9th, 1853.

† George Combe was born in Edinburgh on the 21st of October, 1788, and died on the 14th of August, 1858.

II.—EARLY DAYS: AMHERST COLLEGE: BEECHER:
FOWLER AND PHRENOLOGY.

Lorenzo Niles Fowler was born in Cohocton, Stueben County, in the Southern part of the State of New York, on the 23rd of June, 1811.

As Cohocton was then a new township in a sparsely populated part of the country, the pioneer child enjoyed the delightful companionship of unspoiled nature. He played and roamed among the mountains of Alleghany, and inhaled with his earliest breath the gladsome spirit of freedom. The gushing springs bursting from the hill sides, the ripple of the clear rivulets winding through the valleys, the warblings of the wild birds in the forest, were the first voices of Nature which fell upon his ears. Little bits of half-play, half-work was introduced by his father, such as setting traps to catch muskrats and minks, and playing the part of scare-crow to keep the crows from the corn fields.

So passed the days and months of the first decade of our hero's life among the Alleghany mountains. Those early years glided by as lightly and as quickly as a pleasant dream; but they gave a healthy, fresh, hopeful tone of disposition, which proved a blessing in after years when the child of the mountains had become a helper of his fellowmen. Each new day, heart and brain received a fresh draught of life; and the varied and ever-changing lights and shades which were unfolded around him filled to running over his cup of happiness. He was heir to no hereditary taints, and he suffered from no mental twists; his mind was unburdened with the care of the passing day, and the impenetrable mystery of the morrow cast no phantom shadow across his joy-lit path.

He was blessed with parents whom it was his joy to love and obey, and a life-long delight to honour. His mother was a godly, exemplary, domestic, affectionate, praying woman. His father was a man of sterling moral principle, straightforward, honest, liberal, hard-working, energetic. He was by nature a mirthful man, but his religious convictions and experience suppressed, to some extent, his good humour and his laughter. But although he was a thoughtful, serious man, he was neither dull nor sad. While it was happily true of him that he breathed a spirit of joyous freedom amid the wilds of Alleghany, it is also true that he learned with life's earliest lessons the duty and privilege of serving his Creator in the days of his youth. He had never to unlearn the somewhat rigid moral lessons taught him by his parents; by precept and by example they gave him a good start.

Young Fowler, and his brother Orson, two years his senior, were sent at an early age to the district school, to master the rudiments of education. The school-master taught them on matters which in after years would enable them to use their mental powers to the best advantage, and their father, wise man that he was, took good care that they had sufficient exercise to develop their bodily functions, by encouraging them to engage in spells of farm-work. This dual system of education was kept up until they were sixteen or seventeen years of age, and when they were face to face with life's stern realities, and had to fight their own battles, they found themselves all the better fitted for the task, because they had been taught the science of working as well as the art of thinking. With this practical training, a splendid endowment of good health, and the rich legacy of a father and mother's prayers, they started out to make their way in the world.

When Lorenzo was seventeen years of age he left home to go to Dansville Academy. He commenced life on his own account. He was determined to get along by working part of his time, and he thus made enough to pay his board and his Academy fees. He worked and studied hard, and kept clear of debt. In this matter of fact, self-help way, he succeeded in attending the Dansville Academy for some time. He also enjoyed the tuition and kindly friendship of the Rev. Mr. Hubbard, of that town. He was an active member of his church. A strong and enduring bond of affection was speedily formed between the young man and his pastor. His deep reverence for religious truth; his consistent determination to live out the Christian life, and his desire to commend and enforce the practical truths of Christianity, runs like a golden thread through his whole life and work. These early religious experiences were a most important formative influence in his career. The glow of youth, and the ardent enthusiasm, passed away, but the touch and tone of these days can be traced in every lecture he has delivered and every page he has written.

From Dansville he went to an Academy in Heath, Franklin County, Massachusetts, where he was of great service in a revival which took place while he was there. Leaving Heath he travelled to Hadley, Mass., in order to secure better educational advantages. His chief aim in pushing ahead about this time was to thoroughly prepare himself for Amherst College. And here must be told a parental secret. It was the earnest wish of his parents that their son, Lorenzo, should become a preacher of the Gospel. For some years everything seemed to favour the laudable ambition of his

father and mother ; but, as will be seen by-and-by, their fond hopes in this direction were not to be realised.

In the year 1832 the young student, still working his way up the rugged road to learning, went to Amherst to complete his preparatory studies. During that year, whilst at Amherst, he made the acquaintance of Henry Ward Beecher, who was a classmate of Lorenzo's brother, Orson, and both these young fellows were also studying with the intention of fitting themselves for the work of the ministry. These three young men studied, and prayed, and planned together in their rooms at Amherst College. They were a striking trio. There was something about them which arrested attention. What will these young men be ? What will they do with their glorious gift of healthy, vigorous, aggressive manhood ? Thank God the three students in question had decided to quit themselves like men. Their hopeful look forward as they chatted, and studied, and prophesied, in their rooms at Amherst College, sixty years ago, was no doubt the look of anxious, earnest souls peering out into the hidden future, and trying to outline the life which each would have to work out for himself. Our look backward, measuring each man according to his gifts, his calling, and the work he has done, enables us to enter more fully into the bright hopes and the daring schemes with which they encouraged each other during those college days. They took care of their health ; they improved and strengthened their mental and moral faculties by vigorous spells of study, followed by hours of boisterous play. What they had to do they did it with their might. No man who so lives and labours ; no man who so strives to make life pleasant while the hours are going by, will have a spare moment nor a vagrant thought to waste considering the question, "Is life worth living ?" In a letter bearing date December 4th, 1890, the only survivor of the three Amherst students writes :—"If I am spared until June next I shall be eighty years of age. I am happy to say my health is good ; my appetite is excellent, and I sleep well. By taking care of myself I stave off rheumatisms and aches, so I have nothing to grumble about. I am about as happy as any sinner ought to be."

While Beecher and the Fowlers were busy with their books, a disturbing movement, which caused considerable excitement in Amherst College, demands attention. Our young men are in the midst of it. Then, as in after years, they were as eager for fun as they were in their quest for knowledge. The excitement amongst the students was caused by phrenology, which had ventured within the precincts of this educational

institute, without permission, without apology, and, as the sequel showed, with the determination to stay. The eloquent lectures of Dr. Spurzheim—who had just been welcomed to America with remarkable enthusiasm—playing like a spring shower on the seed sown by Dr. Caldwell, brought forth a rich harvest, an intellectual revival. The interest in the subject spread all over the country. The scholarly and scientific were intensely concerned, and frequent discussions took place at the seats of education between the advocates and opponents of phrenology. At Amherst College, as already stated, it created considerable commotion amongst the students. Some treated it seriously; some made fun of it; everyone was interested. In a moment of seriousness, however, they agreed to argue the matter *pro* and *con*; they decided to make it the topic of a debate. Those who were leading the laughter and the ridicule selected Henry Ward Beecher to take the negative side on the question, “Is Phrenology entitled to the name of Science?” They made up their minds that phrenology was an impostor and intruder; they considered it their duty to scotch and kill it; and young Beecher, with his ready wit, withering sarcasm, and moving eloquence, was the man to do it. Beecher entered into the contest with rare zest and relish.

“When he came to prepare for the debate,” Mr. Nelson Sizer tells us, “he found that he needed to know something about the subject in controversy; that a hollow laugh about bumps, which might pass as wit on the campus, would not answer in a serious debate. Therefore he wisely resolved to send by stage to Boston for the works of Spurzheim and Combe, so that he might be informed as to the claims of the so-called science which his wit and skill were expected to demolish. The books came, and the ardent youth launched into their contents, and soon found he had been assigned to a task he was unable to perform. He sought and obtained an adjournment of the debate for two weeks, at the end of which he made one of the ablest speeches he had ever been heard to utter, *not against*, but **IN FAVOUR OF THE SCIENCE**. His classmates and the faculty—for the interest had brought out the whole college and the cream of the town—were amazed, and the subject was permitted to go by default. The negative was vanquished, and Beecher was triumphant.” After his splendid conquest Beecher handed over his books to the Fowlers, and “thus the name Fowler and phrenology then and there became wedded.”

Beecher continued a firm believer in phrenology throughout his brilliant career. When his biography was published some

time ago, several of the critics were astonished to find that the great pulpit orator was a staunch adherent of phrenology. He made no secret of the fact that he was a phrenologist. His vast congregation, on one occasion, heard from his own lips this explicit statement: "The views of the human mind, as they are revealed by phrenology, are those which have underlaid my whole ministry; and if I have had any success in bringing the truths of the Gospel to bear practically upon the minds of men, any success in the vigorous application of truths to the wants of the human soul where they are most needed, I owe it to the clearness which I have gained from this science."

One day, when the memory of college times had been partly rubbed out by the friction of work and the lapse of years, Mr. Fowler was busy in his office in New York. He was informed that a gentleman, who was waiting in the next room, was anxious to be examined; but only on condition that the examiner would allow himself to be securely blindfolded during the operation. Consenting to the odd proposal, Mr. Fowler's eyes were bandaged, and the stranger was led into the room. Finding that it was no ordinary head on which he placed his hands, the blindfold Professor gave a glowing description of the capacity and powers of his mysterious visitor. He ascribed to him uncommon powers of wit, imitation, and language; he could keep any company alive with his outbursts of natural merriment; he was sure to be a noted man, and either did or would occupy a prominent position in the intellectual world; and was certain to exercise great influence intellectually and morally. The delineation was true to the life, and when the bandage was removed from Mr. Fowler's eyes there was Henry Ward Beecher, brimful of fun and good nature. This playful test of phrenology was Beecher's merry way of looking up his fellow-student of other days.

(To be continued).

MEN AND WOMEN OF OUR TIMES.

LADY MACDONALD has a very striking countenance, and a marked physiological organization, as well as strongly-marked phrenological developments. She possesses a very positive character, and a very distinct organization. She should be known for superior qualifications as a scholar. Has a superior memory; acquires knowledge very easily; and is free and easy in conversation. Is also remarkable

for her power to acquire knowledge, especially through reading, and is capable of communicating her ideas with uncommon copiousness. She has good powers of observation, and seldom forgets what she once knows. She is alive to everything that is going on around her. Is particularly intuitive in her discernment of character and truth. She has clear and distinct impressions, and never hesitates in passing her opinion. Her first thoughts and impressions are her best. Her powers of criticism and of analysis are very great. Her head is unusually high, which indicates strength of moral character, and enables her to exert a very distinct moral influence. Her head is narrow, which indicates openness of mind, plainness of speech, and distinctness of action. Is remarkable for her promptness and efficiency; she comes right at things at once without going around the question. Firmness is very large, giving her strength of will and determination of mind, and withal great force and energy of character. She stands out by herself in a character of her own.



LADY MACDONALD.

Lady Macdonald, wife of the late Premier of Canada, is a native of Jamaica, where her father, Judge Bernard, served for many years in that capacity. She was married in London in 1867, and accompanied her husband a few months later to Canada. She possesses in figure the characteristics usual to those who have been born in Southern climes, for she is tall and well built, with a glow of colour in her cheeks. Her hair, which is abundant and as white as snow, is worn in a becoming style around her high, broad forehead. Her physiognomy indicates determination of mind, and a grave, earnest face, except when it is lighted up with a smile which dispels all trace of care and anxiety. She has the most winning style of entertaining her friends and callers, and no one who visits her, even for the first time, is made to feel he is a total stranger.

SIR JOHN MACDONALD.—The late Sir John Macdonald had a predominance of the motive and mental temperaments; he possessed a very high cast of mind, was no trifler, and was always in earnest. He had plenty to do because he could not be idle; he had a strong character, one that was not easily trifled with; was very firm, persevering, and tenacious; minded his own business, and finished what he began. Few persons were more distinctly individual in their thoughts and



SIR JOHN MACDONALD.

efforts, losing no time, words, or strength, than he. He had great powers of observation; all the perceptive faculties were large; was rather noted for his universal knowledge. He had great powers of speech, was naturally eloquent, could tell what he knew in a plain, straightforward, and, at the same time, in an eloquent manner. His memory of what he saw, did, and learned, and had become acquainted with, was good; he had a comprehensive judgment, was at home in one department about as well as another, and could do many different things; he was a kind of universal genius. He was a kindly-disposed man; benevolence was

large ; was much interested in the general welfare of society. He had extra taste, and sense of beauty and perfection, and took great pains to finish what he attempted to do. He was mindful of superiors, had the elements of reverence and respect ; was of the conservative type, yet was sufficiently radical to give offence to none ; he generally won people to his mode of thinking. He was much stronger in his character than he appeared to be under ordinary circumstances, because he was naturally polite and careful so that he did not offend, but having great will-power and determination of mind he was exceedingly tenacious. He was practical in his judgment, had a desire to perfect everything he did, and to project new labours and duties where others could be benefited thereby. He was not easily exhausted in his powers ; if he was thwarted in one direction, he could easily resort to another equally efficient. When examining his head in Canada I found his superior gift was that of a speaker and statesman.

The Canadian Grand Old Man, who died at Ottawa, on June 5th, was in his seventy-seventh year. He was born in Scotland, but went with his father to Kingston, Ontario, when he was five years old, and was considered "a clear grit Canadian." He commenced his education at Kingston Grammar School, but he was a man who, like Lord Palmerston and Lord Beaconsfield, held that a man's education should only cease with his life. He was conspicuous as a Canadian politician for forty-six years, and was Prime Minister for a longer period than all his contemporaries combined. In 1867 he developed the scheme for the Confederation of the Canadian Provinces, and carried through Parliament the British North American Act, which placed him foremost among the Canadian Statesmen, and secured his appointment of Minister of Justice and Attorney-General of the Dominion. He worked heart and soul to bring about Inter-Colonial trade, and when the Union or Federation was formed, he was asked to form the first Government for the new Dominion. The three chief features of Sir John Macdonald's work are—Confederation, the institution of the National Policy, and the provision of a Trans-Continental Highway from the Atlantic to the Pacific, across the British territory.

ORION.

It is never too late to give up our prejudices.—*Thoreau.*

The mistakes that we mortals make when we have our own way, might fairly arouse some wonder that we are so fond of it.—*George Eliot.*

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

16.—HOPE.

Expectation—anticipation—tendency of mind to contemplate the future with bright expectations of happiness and success.

This faculty expects to obtain and enjoy what the other faculties desire. This it does without basing this expectation upon any other grounds than the mere impression that things will happen as the individual desires that they should happen. By promising the continuance, and even the increase, of present enjoyments, by diminishing the quantity and the bitterness of present sufferings, and by predicting that the burden will be lightened, or that sorrows will be turned into joys, it adds greatly to the sweetness and the fulness of the cup of human happiness; and by representing things as much more desirable, and more easily obtained, than they really are, it contributes greatly to enterprise and effort.

This faculty not only embraces within its range the present state of existence, but, leaping the dark chasm of death, it revels in the prospect of bliss beyond the shores of time, as those in whom it is large generally believe in a future state of existence.

Its function is expectation in general—a vivid and intense glow of delight in the mere anticipation of future happiness and success; and the beauty of its manifestation is that the individual places almost as much confidence in the promises and allurements of this faculty as he does in the conclusions of reason or experience.

VERY LARGE.—One having hope very large, will literally revel in the bright anticipations of those enjoyments which he fancies are before him; and view the future with so high expectations as to be dissatisfied with the present, be it ever so satisfactory; will always live in the future, and long for its arrival; and thus often misimprove the present.

One having hope very large, with cautious. and caus. only full, will be always in chase of some new and desirable object in prospect; will have too many irons in the fire at once; will look upon even difficult attainments as very easy; be subject to frequent disappointments, yet neither disappointments nor misfortunes will damp the ardour of his hope; will be always upon tiptoe of expectation—always sanguine, cheerful, and lively, and, with large mirth, merry; be constantly building castles in the air; and hazardous in his undertakings; with large self-e., will think himself adequate to almost any undertaking; with large benev., will promise much more than he can fulfil, yet, with large conscien., and only moderate secret., will make his promises with the best intentions, and feel sorry that he cannot fulfil them; with very large cautious., will be tantalized with hopes and fears, and have the highest anticipations, accompanied with sufficient solicitude to cause him to proceed with great care and

deliberation, yet, with large combat., will combine discretion with energy; with only moderate acquis., and only full cautious., will live on, enjoying the present, and think that the future will take ample care of itself; and that plans will succeed to the utmost desire, even with very little effort, so that he will be predisposed to a life of ease, and idleness, and pleasure; and, with very large ideal., amat., and adhes. added to this combination, will be disposed to revelry and profligacy, and will be a spendthrift.

LARGE.—One having hope large, will contemplate the future with high expectations of happiness, and dwell upon his prospects with sanguine anticipations of success; will magnify advantages, and diminish obstacles; will be lively and sanguine; will feast upon the promises of hope. One having hope large, with only full cautious., will hope much more than fear, yet, with caus. large, will seldom allow his hopes to hurry him into imprudent measures; but, with the addition of large combat., firm., self-e., and ideal., will seem to be imprudent, especially when in pursuit of some most desirable object, yet his forethought and judgment will not only guard against misfortune, but secure success, even though he will seem to be very imprudent, and, when hope is excited, even hazardous: with only moderate caus. and cautious., may sometimes attempt impossibilities, and, with only full caus. and cautious., improbabilities; with very large cautious., will never expose himself to any of those dangers or losses which can be foreseen or provided against, even though he might thereby gain the more; with firm. and self-e. large will rise above trouble and adversity, confidently expecting that the scale will soon turn in his favour; will lay many new plans; form many new projects; and be prone to try experiments; yet, if concent. is small, will frequently change or vary them; with self-e. large and only full caus., will feel himself capable of attempting and effecting great things; think that he can succeed much better than others; and thus often attempt what he cannot accomplish; but with very large caus. and compar., and large intellectual organs generally, will hope for great things, yet hope within the bounds of reason; will be capable of projecting some stupendous work, and, also, of devising the means for accomplishing it; and will seldom or never fail in his projects, &c.

FULL.—One having hope full, will be reasonable in his expectations, and yet be spurred on by them to attempt important undertakings; will be cheerful, yet seldom elated with hope, &c. One having hope full, with large cautious., will forebode more evil than good, and endure present troubles well, yet live in dread of apprehended misfortunes; but, with the addition of large caus. and compar., will be pre-eminently judicious, calculate with accuracy, realise about what he expects, seldom be led astray by favourable prospects, rely more upon the dictates of reason than the promises of hope, and in the long run succeed far beyond his expectations, and accomplish more than most others; with large or very large acquis., may make great calculations upon amassing wealth, because his love of riches will be so great; and so of the other faculties that are large.

MODERATE.—One having hope moderate, will expect too little rather than too much; make few promises, either to himself or to others; will not be sanguine, nor have a high flow of animal spirits, &c. One having hope moderate, with large cautious., will anticipate the worst rather than the best, fear much more than hope, generally realize more than he calculates upon, dwell more upon the discouraging features of the case than upon its encouraging prospects; with large conscient., ven., and cautious., if a professing Christian, will have many doubts and fears as to his future condition, and lack



L. S. McLURE.—Moderate Hope.

Christian faith; with the propensities only moderate, will not be likely unaided to undertake and prosecute with vigour every important project; yet, with large firm., may hold on and persevere when he is once finally embarked, and is fully committed; with large caus. and compar., may be sure of obtaining his ends, but will be so because he sees by what means they are to be brought about, &c.

SMALL.—One having hope small, in addition to the manifestations described under hope moderate, will be hardly capable of having his hopes raised by the brightest prospects, and take little delight in contemplating the future; with large cautious., and only moderate

combat. and self-e., will be easily discouraged, generally fancy he sees some lion in the way, dwell chiefly upon the darker shades of the picture, brood over misfortune, borrow a great deal of trouble even in prosperity, fear to undertake or risk much lest he should fail, lack enterprise and buoyancy of spirits, delight to indulge melancholy feelings, &c. ; with only moderate mirth., and large ven. and conscien., will be often cast down ; with large combat., firm., self-e., and caus., may manifest a high degree of energy of character when once fully embarked in an undertaking, yet, unless actually obliged to undertake important operations, will shrink from them. Thus we perceive that they who have the most to fear in this matter, actually fear the least, and that they who have the least to fear, fear the most.

VERY SMALL.—When this organ is very small, its functions are too weak and too feeble to have very perceptible influence upon the character, or to be experienced by the subject.

The objects upon which hope fastens will be determined by its combinations. One having full, large hope, for example, with small acquis. and large philopro., will indulge the highest expectations concerning his children, yet exercise very little about property as such ; with large approbat. and only moderate or small religious organs, will hope for distinction and fame, yet his hopes will be confined chiefly to this life, and he will be sceptical concerning another state of existence, &c. Thus it is that hope acts with the greatest vigour upon those things which are the objects of the desires of the other faculties. Hence, some individuals are very sanguine about some things, while their hopes flag in relation to other things.

Hope has three divisions : the inferior division gives Speculation ; the middle division gives Hope Present ; and the superior division gives Hope Future.

LOCATION.—Hope is located in the brain on the second frontal convolution, where the elevator muscles are effected. The expression of hope is to smile and to draw up the corners of the mouth and eyes. Dr. Voisin, of Paris, is recognized as the greatest living opinion on paralysis, and it is his authority that it is this centre which is in a diseased state when persons become very excitable at one time and very despondent at another. A man who suffers from paralysis has a twitching of the corners of the eye and the mouth, and his character changes from a state of great cheerfulness to great despondency. In front of conscien., and behind spirit., being elongated in the direction of the ears.

(To be continued.)

INFLUENZA—A BIOLOGICAL STUDY.

ITS GENESIS AND EXODUS.

THAT there is a great want of general knowledge concerning the etiology of the epidemic of Influenza, is a fact greatly deplored both in the medical profession and by the public.

We seem to have received the Genesis of truth concerning it from some foremost minds, such as Dr. A. Carpenter and Dr. Richardson, but few, if any, have taken the trouble to go further, and consider and examine the Exodus of the matter. Having been asked to give our opinion from a biological standpoint, we trust to be forgiven if we criticise the comments that have already been made, at the same time giving our own theories for consideration. Dr. Carpenter has ably drawn attention to the fact, that unlike other epidemics, this one amongst us is subject to many variations, although it is also allied to the lines of causation which all infectious diseases are inclined to follow. It differs, partly because it is diffused by aërial means much more easily than most of the zymotic class; and, secondly, it differs from all forms of epidemics in its capability of being conveyed across wide expanses of water by the wind.

It is considered that the present epidemic is attributable to the great floods in Northern China, which have produced miasmatic influences that have been transferred to other regions, and that these organisms, enveloped in dense masses of vapour, have been blown over to the north by the south winds, and there distributed in the higher strata of the atmosphere.

To our minds, what is even more important than the origin of these microbes or miasms, is Dr. Carpenter's second point for thought, "The question of Contagion," and it is this point that we wish he had explained more fully. The reason why the disease affects some individuals and not others, and why some men become infected while exposed to out-door influences, and take the disease home to their household, while others escape, Dr. Carpenter attributes to the atmospheric conditions through which the organism is conveyed. We believe this to be the case as far as it goes, but we also believe other causes are at work, which any one who will examine the members of the families who have been afflicted with the epidemic as we have, will have observed that temperamental influences out-weigh even the atmospheric conditions. Otherwise, why does John sicken with influenza, and Edward, his brother, who has been exposed to the same atmospheric conditions, escape? John, we find, has a more susceptible temperament than Edward, which fact is daily proved in other cases. Badly ventilated dwellings are certainly more easily affected by epidemics than light, airy rooms. The close, ill-ventilated, well-curtained and carpeted houses "promote," as Dr. Carpenter says, "the growth of the disease;" thus wealth has this season had its disadvantages.

But the working classes and the East-end inhabitants, however plain and carpetless their rooms may be, are certainly not the most favourably situated for pure air, pure water, good ventilation, and sanitary arrangements ; hence the inevitable conclusion that temperamental conditions underlie the reason why some who have had nightly to tread their way homeward after the day's work is done (men who are not out engaged on Parliamentary duties, and who are not theatre-goers) have not succumbed to the epidemic. Upon psychological evidence, we find that the nervous and lymphatic temperaments, or according to recent nomenclature, the mental and vital temperaments, are much more easily influenced than the bilious or motive.

If we study the age in which we live, we find it is more productive of nervous prostration and nervous disease, or disorders, than formerly ; and the pursuit after knowledge, and wealth, is much more rapid, and under conditions less physiological, because of the haste to obtain them ; hence there is a greater drain upon the nervous and vital system, and sufficient time is not given to rebuild molecular power and nerve fibre. The chemical decomposition of protoplasm goes on, without sufficient thought being given to restore the exhausted bodily powers and nerve cells. Under this high pressure, it is of little wonder that those persons having a highly-wrought condition of the mental temperament are prostrated more easily than those of the less susceptible motive or bilious temperament. Then again, why is it that apparently strong, robust, healthy men, have been stricken down with the epidemic ? Many such have even died from the subsidiary causes brought about by Influenza. Experience again teaches us that the vital, or more particularly the lymphatic temperament, is susceptible to the ravaging influences of the epidemic. When those persons are seized with Influenza who are apparently in robust health, you will find that there was a temperamental condition which favoured a failure of cellular tissue. The most robust in looks are not the healthiest, and many are apt to judge of health by superficial indications, instead of by the quality and tone of the individual.

A person with the vital-mental temperament is capable of doing much hard work, but he is more easily impressed by environments, especially if vitality has become low, than a motive-mental, or even a mental-motive temperament. Thus two boys in the one family, possessing different temperaments, will not even under the same exposure be equally liable to take the disease. The study of temperamental conditions will greatly aid the professional man in

diagnosing Influenza. The medicines that will benefit one temperament will not touch another. Belladonna, which is a most effectual remedy for one temperament, is not equally efficacious with another patient.

Experts who have given much time and study to the subject of temperaments, ought to be able to assist greatly in the diagnosing of Influenza, and when so allowed, we believe the results or cures will be more rapid and effectual. As the epidemic is so distributed through the atmosphere, and as prevention is better, easier, and cheaper than cure, and although temperamentally we are not directly responsible for the inception of diseases arising from atmospheric germs, yet a wise Providence has minimised the difficulty, by providing a delicate arrangement in the nasal organ for arresting the microbe, if it is used for the purpose He intended. Another point in relation to temperament and the epidemic touches it during the stage of recuperation. A man with the best intentions goes to the sea-side, while his temperament needs the bracing air of the moors. Some find out too late that the air of the East coast, and the exhilarating atmosphere of the mountains, is too strong, while the milder, mellower atmosphere of the western and southern towns was what they should have sought. Is it possible to ascertain these facts? Certainly! It is the Hygiene of Phrenology. A more perfect knowledge of the workings of the mind, and how to call into activity such nerve centres as firmness, hope, combativeness, and vivacity, to battle this enemy—Influenza—is of great importance. It was through the examination of integral parts of the brain that Dr. Gall was able to effect a better cure of mental diseases and lesions of the brain than by any other means. Through the localization in the cerebral hemispheres of distinct motor areas, an experienced phrenologist can materially aid all classes of men to build up and oppose atmospheric conditions and influences.

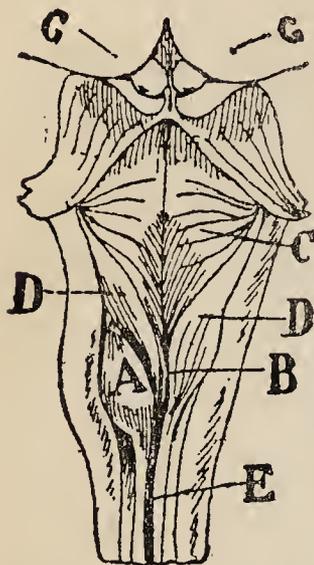
J. A. F.

Hygienic and Home Department.

MARVELLOUS SURGICAL OPERATION IN A NEW YORK PRIVATE HOSPITAL.

AT a private operating-room in this city one of the most marvellous pieces of surgical work—and, it may be safely said, one never before attempted—has just been performed. The audacity of the surgeon's knife, which spares neither brain nor any other of the organs hitherto called vital, has at last attacked the very seat of life itself.

Donna Maria Antonia de Romero, daughter of Don Dodriguez de Romero, of Rio San Diego de Cuba, a wealthy planter, was the patient, suffering from a



Medulla Oblongata.

- A—Tumour.
- B—Upper limit of centre of respiration.
- C—Floor of fourth ventricle.
- D—The alaene cineria.
- E—Spinal nerve of marrow.
- G—The Brain.

peculiarly obscure disease of the spinal cord and medulla oblongata. She had been taken to a great many surgeons in search of treatment, but could find none who could give her relief. The diagnosis of the tumour of the fourth ventricle and cord was made out, but no one could suggest a remedy. The sufferer visited the eminent medical men of the Old World and went from one to another in vain.

“The knowledge possessed by the medical profession on the surgery of this part of the brain is extremely limited,” said one of the operating surgeons, “and is confined mostly to cases in which the autopsy was the chief means of study. Dr. Wanicke has reported a case of about the same kind, on which no operation was performed, although long before his patient’s death he made the diagnosis of tumour of the fourth ventricle, and found at the subsequent *post-mortem* that he had been correct, and might possibly have removed the tumour had he tried,” says the *New York Herald*.

Drs. Barry and Bromwell report another case in which the same circumstances occurred. They were too fainthearted to attempt an operation, and their patient was allowed to die without an attempt to save his life. Sickling also reports a case of the same kind, and finally, Putnam-Jacobi has collected a long list of such cases from the reports of hospital records of *post-mortem*. Thus it will be seen that the chief difficulty is not the making of a correct diagnosis so much as it is the actual removal of the tumour. The medulla oblongata lies mostly within the skull, and the necessity for trephining not only the comina of the cord vertebra, but also the base of the skull, in the vicinity of an important blood sinus makes the operation one of extraordinary danger.

Donna Maria had been told that there was a chance of life if she would agree to have the crucial test made on her. But there was no hope without the operation. She was told that a risk no other had dared to run would be taken by the surgeon who presumed to lay a knife to the base of her brain, the home, perhaps, of the “quivering spark” itself. And she consented. For madness stared her in the face.

The medulla oblongata, in which the fourth ventricle is

situated, contains in an extremely small space a nerve centre that presides over almost every function of the body. To injure that means immediate death. So delicate is the medulla that the thrust of a needle into it proves instantly fatal.

The supposed cause of her sufferings was this: Many years ago she had received a fall, striking on the back of the head with considerable force. The immediate result was the partial paralysis of the lower parts of her body, produced, doubtless, by a lesion within the spinal column and the formation of a blood clot within the canal around the spinal nerve. In the course of a year she got better, but both legs and various areas of the body remained paralyzed. For years she was unable to get out of bed. About a year ago she noticed that the paralysis was increasing, and that the motion of her heart was interrupted by some unknown complication, and that breathing and deglutition were also being affected. Of late the last and most trying development of all appeared—she could scarcely breathe at times and in some strange way she seemed slowly suffocating.

Some time previous to the day of the operation she was removed to the private hospital of the surgeon referred to. At three o'clock p.m. on the day of the operation she was well under ether and a silent group of surgeons stood around her. The operator had invited a number of specialists to be present. Taking a sharp scalpel the surgeon began by making an incision in the back of the patient's neck, commencing from the occipital protuberance and running down to the base of the neck directly over the backbone. He now deflected the strong band known as the *ligamentum nuchæ* to one side, and continued his incision down to the *vertebræ* of the cervical part of the column. No sign appeared of a tumour.

"It must be entirely," said the operator, "within the bony canal of the spine itself." He now carefully dissected away the muscles from the *lamellæ* of the second and third vertebra. Then, taking a trephine, placed its sharp teeth against the bony wall of the canal and slowly worked it into the cavity, cutting away a button-shaped piece of bone directly over the exit of the *medulla oblongata*, which here comes from the cranium. On removing this the meningeal membranes came out of the aperture thus formed as though there was considerable pressure within. This was good evidence that the tumour was close by. But there was extreme danger of wounding the centre of respiration, which meant immediate death, if the least false move of the knife were made.

The first problem was to discover, if possible, what part of the medulla was presenting itself at the opening. As this could not be done from only one opening, another button of bone was removed slightly higher up at the base of the skull itself, and the same protrusion of membrane took place from the new opening. And now the wing-like markings that cross the medulla at the fourth ventricle could be made out. These are the *aleæ cineræ* of the physiologist, and just below their confluence lies the terrible centre of respiration.

This centre was quickly recognised, and to one side of it, directly infringing on its boundaries, lay a small red prominence, oblong in shape, and not larger than a bean. The experienced eye of the surgeon at once recognized this as a tumour of the sarcoma type. The whole cause of the patient's long years of suffering was made clear! This tumour was slowly but surely destroying the nerve centres of the medulla.

The danger of removing the tumour from such a vital spot was apparent to all, and the surgeons consulted in a low voice before proceeding further. Then the operator took up a delicate, almost fairy-like knife, or bistoury, and began to cut between the tumour and the nervous tissues of the medulla. Great drops of perspiration stood out on his forehead, and, except the heavy breathing of the patient under ether, the room was as silent as a tomb. The least cut of the knife into the medulla meant death; her life hung on a hair's breadth. Should the patient cough during this delicate dissection and turn aside the sharp point of the knife death would be instant.

But the surgeon was quick and marvellously skilful; a few cuts more and it would be over. He had just removed his knife from the wound to change it for a sharper one, when the patient coughed. Providence or chance saved her, for had the knife been there the movement of the head would have been fatal. A moment more and the tumour was removed. But the tension on the operator's nerves had been so great that he was now obliged to stop a moment before finishing the operation.

After a brief interval the parts were carefully examined and no other tumours were found. The wound was now treated antiseptically and closed, drainage tubes being left in to allow the free discharge of any resulting products of healing.

One of the most remarkable circumstances of this operation was the immediate improvement of the patient's breathing and of her circulation, once the tumour was removed. She stood the operation very well.

The Labour Bureau.

A Labour Bureau has been opened by the Fowler Institute, to assist people who are seeking employment, and also to aid heads of firms to secure suitable employeés. It is hoped in time that this department will become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C.

A MODELLER is wanted by a first-class firm.

AN ARTIST is asked for who can draw ready sketches for journalistic work.

A LADY desires the post of private or business secretary ; is well educated, and has had the experience of a writer for many years.

A LAD of mechanical talents is anxious to learn manufacturing jewellery.

YOUNG INTELLIGENT LAD wants to work his way up in a Hydropathic Establishment. He would make a capital masseur.

A TEACHER who is admirably adapted for teaching children, desires an opening in a Kindergarten School, to learn the system.

A GENTLEMAN of ability desires to get literary work.

Fowler Institute Notices.

THE July Monthly Meeting of members will take place on Saturday, July 25th, at Mr. Fowler's private residence, when Mr. Coleman will read a paper. There will be no monthly meeting in August.

THE next Session of the advanced class will commence on Monday, September 7th, at 7.15 p.m.

THE next Artizan Class will commence on Friday, September 11th, at 7.15 p.m. In connection with the Artizan Class, a friend has offered four "exhibitions" for women and four for men, which will cover the cost of instruction to the above number of students who pass a test examination. The Secretary will be glad to receive names for either of these classes, and to give any further information.

ON Wednesday evening, June 10th, the lecturette was given by Dr. Hall Williams, whose subject was "Health." The lecturer was most practical in her remarks, and gave much valuable advice on how to secure and retain health. Dr. Williams has practised medicine in London for many years, and is well versed in all hygienic and medical topics.

THE Wednesday lecturettes will be discontinued during July and August. They will re-commence on Wednesday, September 9th.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

W. G. (Co. Down).—The photograph of this gentleman indicates an inspiring mind; is high in the crown of the head, which makes him quite ambitious, manly, and distinct in his character; especially sense of honour, justice, and character are prominent. He is naturally industrious, energetic, and if necessary, forcible; does not stop at trifles; is very candid, open-hearted, and shows out what he really is. His practical judgment makes him quick of observation, interested in all scientific experiments, and quick to gather knowledge as to what is taking place. He is generally in earnest, may be lively in conversation, but does not sacrifice the truth for a joke; is condensed in his style of talking, means much by the little he says. He is orderly about his work, and does it so well that it does not need to be done over again. He prefers to live an active, industrious life, than to be confined to the desk. He is alive to the doings of the day. The lady shows a good business head, and is a good judge of human nature. There is no apparent reason why they should not be adapted to each other, and live a happy married life.

J. D.—Has a predominance of the mental temperament. He is very eager to know all that books can teach; acquires knowledge very easily; is correct in his perceptions of things, forms, proportions, and places. He is exceedingly earnest and sincere; he is too industrious, and liable to overdo in one way or another. He has a great amount of activity, spirit, and ambition. He will need to take care of his diet, avoid extremes in work, and be out-doors taking in plenty of fresh air. He is persevering in his efforts, quite sensitive to praise or blame, and is willing to make personal sacrifices for others and the cause he is labouring for. He has a retiring disposition, is domestic in his feelings, but likes vital and animal life. A sea voyage, or outdoor labour that is not hard, would be much better for him, for a time, than an indoor life or one of study. It is natural for him as well as for other members of the family to make personal sacrifices for others. He must learn how to live and take care of himself.

T.S.—Has an available brain, is public-spirited, and has an original mind with large conceptions. He will be given to reason, and will want to stand before the public. He will early show gifts as a speaker and reasoner. He is much interested in the welfare of others. If he follows his strongest inclinations he will make a public speaker and teacher, and do public work. He has a predominance of moral power, and eventually will show more than ordinary cleverness and ability.

THE FOWLER INSTITUTE.

THE ordinary Monthly Meeting of Members of the above Institute took place on Saturday, June the 20th, at the President's private residence, at which both town and country members assembled, and spent a very enjoyable afternoon. A photographic group was taken on the lawn, after which about fifty members and friends sat down to tea. After tea we had a half-hour's stroll across the fields, and returned to listen to Mr. Fowler's "Phrenological Reminiscences," read by Miss Jessie A. Fowler, at the close of which several well-known friends spoke of the benefits they had derived from phrenology, including Mr. George Ling, of London, Mr. S. Hoyland, of Sheffield, Mr. William Musgrove, of Oldham, Mr. Osborn, of the National Kingdom Alliance, and several other town members. Letters were read from many absent friends unable to attend. We then adjourned to another room to view the curiosities and relics, collected by Mr. Fowler and his family during their travels, which brought to a close one of the most enjoyable and interesting meetings of members of the Fowler Institute we have ever had. Before dispersing, we all wished Professor Fowler many happy returns of the day (this being the celebration of the 80th anniversary of his birthday), in which, I think, all the readers of the PHRENOLOGICAL MAGAZINE will join. ONE OF THE MEMBERS.

Book Notices.

Tinsley's Magazine for July, we understand, will contain a biographical article and portrait of Mr. Fowler. Those wishing to obtain a copy may send their orders to the office of the PHRENOLOGICAL MAGAZINE.

THE eighteenth edition of the popular "Illustrated Self-Instructor," by L. N. Fowler, is just issued. The volume contains two new tables or charts, which will increase the value of the book in recording character. It also contains a portrait of L. N. Fowler. The price, 2s., places it within the reach of all who wish a condensed explanation of phrenology and its teachings. It is probable that more than 250,000 copies of this work have been sold in this country and America, which speaks for itself.

"THE Human Face Divine, and How to Read it," by Prof. J. J. Spark, F. S. Sc., 1s. ; London, L. N. Fowler, Ludgate Circus, E.C. To the student of physiognomy this will prove of much interest and instruction ; some excellent remarks are here made by Mr. Spark on the characteristic features of physiognomy, illustrated by faces of celebrated men. The chin, mouth, lips, nose, cheek, neck, forehead, ears, hair, and eyes, are described with suitable illustrations, thereby greatly assisting the reader to grasp the subject. This little work is well written, and most entertaining. Those who desire to become acquainted with physiognomy ought to procure it.

PUBLISHERS' DEPARTMENT.

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ALL CONTRIBUTIONS for the PHRENOLOGICAL MAGAZINE should be addressed to the Editor, Office of Magazine, Imperial Buildings, Ludgate Circus, London, E.C.

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LETTERS OF INQUIRY requesting an answer by post should enclose stamp for return postage, together with name and full address in every letter.

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THE
Phrenological Magazine.

AUGUST, 1891.



EMPRESS AUGUSTA.

EMPRESS AUGUSTA has a favourable organization. There appears to be an ample amount of vitality, animal life, capacity to labour, endure, and enjoy. She is fairly balanced in the temperaments, with perhaps a predominance of the vital, then motive, lastly mental. She is one of that class that is always growing better, improving and making advancement, because she is taking on a higher degree of the mental temperament, and

her mind is becoming more clear and quick. With her present organization she should be known for exerting a healthy influence over others, rather than a stimulating one. Persons become more equally harmonized and better balanced by the influence she exerts over them. She will make friends that she will keep. She acts out her own real nature, and improves on acquaintance. She requires force of circumstances, or very favourable surroundings, to call out her mind, so as to enable her to appear at her best. She is about the same in her ways and manners every day, under all circumstances, and is particularly known for her good common sense, and every-day substantial influence that she exerts over others. She is not specially witty, brilliant, showy, or fashionable, but she is particularly observing, takes correct stock of everything ; is governed by her experience and observation. She has a capital memory of all she sees and does, and is very correct in her abilities to discriminate, analyse, and compose. She knows how to take the advantage of circumstances, and is characterized for looking ahead and planning beforehand what she is going to do. She has presence of mind in times of danger. She is a true child of nature. If left to herself she would not seek publicity and notoriety, but being placed in society where she has to take part, she follows that course which does not lead to excess, and says and does such things as the occasion requires. She would, under ordinary circumstances, make a superior business woman ; would manage affairs well, superintend and oversee correctly, and carry a large business in her mind. When she is allowed by circumstances to appear naturally and at ease, she is almost a model of a woman for others to follow. She is rather remarkable for her powers of intuition ; she is quick to perceive the state and tone of mind of others, and decides on all questions at once. Her decisions are not the result of deep and hard thinking, but her mind culminates very quickly and correctly. She knows by intuition and common sense that things are, and must be, so and so, and cannot be otherwise. She seldom argues about anything, but makes a clear and distinct statement how things are. She is quite reliable in her judgment for her large perceptive intellect, her clear and active memory with reference to what she has experienced and gone through, and her disposition to state things as they are, which enables her to get at the truth at once. She is not carried away by her imagination, and does not magnify and embellish so as to make facts useless. She is able to go through much hard labour, and is also able to transact a large amount of business without chafing or getting

her mind out of order. She is characterized for clearness of judgment, for self-possession in times of danger, and for giving substantial advice. She is satisfied with what affection she can gain ; is also pleased to receive compliments where they are not simply to gratify vanity, but she does not put herself in the way of being complimented. She sustains her dignity well, is not generally very familiar, but is sufficiently entertaining. She contents herself with talking when she has something to say, and she talks sensibly when she does talk. She does not encourage anything that is simply sensational, or to say and do things to be in the fashion. She will bear well and will last. She is in no way in sympathy with those who are the butterfly of the hour, but she is adapted to the real, stern duties of life, and appears to as good an advantage in going through severe trials, in taking heavy responsibilities, and in being able to regulate the conduct of others, as well as to take life in its more sympathetic and pleasant aspect. If anything, she appears to a better advantage in the hour of trial and in complicated difficulties than anywhere else.

She has a good control over her spirits and temper, and can feel strongly ; at the same time regulates those feelings. She is rather reticent, not forward to tell all she knows, but has two ears to listen to what others have to say. In many respects she is a model woman. She minds her own business, looks after her duties, and attends to family and home first, and has no nonsense about her. Circumstances being favourable, she will live to a great age, for she has a most substantial constitution, and must have come from a long-lived ancestry. She acts upon the principle of enjoying herself as she goes along, and makes the best of a bad case rather than chafe and fret because everything is not exactly to her hand and liking.

She will necessarily improve as she grows older and has increased experience. Her special ambition in society or at the head of a family is to give good advice, to do and say what is necessary, and do that as quietly as possible. She is not a sensational woman, but decidedly domestic, companionable, and practical.

L. N. FOWLER.

[See the August number, 1888, for the character sketch of the Emperor of Germany.]

WHAT IS PURE PHRENOLOGY ?

To draw a line sharply, and so define the boundaries of phrenology, is surely a very difficult task. Phrenology claims so much as within its legitimate scope that more than the head has always to be taken into consideration in correctly

diagnosing character ; and for the matter of that, the object of the phrenologist being by all available means to get to the very top and bottom of individual capacity, there is no reason worthy of a moment's consideration why he should not avail himself of everything comprehended within the wide range of the science of anthropology—if so be, he can encompass it—to aid him at every point in his diagnosis and deductions.

Thoughtful men are ever suggesting that whatever the head may accurately indicate, there are points in the face and features, as also in the body proper, in sympathy and in agreement with the phrenological organ. Joseph Rhodes Buchanan, M.D., has—to his own satisfaction at least—elaborated a system he denominates sarcognomy, by means of which he undertakes to show human tendencies and abilities. He has followers, and is himself, well worthy of respectful attention ; and it is too much to expect that any fair-minded or unprejudiced person should entirely overlook the claims of affiliated or kindred subjects like this to his or her attention.

Probably the day is nearing when all who claim to assist their fellows after the manner of the phrenologist will require to have a more wide and embracing field of operations, and so actually take the designation of anthropologist. Very few phrenologists of any repute to-day are at all satisfied with being limited to pure phrenology. Their experience and research leads them into neighbouring domains, and as they explore therein they add so very materially to their own value and usefulness, that they are encouraged to proceed onward in their progressive career ; and many of these are largely disposed to think and act as though what is denominated pure phrenology, is only a small portion of the greater science of anthropology. Be that as it may, the natural trend of all capable phrenologists to-day is to extend their domain as much as possible, and to know all they may and can in any way bearing on health and hygienic matters, thus to make their services of the utmost appreciable value to their fellows.

When once it becomes the fashion to study for the practice of phrenology, just as it is done for medicine and the law, the extreme probability is that it will be counted essential to embrace more than the head as the organic mind and nerve centre, and at least to take into devout and attentive consideration the whole of the nervous system. There are quite a number of nerve centres, called by some physiologists “little brains,” which are scattered about the vital system ; and these fulfil independent and important nerve or mind functions, which more than mere curiosity and a love of the marvellous

would profit us as mental scientists to investigate. The function of the solar plexus, located near the spinal cord at the back of the stomach, it would be interesting and instructive to intelligently grasp ; and if so be this or other nerve centres have any exterior modes of expressing themselves—which is probably the case—why should not the intelligent comprehension of such details be included in an acquaintance with pure phrenology ?

We need to be very cautious how we fetter ourselves in these important matters. *Man, know thyself!* is not extended to its full scope until it encompasses all that the term anthropology covers. Concentration on parts of the wide subject has its temporary or time-serving uses, and serves its purpose beyond question ; therefore the focussing of attention upon brain as the organ of the mind has been a most essential feature of anthropological research hitherto, but as so much good work has already been done by its pioneers, which cannot need greatly interfering with, the progressive student is thereby afforded leisure to make a wider excursion in his great domain, and so encompass all that comes fairly within his explorations.

Progressive minds in the very nature of things will neither be restricted nor held back. Generally they are not incredulous, nor are they hampered and hindered with harrassing doubts and misgivings ; consequently, while incredulous ones linger in the field of investigation on the most minute points and topics for many years, they otherwise lengthen their cords and extend their stakes far and wide in all the surrounding fields, and become thereby conversant with many things of a very helpful character in addition to those which the incredulous ponder over so ponderously.

Don't be alarmed ! Every man to his trade. Every mind to its bent. The more variety the better for the race. Too many running on narrow lines is no great advantage ; so, too, many seeking to broaden their views may not be any more accommodating. It takes all sorts to make a world, as it takes many microscopic monads to make a body, or even many to make any one of its members or organs. Perhaps we have not shown in this article, in so many words, what is pure phrenology, for is it called for ? but we have suggested what it should aim at, and what it in reason might be expected to include. Why should not the medical profession coalesce with it, and so consolidate it ? When medicine trusts more to prevention of disease than the cure of it, and the teachings and practice of hygiene are more in vogue than the contents of the pharmacopœia, we may expect

to see the practice of phrenology and medical treatment fully reconciled, and going hand in hand together, by one professor fulfilling the two duties.

This co-mingling of matters is somewhat in advance of the individualistic age we live in, but matters in history clearly indicate that something transitional is transpiring, and what may be the outcome thereof it is quite hard at present to determine. No doubt phrenology and many other affiliated subjects have dropped into human thought and the world's history in the very niche of time, and so that they may have grown into such an advanced stage of usefulness, as to be ready for some important purpose they are destined to serve in the world's economy, when they are imperatively demanded by greatly altered circumstances. It is not difficult to see that ere long some other means than the happy-go-lucky one now common will be demanded to place every member of the human family where it may work without friction, and also to the best advantage of every other member of said family. All these sciences now clamouring for acknowledgment and place as qualified means of assorting human entities, have not come into the world's history at hap-hazard. They have come quite apart from human consciousness, when it was known they would be wanted, and they have come to stay ; and whether pure phrenology, or the wider subject of authropology, is to take the field when the time arrives for its predetermined and efficient service to be rendered, it is enough for us to do our best meanwhile to qualify ourselves for all contingencies.

THEODORE WRIGHT.

SUGGESTIONS TOWARDS OBTAINING AN IMPROVED PHRENOLOGICAL NOMENCLATURE.

PART I.

IF the Phrenology of the present day is to pass onwards from soul manifestation, and take the final and only other step possible to complete a knowledge of the whole round of Human Nature, viz., the investigation of the pneuma, with its organ, it will not be amiss, but rather in fuller accordance with advanced phrenological notions, to discard the use of certain words devoid of sense-meaning, which have become current in philosophical writings : such as, the frequent use of general for particular terms ; of mistaking the meaning and functions of abstract words ; of endowing and personifying words, as if they were the symbols of some unique and

independent beings ; of viewing words as if they were the signs or symbols of individual things, when, in fact, they are only the shorthand characters of whole extended sentences, and used for the condensation of thought, and of rendering clearer the meaning intended to be conveyed by authors. It is this class of symbols, these "winged words," which give to composition its elegance of form, pointedness of meaning, and clearness of thought-expression, and which renders cultivated languages so superior to those of the barbaric and the less cultured. These phonetic signs, not of thoughts, but of a number of words linked together, are found in vast numbers in all advanced languages, and yet their purpose had been unaccountably lost sight of, until Horne Tooke, in the "Diversions of Purley," and, later on, Dr. Edward Johnson, in his "Nuces Philosophicæ," tore away the veil, and displayed their beauty of formation and usefulness of purpose, to all minds capable of philological appreciation.

Had philosophers looked at language through the spectacles of the author of the "Diversions of Purley," what mountains upon mountains of pure, unadulterated nonsense had never seen the light, and men, of undoubted talent and profound genius, would have saved themselves the trouble of using words whose sense, or real meaning, they were ignorant of. In consequence of this ignorance, much verbal fustian has been palmed upon society under the grandiloquent phraseology of "The Philosophy of the Human Mind!!"

The words "THING" and "MEANING" will first require to be explained, as they have much to do with what follows.

The word "thing" is of universal application, whatever name it may be called by, and which no people can do without, whether it is called *Res* in Latin, *Crema* in Greek, or "THING" in English, the senses can only appreciate the objects to which their structure has severally been adapted, and no other ; but there is no THING, in the wide universe of God but what can be "talked about," *i.e.*, "named ;" and "the named" is the real meaning of the word "Thing." It is derived from the Anglo-Saxon verb Thingian, to speak, and, consequently, the noun "thing" will mean "the talked about," "the named." As we cannot speak of an object without calling it by a name, it is this meaning of "name" which renders the word "Thing" of such universal application, and that, too, in all languages, whatever the words made use of may be, as they all must signify "the named," "the spoken about." All we know of external objects is, that they produce sensations by means of sense-organs, to which a name has been given

applicable to the kind of sensation perceived, and to which a word-sign has been given.

The meaning of a word, then, should call forth the very kind of sensation to which the sign-word of that thing was first applied. If, when the word is pronounced, the sensation does not come into action, in some way or other, the sign-word representing the sensation has no meaning, being merely *vox et præterea nihil*—a mere “hem” before a cough—and nothing more.

Our next word to remark upon is that of the signification of the word “meaning” itself.

When one presents a bank note, one wants gold in exchange, and not another form of paper. So, with regard to the meaning of a word. We wish to have the meaning which originally gave rise to the imposition or formation of the sign-word, not that of another word having a somewhat similar meaning; and it is too bad for this other word to be palmed upon one, as if this mere verbal exchange were the original golden meaning. Society has had sadly too much of the Doctor-Samuel-Johnson-Dictionary-Sham-meaning of words palmed upon it, and such puerilities as, wrong not right, and right not wrong, meanings more fitted for the Hottentot than for Englishmen.

The real meaning of a word (we do not refer to that symbol, or shorthand sign of a whole string of words) is a sensation produced by the perception of a thing, between which, and the sign-word, some relation was thought to exist. In many words, the relation between the sign and the thing signified is obvious enough, but, in other instances, it is not so. Take the word guzzle, imitative of that peculiar noise made by a liquid, as it issues, by gushes, from a narrow-necked bottle, as a good example of the meaning of a word, where Pope says “The sound is an echo of the sense;” and there are scores of words, where “sign” and “meaning” are markedly evident; but this adaptation of sign to thing, is not so palpably evident in all cases. There is always a reason however for the imposition of a name, and if not so manifest sometimes, there is always a tendency to make an approximation towards showing a lingual reason for using a certain special sign, rather than that of any other.

Etymology is the only standard we possess of knowing the original sense-meanings of words. When that is lost, the word is at the mercy of any set of sciolists who may choose to fix any meaning to it which may suit their purpose. This was the case with the word “mind” itself, until its etymology was unearthed by Horne Tooke, and its original meaning

developed. Fortunately, such was not the case with the word "meaning," now under consideration. The word "meaning" is derived from the Anglo-Saxon verb *mænan*, to speak, or remember. The meaning of a word is what the utterance of that word speaks to us; whatever thing, a word causes to speak to us, is the meaning of that word. But before the meaning of a word, uttered by a speaker, can be imparted to another person, the sensation must have been in that other man's soul, *i.e.*, must have previously passed through one of his senses, else the word would be the sign of nothing. The sensation-meaning of a word must be IN a man, before it can come FROM a man, and go TO some other man through the medium of a word. Things, or objects without, must have acted on the senses before the meaning of a word can be known. In fact, every word has either a natural, or sense-meaning; or a verbal, or language-meaning, the knowledge of the former, being obtained directly through the senses, and that of the latter, indirectly, by a person having the power to translate and re-translate the verbal sentence of which the representative word is the sign or symbol. Hence, the importance of training to a knowledge of the original meaning of words, from the beginning to the end of education; and that, too, in every department of study. Every word is a nut with a kernel inside. That nut-word should be cracked and the kernel-meaning well masticated and digested, in order to give intellectual vigour for future advances in knowledge.

Our next word is that of "MIND," whose etymology was lost, but is found again, but which, whilst in phrenological undress, was arrayed, by the metaphysical school of philosophers, in all manner of garments—many coloured—like that of Joseph, of old, when sold into Egypt.

The word "mind"—if it be a word, and not a mere sound—will have either a natural, or a verbal meaning; *i.e.*, it will either be the sign of a thing or else a shorthand character for a number of words, used for the purpose of convenience and despatch. If the word "mind" is not a word, with a sense-meaning, or a shorthand sign, of other words, it is a sound only, and may be put in the same category as that of the braying of an ass.

It is certainly an old metaphysical word, but whether philosophers, writing on the science of Soul and Spirit, have adopted the meaning stamped upon it at its original formation, the etymology of the word will have to determine.

Horne Tooke has shown that numbers of this class of terms are merely the past participles of Anglo-Saxon verbs. "Mind" is the past participle of the verb, *mænan*—to remember—and

is formed thus : Myned, myn'd, mind ; as head, is heaved, heav'd, head ; and flood, is flowed, flow'd, flood ; with scores of others formed after the same way. The word "mind," then, means something, anything remembered. The "remembered somethings" are a man's life-long sensations, which, if put down in sequence-form, would number tens of thousands, and yet this one word "mind" stands as the shorthand character of all the sense-impressions of the whole pack of remembered sensations for a long life. What a lingual convenience, and what a clearness of soul-vision, this phonetic class of words gives to both written and spoken intercourse : and our language is brimful of such Algebraic signs.

If the meaning of—memory of remembrance—and of other words of the same class,—was stamped upon the root-word of "mind" at its first formation, in what sense HAS it been, and IS used, by metaphysical writers and philosophers in general ? Have they had the audacity to clothe the word in another lingual dress ? They have ; and trotted it out, too, as a full personified, thinking intelligence, as if it were the very Soul itself ! These philosophers have not only deprived the word of any meaning at all, as far as their use of the word is concerned, but have actually re-dressed it, in such gorgeous attire, that the whole world of philosophy, even at this day, bows down and worships at the altar of this verbal imposture !

The word "mind" cannot be perverted, sensefully, from the inherent meaning stamped upon it, at its original formation, as it was the sign of a series of sensations ; and a knowledge of such sensations is all we know about the things. Hence, the use of words, is to cause these sensations—these realities of nature—to be remembered ; for this is all the word "mind" can mean, viz., remembered sensations—one or ten thousands—numbers matter not.

The truth is, the knowledge which the soul acquires in its totality of action is its "mind," or "memory," or "remembrance," or "recollection," for they are all synonymous terms, the three last being merely a set of Anglo-Latin-English words to express the meaning of the word first alluded to—viz., "mind" (*i.e.*, myned, myn'd, and, lastly, mind), and which word "mind" means, and can only mean, "something, anything remembered."

The first fact learned, in the drama of life, is a little streak of mind, seen on the spirit-horizon ; next comes a bit of remembrance, and a bit of memory ; a few packs of these kinds of sensation next present themselves in sequence ; ultimately they are taken in, and apprehended, at one Soulsh effort, and are said to be, and are called—recollected sensations ;

and the word "mind" was the word coined as the "sign" of these remembered sensations, whatever the number, and however designated. The "mind," then, is not a function of the Soul manifested by a cerebral organ, but merely a shorthand character to represent a number of linked-together sensations—memorised, remembered, recollected—during the progress of life; and the man who lives the longest can boast of having more "mind," *i.e.*, remembered sensations, garnered up in science, literature, or collected from following pursuits in the ordinary walks of life, than most or any of his friends or neighbours.

This is a very different view of the functions of the "Human Mind," pompously so called by the old school of metaphysicians, who, having set up a sort of fancy mental creed of their own, endowed it with attributes of their own manufacture, and then, with daring audacity, and with a flourish of philosophic trumpet have carried this factitious nonentity into the very domains of the Soul itself, and bid it SIMULATE the attributes of that invisible power: and, "Mirabile dictu," this literary fraud, this philosophical quibble, has been accepted, as if incarnate truth,—and for ages too,—and thousands of philosophers have bowed down and worshipped at this sham altar of knowledge. What a marvellous deception! and how wide its belief!

In a concluding article we intend to analyse a few more of these so-called abstract words, the terms of an effete philosophy, and try to prove how little they have had to do with soul-workings and spirit manifestations—words which are mostly, and absolutely, the *Epea Pteroenta* of Homer, the "winged words" of language used for convenience and dispatch. These words do, in literature, what the letters x, y, and z do for mathematics—clear away the rubbish of language not understood; make thoughts simple, and more understandable, and in this way, tend to facilitate the transmission of brightly-conceived ideas into every department of human knowledge.

SAMUEL EADON, M.A., LL.D., Ph.D.,

Bristol, May 15th, 1891.

Our great business is not to see what lies dimly at a distance, but to do what lies clearly at hand.—*Carlyle*.

He only is advancing in life, whose heart is getting softer, whose brain quicker, whose spirit is entering into living peace.—*Ruskin*.

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

[Continued.]

III.—PULPIT OR PLATFORM: PIONEERING PHRENOLOGY:
SOMETHING DONE.

The two students eagerly perused the books lent them by Beecher. That they were profoundly interested goes without saying, seeing that their combative companion had been worsted in his attempt to crack the phrenological nut. They did not, however, rashly jump to the conclusion that phrenology was all its professors claimed it to be. The facts were certainly very striking and suggestive; the theories seemed plausible and not improbable; but the Fowlers were determined to test and prove them for themselves. And they did so. Beecher's books, and every work on the subject which they could procure, were read and re-read; in addition to their book-studies, numerous observations and testing experiments were made, with the result that they were thoroughly convinced that the phrenological system propounded by Gall and Spurzheim was founded in Nature. All the while they were prosecuting their inquiries into phrenology, they continued their other studies with unflagging zeal. Their one inspiring ambition still was to work their way through the college, and fit themselves for the ministry.

For some considerable time after they accepted phrenology as true, they had not the slightest notion of starting out as professional phrenologists. But they were full of the new science, and were led to speak out. Constrained by the fervid enthusiasm of their first love of phrenology, and a conviction that its truths ought to be made known, they began to talk about it and then to lecture. They had thoroughly mastered the general principles of the system; and, as the public interest in the subject was deep and widespread, and people were keenly anxious to hear something more about the new mental doctrine, the young phrenologists were bold enough to venture to impart the desired information. Their decision to try their 'prentice hand at lecturing on phrenology did not remove from their minds the hope that they would ultimately become preachers. They believed that in the lecture-field they would gain valuable experience, which would be of practical service to them when they attained the position of ministers or evangelists. The march of time and events, however, enlarged and slightly altered their course. Before they had been many months

engaged in their novel vocation, they found a sphere of wide and promising usefulness opening out before them of which they had never dreamt. In course of events they came to the conclusion that they could not do better than go right ahead. That the decision come to by the Fowlers, to go straight ahead in the work which came so unexpectedly to their hands, was a wise one has been fully proved by their life and work.

And so it came about that they left Amherst in 1834, and commenced to spread abroad, by voice and pen, the truths of phrenology. Requests for lectures were received from all quarters. The interest in the subject extended and deepened very speedily, and at an early period of their public career they had enough to do to keep abreast of their engagements. In 1835 they were compelled to open central offices in New York; branch offices were also opened as became necessary in the principal towns which they visited. By-and-bye the *Phrenological Journal* was started, under the editorship of the elder of the two brothers. It proved a phenomenal success; the circulation rapidly increased until the average monthly issue was twenty thousand. Books and pamphlets were also published in immense numbers, dealing with education, mental and physical culture, health, temperance, and kindred subjects.

Before half-a-dozen years had run their course the lecturers had secured for themselves a unique position in public favour. Their popular demonstrations, held in the largest halls, and frequently in chapels and schools, drew large audiences. The newspapers fully and fairly reported their lectures, and gave prominence to the striking delineations of local notable men which formed the finale of each lecture.

In a few years they had gathered a rare collection of skulls, casts, and portraits. They had also carefully selected specimens to illustrate each of the various temperaments, and a variety of combinations showing the groupings of the organs. They were fortunate in securing masks of most of the Combe collection in the Phrenological Institute, Edinburgh. By exchanging casts and busts of their own collection, for casts and busts of notorious criminals and notable characters, with Deville of London, and the Phrenological Society of Paris, they added still further to their stock of crania, and became the proud possessors of a collection of phrenological specimens more numerous and select than any other similar collection in the world. They had two cabinets of crania, one in their office, Broad Street, New York, the other in their Philadelphia depôt. Each of the cabinets contained

about one thousand specimens, and both were open to the public.

At an early period of their career, a chart was prepared to meet the demand of their patrons who desired a record of their estimate of the size of the organs. This chart, produced fifty-five years ago, was a very unpretentious single sheet. It has been improved and enlarged as every new edition was issued, and is now a most interesting volume of about two hundred pages. This little book is the combined production of both the Fowlers, and is known and highly valued all over the world as "Fowler's Self-Instructor." Apart altogether from the tens of thousands supplied to those who have had personal consultations, it has had an enormous sale amongst the general public. Over a quarter of a million copies have been sold in this country and America. It contains the essence of the phrenological system, and may be termed a trustworthy A B C guide to the science. Two new tables or charts, and an excellent portrait of L. N. Fowler have been added to the latest edition of this popular Self-Instructor.

The names of Orson and Lorenzo Fowler will go down to posterity as the pioneers of applied phrenology. They demonstrated by their lectures and delineations the vital importance of the system, and urged upon teachers and ministers its practical value as an educational factor if rightly understood and wisely applied. They were deeply convinced of its truth and utility, and with a splendid enthusiasm, which carried them along through all opposition and misrepresentation, they made it known throughout the length and breadth of the land. They brought forward many new facts, and presented the whole subject in a more complete and practical manner than it had been previously placed before the public. They wiped out the untruthful and disgraceful stigma which had been hurled at phrenology, and its advocates, by those who branded it and denounced it as materialistic and leading to fatalism and infidelity. They proclaimed with no uncertain voice that phrenology was not antagonistic to the Christian religion, for the self-evident reason that the human brain is as certainly the handiwork of God as the Bible is His Word. They cleared the air of these vile charges, and replied to the flippant, sneering objectors who rushed in to slay phrenology as if it were a foe of the human race. In spite of opposition, ridicule, and prejudice, they confronted the sceptics, and boldly challenged them to test the science in any way their animosity could devise. It is not claimed that the Fowlers made no mistakes, but it is beyond question that in ninety-nine out of every hundred of their

delineations, they were remarkably and convincingly correct. By their arduous labours, their intelligent methods of exposition and illustration, their unbounded enthusiasm, and their exemplary lives, they raised the practice of phrenology to the dignity of a profession.

There have been a few solitary adherents of phrenology who have argued that it lowered the dignity of the science when it was brought to the level of examining heads. The dignified services rendered by the Fowlers to the cause of the science, is the fittest answer to this foolish assertion. They faced this petty charge frankly, and fought the brief battle successfully. They had to contend with some who were the professed friends of the science, as well as with those who were its avowed opponents. Their retort to both classes of objectors was curt and final; to their reasonable defence there was no valid answer. The properly qualified phrenologist no more compromises the dignity of his profession, they replied, by requiring pay for services rendered, than the lawyer by soliciting his fee, or the physician by presenting his bill. If it is right and desirable that doctors should tell men and women their physical ailments, and prescribe medicine, surely it is also right and desirable for capable phrenologists to indicate mental and moral disorders, and prescribe remedial aids. Reason and good sense pronounced in favour of the contention of the phrenologists. The super-sensitive wrigglers who contended for the honour (?) of the science, stuck to their opinion no doubt, but the mind and heart of the multitude was most heartily with the young phrenologists.

Without excitement, without the aid of brass bands or big drums, all sorts and conditions of men and women crowded to hear their lectures, and large numbers waited upon them for personal consultation. Our enterprising, wide-awake teachers quickly became aware of the fact that each unit of the human family is anxious to learn something of the mystery of life, to know something of themselves and the art of living. Whether highly endowed with ennobling physical and mental gifts and graces, or beggared by a lack of those qualities, man desires to know himself, and is more or less ready to be instructed how to obey the laws of his being. They offered to assist their fellow-men to understand themselves; they outlined the animal forces slumbering in the brain, which would make for evil, as well as the holier fires which would make for righteousness. If the professional phrenologist gives informative advice after this fashion—if he indicates the probable influence for good or ill one faculty, or a group of faculties, may exert in the weaving

out of our mortal lives ; if by solemn warning or hopeful encouragement he assists in rightly shaping our soul's eternal destiny, surely he is doing work of which he has no need to be ashamed. Facts are stubborn things. A phrenological consultation has proved a vital turning point in the lives of many forlorn travellers who had all but lost their bearings in the perplexing by-ways of life. The charts marked by the Fowlers can never be numbered. These silent monitors re-echoed again and again the helpful words spoken with affection and hope. In the life of this man here, and that man there, these transcripts have been a new incentive to try once again the stern battle of life ; and the freshened impulse, the new hope thus imparted, has proved the beginning of brighter and better days. Who can tell what the full harvest will be ?

This, however, is by the way. We are now dealing with our subject's life work, rather than the harvest of good results which is certain to spring from it. It is a pleasing thought that he is still scattering the seeds of truth with a generous hand. Although in his eighty-first year, he is hale and hearty, and enthusiastic in the cause he has loved and served so well. True, the grand old man of the phrenological world is not by any means deaf to the seductive voice of hope, as she whispers, "'Tis better on before ;" but he gives striking evidence, day by day, that he is not forgetful that "the night is coming," and he means to work until the last beam has faded, until his long day's work is done.

Prof. Sizer tells us, in his "Forty Years in Phrenology," that a considerable number of persons entered the lecturing field soon after the Fowlers, but most of them in a few years turned aside to the professions of law, theology, or medicine, or took to some business, and did not long remain identified with phrenology. That L. N. and O. S. Fowler found in phrenology their "can do" was apparent from the first appearance they made in public. They gave themselves to their profession with all the fire and vigour of their glowing manhood. Orson was twenty-five, and Lorenzo twenty-three years of age. If some despised them for their youth, that defect was speedily overcome, and the objection slowly but surely lived down ; the quickly passing years hurried them along to a wider field of labour, and added to their knowledge experience, and to their experience hope. Every fibre of their nature responded to their mission ; each day brought them fresh opportunities for the practice of their profession, and their one complaint was that the days, the weeks, and months were all too short for the work they desired to accomplish.

In 1850, after sixteen years' advocacy of phrenology, they had good reason to look backward with thankfulness and forward with hope. They were thankful that the something attempted had resulted in something done. Their establishment in New York was a throbbing hive of restless industry. Every man had a particular duty to perform, and each man kept well to his post. In this lively mental hive there was no room for drones. They were not a great company, but they had a mission and a message. In the consulting department there were lecturers, delineators, and shorthand writers; in the commercial and publishing department there were editors, clerks, packers, porters, and messengers. Twenty thousand copies of the *Phrenological Journal*, eighteen thousand copies of the *Water Cure Journal*, and five thousand copies of the *Student*, had to be mailed every month; thousands of books and pamphlets were despatched by post to all parts of the world; many hundreds of lectures were delivered; over ten thousand heads were examined, and twelve hundred characters fully written out, with drawing-room lecturettes and private classes filling up the spare hours of the busy days, was considered a fairly good year's work for the staff connected with the Fowler Phrenological Establishment. Taking stock of what they had done during 1850, the brothers intimated that they were at home to friends all over the world. And this was not merely tall advertising talk. It is worthy of note that as far back as forty years ago the name of Fowler had become a household word.

(*To be continued.*)

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(*Continued.*)

17.—SPIRITUALITY, OR MARVELLOUSNESS.

Wonder—credulity—disposition to believe what is not proved, or what are considered supernatural manifestations, &c.—to regard with wonder and astonishment that which is somewhat strange or singular.

There are things, the evidence of which the human mind is incapable of grasping, and which must therefore be taken upon trust, or, what is the same thing, which must be the objects of credulity. Hence the necessity of *some* faculty, through the door of which such truths as are beyond the reach of reason or of observation can be admitted to the mind.

It cannot be denied, that there exists a tendency in the human mind to view things, as it were, through the medium of extravagance

and wonder; to magnify uncommon phenomena, or to regard them as supernatural; to believe the mere declarations of others, even though they may be strangers, &c. This tendency of mind is more apparent in children than in adults. They listen with astonishment to tales of wonder, and implicitly believe what is told them, even after they have been repeatedly deceived. Without this faculty, they could be instructed no farther than their extremely limited observation, or their still feebler reasoning faculties, could demonstrate the truths presented to their minds.

It is by no means certain that this faculty is not adapted, among other things, to a belief in those portions of Revelation which are attributed to a supernatural agency, and that it is calculated to increase religious zeal. At least, it prepares the mind for a reception of some of those doctrines taught in the Bible, which reason does not teach because it cannot comprehend, and which can be believed only "by faith." By creating a love of the wonderful and the novel, spirit. is calculated to lead the way to many valuable improvements.



H. J. SHELLMAN,—Spirituality.

VERY LARGE.—One having very large spirit., with only moderate secret., will take for granted whatever is told him, however inconsistent it may be; seem greatly astonished at almost everything which is a little uncommon, as though something mysterious had happened.

In Sir Walter Scott, this organ was large, accompanied with a very large, active brain, very large imitat., lang., compar., and local., and large intellectual, moral, and domestic organs generally, which gave him those unequalled powers of conception and description which he possessed, and thus furnishes an additional proof of the truth of phrenology, whilst his writings afford one of the very best illustrations of such a combination of faculties anywhere to be found.

LARGE—One having large spirit., with large ven., will readily believe in special providences, and regard many things as providential which can be readily accounted for upon other principles; with large ideal., will gaze with surprise upon magnificent objects, and possess wondering frame of mind; with large event. and ideal., will be passionately fond of hearing or perusing marvellous accounts, hair-breadth escapes, and such mysterious relations as are contained in

Sir Walter Scott's writings, and in works of fiction generally, and be liable to be greatly injured by this kind of reading; with large ven. and conscien., will be naturally inclined to believe in dreams, signs, lucky and unlucky days, &c.; will contemplate the character and the works of the Creator with mingled emotions of awe; be zealous in his religious belief and practice, and, with the addition of large cautious., will be afraid of ghosts, of staying in houses said to be haunted, &c.; will fancy that he has seen supernatural appearances, and, with only moderate secret. added, can be easily hoaxed and imposed upon by stories about witchcraft, &c.; with large approbat., lang., event., and imitat., will be even enthusiastic in relating wonderful anecdotes concerning himself and his relatives; in narrating hair-breadth escapes, astonishing feats of dexterity, &c., &c.; and will describe even common occurrences as very extraordinary; with large conscien. and benev., and only moderate secret., will place perfect confidence in what is told him, even though it be extravagant; pin his faith upon the sleeve of others; seldom doubt the word of others; and take things for granted without examining them for himself; with large conscien., ideal., compar., and ven., will be likely to fancy that he discovers a striking resemblance between spiritual and temporal things; will imagine that he sees the special hand of divine Providence in almost every event of his life; believe that God often manifests his will in a miraculous manner; and, with large caus. added to this combination, like Swedenburgh, will adduce wonderful theories to account for curious natural phenomena, and reason in a very extravagant manner; with large cautious. and individ., will be likely to experience optical illusions, when the appearance may be caused by an indistinct vision of some natural object; with large ideal., imitat., lang., event., and compar., will delight and excel in relating marvellous stories, wonderful tales, "fish-stories," &c., which he will generally augment, and always adapt to the occasion.

FULL.—One having full spirit., will have a mind open to conviction, and possess sufficient credulity in what is presented to his mind to give it an examination, yet cannot be satisfied without considerable proof; will require a good degree of evidence in order to produce entire conviction, yet will rest satisfied with less evidence, both in degree and amount, than he would if possessed of smaller spirit., and will not so thoroughly canvass the evidence presented to his mind; with only full caus., will frequently advance insufficient reasons for his belief, and believe without fully understanding the grounds of his belief; with the religious organs generally full, may possess much religious faith, and also be quite zealous as a Christian; with large caus. and compar., on the first presentation of a subject, may believe upon insufficient data, yet will afterwards more closely examine, and reject that which will not stand the test of close examination; with large ideal., will feast his fancy, and revel in such fairy tales as the Arabian Nights' Entertainments, in the novels of Sir Walter Scott, and in fictitious works generally; find it difficult to divest himself of a partial belief in them, and be liable to be injured, not only by

perusing works of this class, but, also, in the revellings of his own fancy.

MODERATE.—One having moderate spirit., cannot yield a full assent to things which are unaccountable, unless they are supported by evidence which is quite satisfactory, and will have many doubts as to the truth of what he hears. One having moderate spirit., with large caus. and compar., will be hard to be convinced of the truth of that for which a satisfactory reason, or full explanation, cannot be rendered; can be readily convinced by appeals made to his understanding; and, with only moderate perceptive faculties, may even question the evidence of his own senses; and with the addition of large firm. and self-e., can be convinced only with extreme difficulty; will, in a measure, close the doors of his mind against the admission of new facts or truths, and, with only moderate ven. added to this combination, will not be likely to believe in the authority of great names; with large conscien., ven., and hope, may believe in the existence of a God, in the forewarnings, and interposition, and guidance of a special, divine Providence, in a future state of existence; and, with the addition of large compar. and caus., may believe in the doctrines of Christianity, because they seem consistent and reasonable, yet not because he has been told that the one or the other doctrine is true; but, with only moderate conscien. and ven., be naturally sceptical as to his religious creed; with only moderate secret., and large adhes., benev., and conscien., will implicitly believe what is told him by a tried friend, and place quite too much confidence in the integrity and honesty of his fellow-men, yet not believe new doctrines which seem to him improbable; will put no confidence in signs, and will even ridicule those who do; thus seeming to himself, and to others, as both credulous and incredulous; with large ideal., individ., and event., may be extremely fond of reading works of fiction, yet will not believe them, &c.

SMALL.—One having small spirit., will reject as untrue whatever things are presented to his mind unsupported by demonstration, or, at least, by an abundance of the strongest kind of proof; and will receive facts and truths into his mind chiefly through the door of his other faculties. One having small spirit., with large caus., must know upon what principles of reason, or of cause and effect, those things are to be explained, of the truth of which he is to be convinced, will scrutinize closely every point of the argument, and be convinced only by an overwhelming mass of evidence; and even then, for a long time, his mind will refuse its full assent; with large individ., will wish to possess some tangible evidence upon which to rest his belief; and, with the perceptive faculties strong, to see before he can believe; will have religious views peculiar to himself; and have a religious creed of his own, especially in its details; with only moderate conscien. and ven., will have no door to his mind for the reception of moral and religious truths; and be naturally inclined to scepticism, fatalism, atheism, &c.

VERY SMALL.—One having spirit., very small, will doubt almost

everything, and fully believe scarcely anything; will even doubt the evidence of his own senses, and be almost unwilling to say that he positively knows anything, and much less anything pertaining to religion, &c.

LOCATION.—Spirit. is located in the brain on the second frontal convolution, on the two sides of ven., between imitat. and hope. It runs lengthwise in the direction of the coronal sutures, and lies nearly under them. Very large imitat. throws it as far back as the middle of the head.

In the American head, it is generally moderate or small, while in the English head, it is frequently large. In many very zealous preachers they have found it large. In Presbyterians, it is generally small, while conscien. and benev. are generally large. In Roman Catholics, spirit. and ven. are generally large.

Spirituality has three divisions—the lower part gives Wonder, the middle Trust, the upper part gives Faith.

(To be continued.)

BOYS AND GIRLS OF OUR TIME.

THE head of this child is remarkable for its perfect shape. It is an all-round head; every part appears to be fully and



ALBERT VERNER FENSCH.

strongly represented. If circumstances are favourable for him to grow into manhood with the same uniform development, with all his faculties in a healthy state, he will be remarkable for many things, for there appears to be no deficiency either in quality or quantity of the brain. He will

naturally show some power sooner than others, in proportion as circumstances favour extra culture. His head is very broad in the forehead and between the eyes ; his perceptions are very extensive and quick. Impressions made on his mind are very lasting. He will be able to commit anything to memory that he takes hold of. Will learn with perfect ease. He also has abilities not only as a scholar, but as an artist. Will be able without teaching to draw correctly ; also will be correct in spelling and proof reading. He has uncommon versatility of talent. He will want to do everything that everybody else does. He will show extreme memory of all he learns, hears, and sees. He will probably exhibit an unusual amount of musical capacity when he gives his attention to it. His moral brain is large, and one of the strongest features of his moral character is consciousness of the spiritual, the ideal, and the future. He has superior gifts, if developed in that way, to be an inventor (a kind of second Edison). He is remarkable for his natural honesty, sense of right and duty. He will be a law to himself so far as his knowledge exists. He will always be greedy to acquire knowledge, accumulate relics, books, tools, and so forth ; but his speciality consists in his superior memory of faces, forms, power to remember what he sees, and ability to communicate to others what he sees and hears. He will be watched with great earnestness to see how his mind will develop and what he will be able to do best. Very few have so promising a future before them as he has.

America has "boy preachers," "boy orators," and "baby musicians" almost by the score, but Atlanta, Ga., comes to the front with a boy doctor, and has every reason to be proud of the precocity of this youthful citizen, who has seen fit to depart from the rut heretofore adhered to by juvenile geniuses.

He was not long since the recipient of an honour that has never been in all history conferred upon one so young. During the recent convention in Atlanta of the Southern Medical Society he was unanimously elected to honorary membership in that organization as the youngest medical student known to the profession.

The President of the society, in calling the members' attention to this youthful prodigy, stated that although he had not yet reached the age of five years, he was possessed of a knowledge of anatomy, especially of osteology, equal to that of many graduates of medicine. In his exhibition before the society Master Albert was able not only to give the technical and scientific names of each of the 200 and odd

bones of the human skeleton, but to describe their various functions, divisions, tuberosities, tubercles, depressions, processes, articulations, etc. He can repeat also the names, origin, and insertion of nearly all the muscles of the human body, and the process of circulation and of digestion.

He has since been examined by the professor of anatomy in the Southern Medical College of Atlanta, and has been given a certificate of graduation in anatomy.

The child is a son of an army surgeon at present stationed at Fort McPherson, near Atlanta. He was born at Fort Niobrara, Neb., at which fort his father was then stationed. This fort is located near the Sioux reservation, and Master Albert's earlier and sole playmates were the Sioux children. His favourite playmate was an Indian boy named "Two Kettles," who is still lovingly referred to.

Albert's knowledge of anatomy dates from about a year ago, when he was given a dilapidated copy of "Gray's Anatomy," with coloured plates and illustrations, which, through childish curiosity, he asked to have explained to him. These explanations made a permanent impression upon his brain, and inspired him with a desire to learn more about the fascinating science.

In October last he attended with his father a lecture at the Southern Medical College of Atlanta, where he heard a lucid and simple explanation of the bony structure. When he returned home, to the surprise of all he was able to rehearse in his own way the substance of the lecture. Since that time he has been a regular attendant upon the lectures of that college, where he is a general favourite with the professors and students.

Some one has presented him with a complete skeleton, which is prized more highly than blocks and other toys. In addition to electing him an honorary member the Southern Medical Society presented him with a gold medal to still further attest their admiration for his remarkable talent.

The future surgeon and anatomist attends a kindergarten school, and is just beginning to spell short words. He is a handsome child, with large, lustrous brown eyes, rosy cheeks, and long golden curls.

PRINCESS WILHELMINA, the Queen of Holland.—As this Queen advances in life, gains knowledge and experience, she will manifest the following qualities. She will not be specially brilliant, showy, fashionable and attractive in the ordinary way, but she will be dignified, conscious of her own importance, anxious to have an influence, and be respected by others.

She will not give herself up to frivolity in order to attract attention, or be specially conversational or witty ; but she will be sound in judgment, very tenacious to have her own way, high-minded, exalted in her views, and will adhere most tenaciously to her way of looking at things, and be slow to change her opinions, or adopt new measures. She will have more than ordinary strength of character, and will sustain herself in the course she chooses to pursue. She will not be showy or brilliant in entertaining company, but will be quite sound in her judgment, original in her mode of thinking, and very staid and settled in maintaining her individuality.



PRINCESS WILHELMINA.

She appears to have a favourable balance of organization, with the exception that she has excessive firmness, tenacity of mind, independence of spirit, ambition to secure all the credit that belongs to her ; and will be characterized for her great tenacity of mind as applied to right, duty, and obligation. She will be rather a severe disciplinarian, and as far as possible, in the order of things, she will have everything to suit herself. She will know that she is a queen, and will act like one. Will early take responsibilities and pass her judgment on things. She will not be devoted to vanity, to a frolicsome and fashionable life, or noted for saying and doing great things. She may have her fun under favourable circumstances, but not at

the expense of character. She will not be able so well to attend to details, remember common occurrences, or show off in scholarship, but she will be sound in her judgment, original in her ideas, and capable of giving advice and administering justice as the occasion requires it. She will not be afraid to take her place and despatch her duties, for cautiousness is not so large as to throw many obstacles in her way.

“ORION.”

PREHISTORIC TREPHINING IN PERU.

IN a recent address, Dr. Parker bore testimony that there was nothing new under the sun and enlightened his hearers upon the antiquity of the Chinese learning. In an article in *The Lancet* for April 4th, we quote the following on prehistoric trephining in Peru, which proves how early this subject was known.

“The antiquity of trephining has formed a frequent topic for the medical historian, and many skulls have been produced from caves in France, the Canaries, Algeria, Mexico, and Peru, which bear evidence of having undergone the operation during life. M. Broca has written a good deal on the subject, also Dr. Prunières, of Toulouse, who discovered some of the specimens. There does not seem to be any doubt that the European specimens really represent a rude surgical operation, for in many of the cases the edges of the bone are rounded as if the individual had lived for some considerable time after the operation. Less, however, would appear to be known about the Peruvian trephining, as the accounts existing in medical literature are apparently limited to a description of a single specimen by Broca and Nott. A very interesting paper has, however, now been published in *La Crónica Médica* of Peru, by Dr. A. Lorena, of Lima, with drawings of four skulls, which, however, are only intended to serve as specimens of several hundred similar ones in the old tombs of Calca and Poman-canchi in Silque. Although Dr. Lorena does not seem to hold any strong views on the origin of the trephine holes, he thinks it very doubtful whether they were made by a surgical operation, though the beveling and notching may have been done by some rude instruments—perhaps with some reference to the fitting of an obturator plate of lead, silver, gourd, or other substance, such as is not uncommon at the present day in some parts of South America. It is suggested that syphilitic disease, which is known to have been very common in the

time of the Incas, notwithstanding their severe moral laws, may have caused the perforations, or some of them. Another explanation possible is that the skulls were injured by weapons. A third may also occur to those who are acquainted with the diabolical cruelty of Indians—viz., that the holes in the skulls may have been chiselled or burnt out as a species of torture. The objections to the theory of surgical trephining is that the Incas seem to have had no knowledge of boring instruments, and that the operation, if such it were, must have been an exceedingly common one, judging from the numerous skulls that are found with holes in them. Of course, amongst these people, as amongst others where it is more certain that holes have really been chipped, scraped, or drilled into the cranium by barbarous surgeons, the idea probably was to provide an outlet for the evil spirits which were supposed to cause headaches or other diseases. In one of the skulls with two apertures there is between these a kind of pit in shape something like the cells of a wasps' nest, which gives one the impression that the operator after making a commencement there thought better of it, and began again at a little distance. Two of the specimens figured present two apertures, and two one only. Five of the holes are approximately circular, and are in the parietal bones; the sixth, which is very irregular, probably from pathological processes, is in the occipital bone. Most of them are beveled at the expense of the outer table, and one is crenate, as if the edge had been filed with a cylindrical file or cut with a boring instrument, there being sixteen arcs in the circumference. It is possible this may have been done after death, with the intention of making an amulet."

CURIOSITIES IN MEMORY.

BY JAMES COATES, Ph.D., F.A.S.

WHAT memory is I do not know, and therefore cannot pretend to define to suit the exact requirements of exact science. Perhaps this does not amount to much, saying how little we actually know about anything: Life, soul, spirit, light, heat, electricity, chemical affinities, how little? What it is possible to know of their methods of operation, is, however, another thing. Hence, we may know something of memory by its methods. Did we care to study the subject fully, we might be able to discern with considerable accuracy what are the foundations of a good memory; of what component parts memory consists; hindrances to memory;

and how, for instance, a bad memory might be cultivated. I propose briefly to notice some

CURIOSITIES IN MEMORY.

Physiologists and others write of a "faculty of memory" and "faculty of music," etc.; but, as phrenologists, we know better. There are no such faculties in a phrenological sense. Each faculty of the mind doubtless contributes its quota to that which we esteem identity or memory. The power of each faculty will necessarily depend on the size, form, and quality of each particular organ through which the faculty is manifested.

The idea of having a special organ for memory is erroneous, and perhaps arises from certain charts and busts sold largely in opticians' shops, having the word "memory," without any explanation, labelled on the portion of the forehead said to cover the phrenological organ of "eventuality." Memory in an intellectual sense is an impossibility unless preceded by healthy and unexhausted conditions of the organization, cerebral impressionability, and fixity of attention. Whatever interests, to which attention is given, will be as a rule remembered best. Therefore, a boy with individuality large, will remember things or objects observed, and contrariwise will take an interest in observing objects, what the objects may be; and his conception and perception will necessarily depend on the class of objects which interest him, *i.e.*, according to his phrenological capacity, his cerebral and organic development. Now on this point I do not think there is any possible room for disputation. Memory, however, limited to conscious effort, would necessarily be very limited indeed. Personal identity and fixity of attention are in a measure related to memory, but are not memory. Memory has a deeper significance, and it is more than probable man has an inner memory related to his more purely psychic states, which is more or less effaced from conscious perception and recollection in his waking and every-day states. That he has also what might be termed an automatic memory, I do not doubt, when every action of his waking state, muscular impressions, and every change which takes place in his organism, conscious and unconscious thoughts, are recorded in some way in his cerebral centres unknown to himself. So, in fact, our memory must correspond to our entire nature, and to every department of that nature, and is, and will be, as complete or otherwise as we are ourselves.

Our memories will differ in degree from that of our faithful and loving dog "Chip," or little, affectionate, and easily

taught canary. As our natures are higher, and in some respects are, or ought to be, more spiritual, so our memories should accord therewith.

It is a blessing we can forget as well as remember. Often a certain train of thought and accidental word, or providential circumstances, bring memories back : to chasten or correct ; to lead us onward ; make us grateful when, " absent-minded " through our immediate importance or present pleasures, we forget duties, are ungracious, thoughtless, have forgotten.

Instead of having one organ of memory, our brains, as a whole—made up organs, known and unknown, the spinal cord, and the entire nervous system—are seats of memory. This may be ascertained from the evidences of actual mental growth, yet in some especial way, our consciousness—recollection and interest in " days of yore ; " " childhood's happy hours ; " or in " the traditions of the elders "—is related to and connected with the grey matter of the brain. Our impressions are conveyed thereto and from by the white and fibrous brain matter, from certain sorting houses—the corpus and striatus—situated in the centre of the brain. These again received their information—" parcels of news," &c.—through the sensory and sensuous channels, which relate us to the outward world in which we live.

Our powers of acquisition are limited by our health—constitution, vigour, and brain capacity. Time is requisite to convey and record impressions. Given a full and an active brain, retentiveness or memory will correspond most fully in that particular where the brain is most full and effective. It is not surprising, then, variety of talent, ability, memory, etc., will correspond to the peculiarities in brain formation. Roughly stated, " as is the brain, so is the memory."

The all-round men, who are developed in every particular, must be limited. I have seen none ; have travelled largely and observed extensively, and remembered fully, but cannot recollect coming across any of these. Civilization makes for " lobsidedness ; " minds, and therefore memories, are lobsided.

I have met with the clever, the brilliant, the ordinary, the angular, the cross, and apparently stupid members of society everywhere. Examining a little closer, we find blockheads everywhere. We are all blockheads in something. If we have no brains for mathematics, art, music, locality, or order, we will have no " mind " for these things ; our memory therefore of them, or about them, will be as a broken reed.

There will be a limit to our acquisition and to our memory. We can neither learn alike nor remember what we please. The healthiest and best brains are circumscribed in power—

what about deficient, coarse, unhealthy, rum-soaken, and tobacco-laden brains? Local injury to the brain has the effect of destroying certain classes of recollections, and not others. In a similar way accidents and inflammations have called into play the memories of long-forgotten incidents—and, stranger still, “unconscious cerebral impressions,” of which the individual had no idea of ever receiving. Of this I could relate many interesting cases. The brain may be likened to a phonograph, recording all impressions received—whether directly intended or not. So the brain records all impressions, conscious or unconscious, received through the avenues of the senses, or by more subtle channels; while every organ of the brain, every faculty of the mind, has its own recollections, weak or strong, as these are weak or strong. Memory exists only, when the renewed feeling (from whatever cause stimulated) occupies once more the same organs, in a similar manner to the original feeling. We then once more live in the past, call up its hopes, dreams, persons and scenes; speak according to knowledge, and testify to what we have seen or heard, that is, what we know, believe, recollect, remember—our memory.

Robert Houdin, the celebrated conjuror, trained his son in acquisition and retentiveness to such a marked degree that in walking rapidly past a toy shop he could write down correctly, afterwards, the position and character of every toy in it. Entering a gentleman's library with his son, on the occasion of a private entertainment, the youth, while his father was making arrangements with the host, in a few minutes noted the name and position of every book on the shelves. During the course of the evening, as an exhibition of “second sight,” Houdin astonished everyone, by his son's “gift,” in being able to detail so accurately the books and things in the next room—*i.e.*, the library where they were both a short time before. This might be termed an acquired feat in memory. It is probable young Houdin had large individuality. Sir Walter Scott was remarkable for his retentiveness. What he once acquired he seldom forgot. The Ettrick Shepherd called upon him one day in great trouble about a poem he had lost. Sir Walter said he thought he could help him; and although he had heard it but once, dictated the poem to the author, which he had forgotten. Gustave Doré, the inspired artist, had a most retentive memory. He not only recollected what he saw, but could, with his matchless genius, reproduce the same with marvellous accuracy months afterwards. The smallest details of scenes visited by him would be faithfully conveyed to canvas. Now it is more than probable Doré could not repeat a poem;

any more than Sir Walter Scott could reproduce the details of a landscape or portrait. Irving Bishop, the unfortunate young man who some years ago delighted old and young with his muscle-reading, second-sight exhibitions, and exposures of modern spiritualism, possessed a sharp and vivid memory. He was keenly alert to impressions. The merest movements and the slightest expression by some of his audience were quite enough to give him the key to the situation. *Nous* and audacity, which he had in abundance, furnished him all else that was necessary to give his entertainments.

Mr. George Combe tells us of a case in which a Dublin porter was sent to deliver a parcel; he got drunk, and delivered it at the wrong place. When sober he could not remember where he had delivered it; but the next time he got drunk he remembered, and went to the place and got it. Mr. Combe concludes that in order to recall impressions, it seems necessary the brain should be in the state in which it was at the time the impressions were made.

Disease, accidents, and mesmerism, furnish striking cases of double memory—an inward and an outward memory—the former overlapping and including the latter. The latter might be called our “every-day memory.”

Dr. Abercrombie relates the case of a boy who was trepanned for a fracture of the skull. He was in a complete stupor, and had no recollection of the operation, which took place when he was four years old. At fifteen he became seriously ill of fever. In the delirium occasioned by the fever, the youth gave a correct description of the operation, and of all the persons present, their dress, etc., to minute particulars. In this instance the fever revealed the “unconscious impressions” recorded on the mental phonograph eleven years before.

Persons have lived for years, and have spent half their lives in a sort of trance—living a double life. In the one forgetting all which took place in the other. Some writers attribute this to spiritual obsession. Others to the fact, that man has two brains literally, constituting the right and left hemispheres of the cerebrum. These are often unequal in size and form. Generally the left is slightly larger than the right. It is conjectured, that by disease, etc., there is a disconnecting of these brains, and the telegraphing to and the registering of impressions in one or other of them is discontinued, in consequence, for a period. For a time the impressions are switched off the right unto the left, or *vice versa*, months or years intervening, a sudden fit, a powerful dream, again shifting the connection. The right brain ceases,

for instance, to have an active part, interest, or memory in life, the left carrying on on its own account an independent existence. What was said and done on the X × right state of yesterday, ceases to be in the X × left state of to-day. Here we have two distinct memories and lives. Neither the memories nor the lives overlap.

Prof. Huxley described at Belfast, some years ago, one such case, in which two separate lives, a normal and an abnormal one, seemed to be lived at intervals by the same individual.

Dr. Jerome Kidder, in *Vital Resources*, describes the case of Miss Reynolds, of Pennsylvania. She was the daughter of a clergyman; in her normal condition, she was sedate, pensive, and melancholy, slow and sensible in her intellectual character, but almost destitute of imagination; whereas in her trance state she was gay and lively, full of fun and fond of social life. Somnambulism presents innumerable instances of "double memory," as distinct in their character as if two individuals resided in the one body, or two distinct souls directed and guided the one head, each by turns taking dominant possession of "the dome of thought," to the apparent or entire suppression of the other tenant for the time being. I have seen a young man in the mesmeric state deliver addresses on taxation, politics, and temperance, which for flow of language, dry, and pawky humour, would have done credit to Sir Wilfrid Lawson. In his normal state this man was slow, backward, and by no means cultured.

Mr. J. Balfour Brown, in his *Medical Jurisprudence*, says, "in cases of pure somnambulism, the waking consciousness of the individual knows nothing of the sleeping consciousness." It is as if there were two memories.

In dreams, and in cases of the rescued but almost drowned persons, the mind acts with extraordinary rapidity. I have been across the Atlantic, once more an inmate as a prisoner of war in Libby Prison, Richmond; have marched, fought, and returned to this side again, all in about three minutes—of course in dream. The scenes of a long and entire life-time have been passed in review in absolutely less time by persons who have been saved from drowning. So one is led to infer that the purely physiological explanation of memory is incomplete. Memory seems to have a close relationship in some of its phases to that mystic, subtle something which Prof. Stokes calls "energy," underlying the principle recognised as "identity," or personal consciousness in this life. What if, after all, science, so long materialistic in its character, declares for "spirit" as the real recollector—the true possessor of

memory in the body here, and out of the body hereafter. I should not wonder.

If it is true, as "curiosities in memory" appear to indicate—viz., we have an inward and outward memory; a knowledge or recollection, as conscious and unconscious life and being are recorded in the brain, whether we are aware of it or not—it must come home to us, the importance of "right living." If all the thoughts and actions of our lives—determined, wilful, or accidental; every lesson we have learned—good or bad—thus record themselves—nay, form themselves into the warp and woof of the garments of the soul, how anxious we should be so to fashion our lives that the memory or memories thereof shall be sweet and pleasant. If curious to know, let us try to shape ours now. Will it be good or bad? What will it tell us, and when? Whatever I believe I do not know, yet of this I am persuaded—memory will tell us the truth, the whole truth, naught extenuate and naught set down in malice. As Mackay says:—

If thou'lt be busy, I will toil
 And aid the work that thou hast planned;
 If thou wilt quaff, or jest, or laugh,
 Mine hours shall waste at thy command;
 If thou'lt endeavour to be wise,
 I'll aid thy soul to understand.

Do with me as thou wilt, good friend;
 I'll be thy slave in time to be,
 But when I pass—whate'er I was—
 I am the master over thee,
 My father's ghost inspires my word,
 Take heed!—make friends with MEMORY.

THE FOWLER INSTITUTE.

THE second series of Autumn classes will commence on Monday, September 7th, in the Lecture room of the Institute, under the personal supervision of Mr. L. N. Fowler and Miss Jessie A. Fowler. The classes will be divided into two sections—the advanced class, and the preparatory or artizan class.

The former embraces a thorough course of instruction in phrenology and kindred subjects, and is preparatory to the examination for diploma, to be held at the close of the year.

The artizan class is a class for beginners, and for those who do not, from various reasons, wish to make a thorough study of the science.

The facilities for instruction are such that they cannot be equalled by any other organization in England, and as there is an increasing and constant demand for accurate instruction and correct information in regard to phrenology, it is hoped that many will avail themselves of the opportunities these classes give.

The Institute, though still in its infancy, is beginning to be widely known, and its useful work recognised. There is a great want for *good* lecturers and examiners, and special attention is paid to giving concise and accurate instruction to professional students.

Classes in physical culture will also be held during the autumn and winter months. For full particulars apply to the Secretary.

Hygienic and Home Department.

WILL HYGIENE DO AWAY WITH THE PROFESSION ?

BY MRS. E. R. SHEPHERD.

“WHY, if that’s all there is to your hygienic system, I don’t see what need there is of having colleges, doctors, trained nurses and high charges. ‘Most anybody can pick it up in a little while and doctor himself, or if he waits on other sick people he shouldn’t charge much for doing these simple things.’”

So reasons the public upon a superficial examination of the new school of medicine—the Hygienic.

That each man *could* become his own physician is true—in which case doctors would increase rather than decrease in number—but that he *will* do so is not at all probable. People in general do not want to bother themselves about their own health; they like to be careless, and fearless, and venturesome. It is too much trouble to sit down and count the cost. Even physiologists are apt not to do as well as they know.

As one individual said: “Yes, I know all about the whole wheat flour—know it’s the healthiest and best every way—but I don’t like the taste of it, so I eat white flour and take pills.” Another, “Oh, go to grass with your old hygiene! I’d rather eat what I want and die ten years sooner.”

If such people only *would* die, we could say nothing more. But for them to become chronic invalids, always ailing, always drawing on the sympathies of the family, keeping the household awake nights and stirred up days, or else under a solemn hush and hindrance, and then not expect to be charged for it, is insufferable.

These constitute one class likely to remain with us for years, not to say ages, and who will prevent the obsolescence of the medical profession. They are wilfully careless.

Then we have the blindly careless. These are the best intentioned of persons, really trying to live up to their highest light, and who succeed well under ordinary conditions in carrying out the general principles of health, but who are liable to occasional failures through not knowing how to conduct themselves, or how to apply the principles in special and untried circumstances. These people can do what they are told, are good to obey, but become confused in new situations when thrown on their own resources. They lack the genius of foresight. They seem unable to dive down to the roots of things, and accurately trace the nice relations between cause and effect.

A certain man applied to a neighbour in regard to an occasional severe pain in the region of the heart. A few questions elicited the fact that the pains came on after sudden changes in the temperature of the body, as on coming out of the timber, warm and sweating from the use of the axe, into the open plain without an extra coat. Instead of the name of a new patent medicine or the neighbour's favourite doctor, the man got a clear and forcible explanation of the phenomena, and the good advice never to go away from home unprovided with an over-jacket to be put on before exposure. Then followed a prescription for self-treatment in case of unavoidable circumstances bringing on the trouble. All of which he seemed to take in good part, free from defiant attitude, as if he realized his danger and meant to put in practice the knowledge his own questions had drawn out. He had paid such good attention, giving evidence of a humble and sincere desire to learn, that it was with considerable surprise, when, two days later, towards night, the said neighbour answering the summons at the door, confronted him in his shirt sleeves, shivering with the cold—come on a borrowing errand. It had been one of those showery days, common in spring, with a smart rain every hour or two, accompanied by a chilling wind, and a hot sun between showers. How any man with his danger hanging over him, knowing, as he acknowledged he knew, that another shower was imminent, the late conversation fresh in mind, could have risked a quarter-mile run across the prairie in his shirt sleeves, is a mystery equalled only by a score of similar ones daily seen everywhere, and serves to remind us that while such things happen the "profession" will not die out even in the midst of hygiene.

Like a child under obedience to its guardian, so those

grown people who are forgetful, or are unable to see ahead or are too busy to stop to think, could with profit put themselves into the care of a hired watcher over their health, as a preventive measure. But as this will not be done, the next thing to it will take place, viz. : wait till they have passed the preventive stage and are fairly down sick, and then send for the doctor. The good doctor, the successful practitioner, will be most in demand, and can charge what he pleases.

While this class exists—and that will be for many years yet—the physician will be a necessity. The pressing quests of this class would almost create, or rather unearth physicians, where none existed before. The true physician is born, not made, and the mission of the sick is to find him, or rather to discover him to himself. A college is a place where the found physicians congregate to compare notes and perfect each other, not a place where they turn out doctors ready made to order.

The true physician is by nature and genius—or the genius of nature—all that his patient is not. Knowing the cause of sickness, he knows how to cure it. It becomes then a mere question of choice of schools. All schools except the Hygienic proclaim they *do not know* the nature of disease. Every dose of medicine, then, is a blind experiment on the vitality of the patient, which leaves the patient still pursuing his mission of finding the true physician. Thus it ever will be until people learn how not to be sick, until the wilfully disobedient, and the blindly so, *themselves*—not a mysterious Providence nor an arbitrary social system—do away with doctors. Until that time comes, a course of study in a Hygienic medical college must cost as much as in any other.

CHERISH YOUR CHILDHOOD.—Dear girls, don't be so often wishing you were grown-up women that you will neglect your girlhood. In the rush and hurry of these fast times, there is danger that you will reach and strain after "young ladyhood" too much. Be girls a while yet; tender, joyous, loving, obedient, and industrious. Womanhood, with its privileges and power, its burdens and its trials, will come soon enough. On this point one has said :—"Wait patiently, my children, through the whole limit of your girlhood. Go not after womanhood; let it come to you. Keep out of public view. Cultivate refinement and modesty. The cares and responsibilities of life will come soon enough. When they come you will meet them, I trust, as true women should. But oh, be not so unwise as to throw away your girlhood. Rob not yourself of this beautiful season, which, wisely spent, will brighten all your future life."

GIVE THE SMALL CHILDREN WATER.—Small children generally receive water only as they get it in their milk or milk food, alike in

summer and in winter. It is probable that the fact seldom occurs to a mother or nurse that a child may be thirsty without being hungry at the same time. Certainly many a discomfort and even sickness in a child is conditioned upon the fact that it has been compelled to eat in order to get its thirst satisfied, and often has to suffer thirst because the over-stimulated and injured stomach will take no more nourishment at irregular and too short intervals.

Notes and News of the Month.

MISS JESSIE A. FOWLER begs to announce a series of matinees to be held in October, under the auspices of the Fowler Institute. The popular lecturette on "Dress" will be given, also new styles of clothing and dress will be shown, &c. Further particulars will be given in September number.

THE next Session of the advanced class will commence on Monday, September 7th, at 7.15 p.m.

THE next Artizan Class will commence on Friday, September 11th, at 7.15 p.m. In connection with the Artizan Class, a friend has offered eight "exhibitions," four for women and four for men, which will cover the cost of instruction to the above number of students who pass a test examination. The Secretary will be glad to receive names for either of these classes, and to give any further information.

THE Wednesday lecturettes will be discontinued during August. They will re-commence on Wednesday, September 9th.

THE article on "Faces," by Madame Patenall, has been reprinted in pamphlet form, and can be had at this office. *The Perthshire Advertiser* says, "The Article is very readable."

HEALTHY AND ARTISTIC DRESS UNION.—This Society held its first Annual Meeting in the Portman Rooms last month, Dr. Wilberforce Smith in the chair. Considering the age of the Union, the members have every reason to be gratified by the large attendance of ladies, and by the earnest attention given to the explanatory speeches by Dr. Wilberforce Smith, Mrs. Bryant, and others, and also by the interest shown in the exhibits, which were numerous, and both healthy and artistic. The objects of the Society are to encourage a thoroughly healthy and hygienic style of dress (but not at the expense of the beautiful or artistic), harmony of colour and outline, and light weight.

AN EXTRAORDINARY BRAIN.—A post mortem examination upon the body of a labourer made at Preston, a few days ago, revealed a brain of extraordinary size. The man was of ordinary build, about 5-ft. 6-in. in height, and in the size and appearance of his head there

was nothing unusual. When the head came to be opened, however, the operator found the brain to be altogether exceptional. When weighed it turned the scale at $64\frac{1}{2}$ ounces, and was perfectly healthy. Taking 100 cases, the average brain is only $49\frac{1}{2}$ ounces in weight. In the case under notice the man was of but ordinary intelligence, and it would appear that little use had been made of his great brain power. Medical works show that the heaviest brain was recorded by a French surgeon, Tiedeman, though the date of the record is not mentioned. It was but half an ounce heavier than that of the Preston labourer, whose brain, in conjunction with that of Cuvier, the renowned naturalist, ranks as the second heaviest on record.

CAN YOU SEE YOUR OWN BRAIN?—On the authority of Dr. Fraser Halle, it is quite possible for a man to see his own brain. Fifty years have elapsed since Purkinge observed that in passing a candle to and fro several times by the side of the eye the air in front was transformed into a sort of screen, on which was reflected what was then supposed to be “a magnified image of part of the retina.” Sir C. (then Mr.) Wheatstone believed it to be “the shadow of the vascular network.” Mayo thought it was “an image of the blood vessels of the retina.” Sir Benjamin Brodie said that it was to him really incomprehensible. By means of careful drawings Dr. Fraser Halle resumed the exploration, and succeeded in identifying the picture with the representation of the “anterior lobe of the cerebrum.” The picture consists, he has long observed, of “red convolutions with dark interspaces,” among which a whitish admixture is sometimes visible. These, he says, constitute exactly the image of the folds of the interior lobe of the brain with the furrows between them. The candle should be moved to and fro about four inches below the eye, and three and a quarter inches from the face. When the movement ceases the undulations of course also cease and the image disappears. A reddish mist appears first, and the image is soon developed and defined. Night is the best time for it, but it can be seen in a dark place faintly in the daytime.

ON Wednesday afternoon, July 15th, 1891, a demonstration which was unique in the annals of English education was given at the Hampstead Physical Training College. This college was founded some years ago by Madame Bergman Osterberg, with the view of training educated women as teachers of scientific physical education, and this demonstration was given by a number of students who are now leaving after two years' training. The company before whom it was given included Sir Edward Sieveking, Mrs. Garrett Anderson, M.D., Mrs. Spence Watson, Dr. Wallace, Dr. Robarts, Dr. Wilberforce Smith, Dr. Schofield, Prof. W. H. H. Hudson, Mr. G. Mèlio, &c. The senior students first delivered a series of lectures on different anatomical, physiological, and hygienic subjects, and, having shown that they thoroughly understood the theoretical part of their work, they demonstrated their method of teaching by giving a series

of gymnastic, fencing, and swimming lessons to a class of junior students, The result of the teachers' own training was shown when Madame Osterberg conducted them through a difficult yet graceful series of gymnastic exercises. Mrs. Spence Watson distributed certificates to five young ladies, and Dr. Wilberforce Smith congratulated Madame Osterberg on the success of her work, and conveyed the thanks of the company to her for the opportunity she had given them of seeing such an interesting demonstration of Ling's system.

THE *Scottish Leader* has the following Tit-bits, which we reprint with pleasure for the sake of Phrenology and Temperance.

* * *

IN the course of an address delivered at the funeral of the late Mr. William Hoyle, five years ago, by the Rev. Charles Garrett, he said—“A few years ago when in London we stayed with one whose heart, I am quite sure, is here—our friend, Mr. George Ling. He said, ‘Mr. Fowler is going to give a lecture at the Central Hall to-night on phrenology, would you like to hear him?’

* * *

“WE both expressed our wish and went. We were both unknown to Mr. Fowler, and when at the close of his lecture he requested somebody to go on the platform that he might illustrate the science, I whispered to Mr. Hoyle, ‘I will go if you will,’ and we went.

* * *

“WE were very different beings, though one in heart. Mr. Fowler's sketch of Mr. Hoyle was perfect, with one exception. He said, ‘You have no gift for figures.’

* * *

“WHEN we came out, Mr. Hoyle said, ‘Well, that was a capital sketch of you.’ I said, ‘Well, it was a good sketch of you, with one exception.’ He said, ‘Which was that?’ ‘Why, the statement that you had no special faculty for figures.’

* * *

“‘OH,’ he replied, ‘I think that was the truest part of it. I have naturally no special faculty for figures, and I have gone in on that line partly because nobody else seemed to be going, and I thought that the temperance argument wanted it.’

* * *

“THIS was the glory of the man,” continued Mr. Garrett; “his own tastes sacrificed in a moment. Here was the way to promote temperance—that ended everything with him. If he had not the faculty he would get it; and if it was not a natural disposition it should be an acquired disposition—but get it he would, God being his helper.”

* * *

THIS incident, which I find entered in my common-place book, culled from the *Methodist Recorder* of 3rd March, 1886, is an

interesting proof of Mr. Fowler's unique power as a delineator of character. It also introduces us to a group of three notable men who have fought the curse of strong drink with rare energy and unquestionable success, with an earnestness and an enthusiasm which increased rather than diminished. As the temperance cause spread all over the world they have dared to strike for the right against the merciless might of the drink traffic and the degrading power of the drink habit.

Book Notice.

MESSRS. BENTLEY & SON, publishers to Her Majesty, will bring out in October a "Life of John Linnell," the famous landscape painter, by Alfred T. Story. It will be published in two volumes, demy octavo, and will be profusely illustrated from the works of the artist. On the morrow of his death the *Times* said John Linnell was the greatest landscape painter since Turner died. During the latter part of his life, John Linnell obtained the largest prices for his work of any living artist, and he succeeded in amassing a large fortune. But Linnell was not only distinguished as an artist; he was also a man of original thought in other departments, and was indeed one of the most remarkable men of his time, being a poet, a theologian, and scholar of no mean parts. Mr. Story has been engaged on the "Life" for the best part of two years.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

PHRENOLOGY.—We have much pleasure in directing attention to the fact that Professor J. Millott Severn is again visiting Ryde. Many of our readers may remember the professor's former visit, when a large number of persons were phrenologically examined. We would advise, especially young men about to start in life, to consult the professor.—*Isle of Wight Times*.

THE *Sheffield Independent* has, for fourteen months past, devoted a column to delineations from photographs. We desire to thank the proprietors of this worthy paper, for allowing this much in favour of phrenology to appear, and we trust that "Delineatus," as he makes his bow, having fulfilled his contract, will persevere with his studies.

in phrenology, and, with the help of the 1,200 persons who have submitted their photographs to his searching gaze, will do their part in revolutionizing the world, and make phrenology acceptable to all.

PROFESSOR A. J. COLE, phrenologist, from Torquay, who is paying a visit to Taunton, gave the first of a course of three lectures on phrenology, at the Parade Assembly-rooms. Mr. C. R. Humphrey, head master of the Huish School, was the chairman. Professor Cole dealt first with the formation of heads, and illustrated his remarks with illustrations of some well-known examples. Different ways of walking, he said, also showed different characters in people. He would advise every one to cultivate self-esteem, for there were thousands of men and women who would rise higher if they had only more self-esteem. The hands also showed the character of people, authors, for instance, having long, tapering, forked fingers. The chin was another type of character; a small chin denoted a weak will. The nose, eyes, and eyebrows also showed the character of people. At the conclusion of the lecture, the Chairman thanked Professor Cole for his most interesting address.—*Taunton Gazette*.

Temperance Notes.

ON June 18th, a successful garden meeting was held, under the auspices of the Bromley and Shortlands Branch of the B.W.T.A. Rev. Mr. Lovell presided. Miss J. A. Fowler was asked to speak on the work of the Association. She said she rejoiced that the Bromley and Shortlands ladies had started a branch at last. She felt it was a direct answer to a prayer she had been raising for six years. It was when she was speaking for the Rev. Mr. Lovell's Temperance Society she became aware what a great field there was for a branch to be started, and she had never ceased to ask that the ladies' hearts might be quickened to the work in that neighbourhood. Miss Fowler spoke of the great need for the continuance during the summer of Temperance garden parties among the branches. She also explained the importance of "Y" Branches to interest young ladies in the work. Scientific Temperance teaching in our Educational Code, she said, was a point of burning interest at present, also Grocers' Licences, and the distribution of Temperance literature. She urged the ladies present to at least circulate a British Women's Temperance Association Calendar wherever they went this summer.

A TEETOTAL OCTOGENARIAN. — "Many happy returns" to Professor L. N. Fowler, the well and widely-known Anglo-American Phrenologist, who on June 23rd celebrated his eightieth birthday in the full enjoyment of all his mental vigour, and of physical strength remarkable for such an age. His eighty years of life have been eighty years of total abstinence, his parents before him having been

abstainers, as all his charming daughters are, while the late Mrs. Fowler was a pioneer of scientific Temperance teaching. Mr. Fowler modestly attributes what he is, and what he has done for good and truth, and for the benefit of humanity, to his having had "a saint for a father and an angel for a mother;" but there are many who, in the course of his long life, have derived lasting benefit from his pure example, wise counsel, and sage teaching, and who therefore hold him in love and reverence. An unique gathering of personal and professional friends, on Saturday, celebrated Mr. Fowler's eightieth birthday at his charming residence in Kent, when the company were afforded the treat of hearing some of his remarkable phrenological reminiscences. Mr. George Ling and Mr. H. J. Osborn (of London), and Mr. Samuel Hoyland (of Sheffield), represented and responded for the Temperance movement.—*The National Bulletin*.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

J.W.L. (Morcambe).—Has a distinct degree of the mental temperament. Is prepared to spin a fine yarn, and to do things very nicely and neatly. He is anxious to appear to the best advantage, and knows how to make the most of everything that may be turned to his benefit. He is very mindful of circumstances, very close in observation, and naturally particular and systematic. He is reserved when anything can be gained by it. It is difficult to become truly acquainted with him; he should be more open, free, frank, and companionable. Where he is well-known, his friends place a high value upon him, but he does not make friends so easily as many, because of the restraints he throws around himself. He has favourable qualities for sagacity, discernment of character, perceptions of truth, and judgment of art, and is known for his general neatness and uniformity of life and character. He is very particular as to who his friends are. He has a literary and scientific turn of mind. He is scarcely bold and energetic enough to command respect, or to be a lawyer. He is economical, careful about using his money, and is generally conservative in giving his opinions. If he were a lawyer he would require his 6s. 8d. for every particle of advice he gave.

W. M.—The two photographs taken in 1891 represent a better physical and mental condition than the one taken in 1877. He is better braced up, and more positive in his character in the two latter. He has a very distinct organization, and a character peculiar to himself. In the latter photographs he is more open and free to

He is known for his industry, his desire to make the most out of his time and labours ; particularly observing, and is governed by experience, specially intuitive in his discernment of character, and off-hand in his judgment ; is particularly anxious that everything should be done correctly, and his disposition is to gain information wherever a thing can be improved. He is not a philosopher in the abstract sense, and does not go into complicated subjects for investigation. He is very apt in comparing persons, things, qualities, and circumstances, hence has a good off-hand judgment. He can tell what he sees and places that he visits. He will find it difficult to remember abstract ideas or things that are complicated. He is particularly kind-hearted, tender in his feelings, benevolent in his disposition, and he has very lively sympathies towards man or beast that is suffering. He is thoroughly domestic, and fond of all that belongs to the farm or the house. It would appear that his health was better in the 1891 photograph than that taken in 1877, and if he continues to take care of himself there is no reason why he should not continue to live for a number of years. He is very distinct in his character, and can be relied upon.

W.W.—This photograph indicates almost the highest degree of the mental temperament. The gentleman is prematurely developed in mind, and his reflective intellect, with a predominance of the mental temperament, makes him very self-assertive, which, joined to a high crown of the head, leads him to place a high value on his own opinion ; he is very much inclined to argue, and wants his own way ; he is decidedly original, and always has a reason for everything. It is not easy to teach him, for he feels very much like correcting his teachers, instead of receiving instructions from them ; he has a very clear mind, and notices all inconsistencies and imperfections ; he has more of the qualities to give reason and judgment, than knowledge and quick perception ; he could succeed in grammar and language ; he is ingenious in argument, and has strong imagination and considerable versatility of talent. It will be difficult for him to settle down to one thing and stick to it ; he had better get his living by his education than by physical labour ; he is subject to some extremes because of his great ambition, originality of mind, and energy ; he does nothing in a half-hearted way ; he wants everything complete ; he has a strong temper, is excessively sensitive, and liable to make too much of trifles. He would make a shrewd lawyer and politician, or a good manager and accountant ; he will gravitate into being an author, tutor, or something of that kind more easily than anything else, unless there are family interests to divert his mind otherwise.

A.R.—Has a very positive mind, and is exceedingly energetic and spirited to overcome obstacles. He is anxious to be doing for himself. He has already high notions, and an aspiring mind. He has a resolute, combative disposition to overcome all obstacles ; is exceedingly tenacious and determined in his character, and should be employed in a business where he can be master of the situation. He will not easily follow others, and does not want to be guided by

them. He has many notions of his own, and it will be a bad job for him to be trained by those who disagree with him. He will never be satisfied until he is the master-spirit. He is very careful, quite ingenious, and readily devises ways and means. He has an acquisitive turn of mind. He is best fitted for a general business-man; and as a professional man he would succeed best as a surgeon or physician. He is not wanting in talent, but will probably not make a very good speaker. He is always in earnest, and cannot take jokes very well. He means what he says; and is liable to be pugnacious, self-willed, and confident that he is equal to his task. He will not probably stay at home and be a boy until he is twenty-one years of age; he is prepared to go almost at any time if circumstances are favourable. He will prove to be a strong friend and partizan. He will as a whole be more Conservative than Radical, and for one of his age he has more critical acumen of mind than boys generally have. He is not so well qualified for a speaker as for active service in business, or else for a surgeon and doctor, or possibly a dentist.

W.R.—Has a strong hold on life, and is from a long-lived ancestry. He is noted for his perceptive talents, powers of observation, critical judgment of men and things, and for abilities to acquire positive and scientific information. He has great powers of criticism, will discriminate well between one thing and another; and, in fact, is quite a critic, and not satisfied with the way others do things. If left to himself he will go on to the platform, where he can do public work and teach others. He will not be so philosophical and original as analytical and discriminating. He will early show a strong desire to travel and go about in the world, for his memory of places is very great. As a speaker he will be plain and practical, easily understood, and direct in all he says. He can scarcely help being a public man, a speaker, traveller, lecturer, politician, or something that will bring him before the public. He is benevolent in his disposition, respectful in his feelings, independent in his opinions, and fond of saying and doing that which will result in good to others. He has good mechanical judgment, and if he were to learn a trade he would do best as a builder, or practical engineer. He will be particularly indebted to his firmness for carrying out his principles and finishing what he begins. He is strongly social, and delights to take a leading part in whatever will result in usefulness or entertainment.

K.—Comes from a family of considerable ability. She has good natural abilities; is a power within herself, and will have a character of her own. She is quite original; is given to thinking; has good judgment, and can plan and lay out work. She is not quick of observation, nor ready in memory of outlines; is forcible, rather than copious, in talking; has a good head for a business woman, teacher, or manager; will look after her own business, and will prefer to be the leader rather than the follower of others. She will always appear comparatively young. She has a pliable, youthful, cast of mind; is easy in her manners, and can suit herself to many different circumstances, or kinds of work. She is not very hopeful and enthusiastic, but is sound,

solid, and serious. She may laugh heartily when pleased, but is not light minded, nor given to trifling. She will make a thorough, substantial, earnest worker, and a good housekeeper, and will very easily take the place of a wife. She should love enough to enjoy home and wedlock, and to be satisfied with the surroundings that she can secure in a home of her own, in which she will appear to the best advantage. She will, probably, live to a great age. It must be a very serious illness that shortens her days. She will not make a great noise as she goes along, but will leave tracks of the work she has done, and will be more appreciated as she is better known.

G.—Has a fair temperament for culture and scholarship, and has a predominance of the mental temperament. He has a desire to be a professional man, and has several qualifications for a student, a professor, a speaker, or scientist. He would be very popular as a doctor, and generally successful. He accumulates knowledge very readily, and has a good memory of all that he sees and does himself. He will have a passion for travel, and will be able to describe a long journey minutely. His spirit as a whole is a public one. If he were to try to be content with his own everyday work, he would tire of it, for his longings are to come in contact with the world. He has strong imagination, and considerable scope of mind, and is very much interested in all kinds of advancement. He is a great lover of order, and quite particular how everything is done. He is cautious, prudent, and circumspect. Is comparatively reserved, and capable of keeping his mind to himself; but delights to instruct and impart knowledge. There is nothing to indicate a low or gross kind of mind. His ambition may stimulate him rather too much; and he will not be satisfied unless he is making continual advancement. He is evenly organised for health and long life, provided circumstances are favourable, but is not so tough and hard as the young lady.

K. & G.—Will be of mutual service to each other, and the probability is that they will harmonize. They are not of such a temperament as to become specially fascinated with each other, or for either to get thoroughly under the magnetic control of the other; but there will be a general uniformity, or agreement and satisfaction in each other's company. She will be benefited by his imagination, causality, ambition, and high tone of mind; and he will be equally benefited by her sound sense, good judgment, strong moral principles, and stability of constitution. She will not be devoted to the fashions; is not vain and affected, and does not want to live an idle life; he prefers to be constantly employed. They will amalgamate, and grow more and more like each other the longer they live together, and their children will be comparatively brilliant.

T.T.—Has an available brain, is public spirited, and has an original mind with large conceptions. He will be given to reason, and will want to stand before the public. He will early show gifts as a speaker and reasoner. He is much interested in the welfare of others. If he follows his strongest inclinations he will make a public speaker and teacher, and do public work. He has a predominance of moral power, and eventually will show more than ordinary cleverness and ability.

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CAPTAIN SHAW.

CAPTAIN SHAW has a strong, vigorous organization, a powerful will, and great executiveness; he also has a superior capacity to plan, think, and exercise judgment. Causality being large, it gives him strength of intellect, originality of mind, and power to devise ways and means.

He is easily called out in the expression of his mind, can tell what he knows, can act on the spur of the moment. He

is manly, youthful, genial, and is quite impressible to the spirit of the occasion. He inherits a mind that will retain its youthfulness into old age, and although he may be advanced in years, yet he is as young as a boy in feeling. He has the qualities of a scholar, and he readily acquires information. He is able to tell what he knows, and is a great lover of oratory. He possesses taste with reference to works of Art; and wants everything as near perfect as possible. He is not easily satisfied with the way that people do things, and would prefer to do all his own work himself, rather than to depend on others.

He has great versatility of talent, is quick at contriving ways and means; he can act with expediency in a new direction. He is always on the look out. His cautiousness is large and active; he is seldom careless, and does not show anxiety, yet he is quite conscious of what is going on around him.

Order is one of the most marked features of his mind. He systematizes everything, and if business cannot be done according to his plan, he had rather not have anything to do with it at all. He is naturally of a mirthful spirit, and can enjoy lively and youthful company. He possesses an excellent memory of places; there is no danger of his ever being lost. He can keep his own counsels, and although he is good in conversation, yet he knows where to stop and what to say. His sense of punctuality is large. He is particular to do what he agrees. He is not easily frightened; and is alive to what is taking place. His mind acts with great freedom, as well as quickness and correctness. He would be quite a friend among children, and young or old people. He would pass for an old-fashioned Roman soldier.

He is singularly mild and gentle in disposition when there is no cause for an opposite state of mind, but when aroused he has all the courage that the occasion demands. One speciality of his mind is the quickness of his thoughts, the promptness with which he puts his plans into execution. He adapts himself to circumstances with great ease. He has the qualifications to be enthusiastic, and of inspiring others in the same way. He derives some of his qualities from the mother's side, and one of them is superior intuition; he is prepared for almost anything that turns up, and the more complicated his position is, the more versatile his mind proves to be. He almost knows beforehand what is going to take place, and he has the habit of thinking about a variety of conditions in which he might be placed, and what he would do under those circumstances. He is particularly faithful in the discharge of his duties and in keeping his word. He has the

elements of an orator, and he only needs practice to overcome any impediments in the way of a good speaker. He is a great admirer of beauty, whether in Nature or Art, and wants everything to look as if it were finished. The base of his brain is large and influential, which makes him warm-hearted, ardent, and impulsive. He has a very marked organization, a powerful constitution, and possesses great individuality of character.

L. N. FOWLER.

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

IV.—A TANGLED CHAPTER OF ILLUSTRATIVE EXAMINATIONS: AMUSING: INSTRUCTIVE: TRAGIC.

The art of lecturing was speedily acquired by Mr. Fowler, and without the preliminary floundering and blundering which usually falls to the lot of those who elect to become public speakers. He happily discovered at the outset of his career that one of the best incentives to vigorous thought and earnest speech is that of standing face to face with several hundred people—some serious and critical, others humorous and indifferent—all on the tip-toe of expectation. He soon became familiar with the moods and manners of a popular lecture audience, and from the first he received a fair hearing. He had no right to ask or expect more than this until he had proved his right to be heard. He made good his claims in due course, but, to begin with, he had to be content with a "mixed reception." While large numbers were favourable to his views, and the majority were respectful and attentive, innumerable attempts were made to ridicule phrenology, and confound its inexperienced exponent.

Before he had occupied the platform half-a-dozen times he became aware of the presence of the obstructive phrenosceptics: they played the part of cross-examiners in particular of the lecturer; they pompously called in question the whole phrenological system. This class of objector is too well known, even in these latter days, to require either introduction or description; they generally perform that dual function themselves. In a kind of know-everything tone they explain that they have carefully and exhaustively investigated phrenology; they have also carefully examined their own craniums for "the much-talked-about bumps," but alas, they have found nothing worthy of serious attention either in the one case or the other.

The sceptics, we may be sure, were not allowed to have all the fun on their side, and young Fowler was hopeful and confident that he was on the winning side. "No pleasure is comparable to the standing upon the vantage ground of truth." A true student of human nature, particularly a man of Mr. Fowler's fun-loving disposition, can enjoy a little of that nonsense now and then which is said to be relished by the wisest men; and, when the spirit of fun and mischief was in the air, he generally hurried to meet the mirth and mischief-makers rather more than half-way.

The skilful phrenologist has a special advantage over his antagonist, inasmuch as he is able to estimate the weak points or the strong points in his opponent's mental armour. A glance at his head and face reveals to him at once whether he has to answer a philosopher, a bigot, or a fool. It was no uncommon occurrence at Mr. Fowler's lectures for the ignorant, conceited objector, to find his quips and cranks go off at his own expense; and the village wit, well primed with jibes and jokes, frequently found the roar of laughter turned against himself, which he had intended should bring confusion of face to the lecturer. It is well to note, however, that a fair proportion of the attempts made to catch Mr. Fowler tripping, were made by those who were honestly concerned regarding the truth of the system he was advocating. These testing experiences put the young lecturer on his mettle, and kept him alert and on his defence; it is hardly necessary to say that he passed through these ordeals with exemplary patience, and displayed his usual infectious good humour. When he was put to the proof in this way, his brusque retort, his swift diagnosis—often made without touching the subject's head—was flung at his tormentors with a readiness and an abandon which surprised and utterly discomfited them. True, some of the covert attacks of the enemy were very trying and annoying; but he steered through all these early crucial contests without loss of temper, and without exciting or offending those he was sometimes compelled to expose.

At one of the earliest of Mr. Fowler's expositions, a company of anti-phrenologists brought forward a person to be examined who was noted for his obstinacy. This was the first prominent trait of character mentioned by the examiner; and the sharp, correct, complete interpretation given of the obstinate man's disposition evoked the hearty applause of the audience. There is no more easily diagnosed type of character than that of the conceited, obstinate, mule-man. The phrenologist can tell how wise he is, and how otherwise, before he has time to twitch his ears or utter his bray. The

egotism and dogmatism of these conceited gentlemen is well-nigh inextinguishable ; they are as unreasonable as they are unteachable ; they will not be driven, and they are not easily led. Mr. Fowler got along with these bustling, bouncing, blustering boys when no one else could. It took fifty per cent. of the conceit out of them when they were taken in hand by one who was their mentor and their master.

The first appearance of the Fowlers in New York was made the occasion of a novel experiment, in which both took part. Previous to the person selected by the audience taking his place on the platform, one of the lecturers retired from the hall, leaving the other to make the examination. The brothers then changed places, and the same gentleman was examined by the other brother. The second description was listened to with rapt attention by the audience ; and as the second delineation was almost identical with the first, and both a correct reading of the character of the gentleman who was examined, they were not slow to show their warm appreciation at the success which attended the experiment. The same evening another gentleman presented himself for examination. Immediately he was taken in hand it was found that he was no better than he should be. What could be safely said in public about him ? On both brain and features were the unmistakable signs of uncultured intellect, perverted propensities, unrestrained passions ; destructiveness and combativeness were large, and conscientiousness was only wide-awake enough to look after the interests of "number one." There was no time to consider, no time to consult what they ought to do ; the man was meekly waiting, and most of the audience being well aware what sort of a man he was, they were naturally puzzled what the phrenologists would say about him. The examination was promptly proceeded with. Carefully and accurately Mr. Facing-both-ways was described ; many things were left unsaid which would have been frankly stated had the examination taken place in the consulting room ; enough was said, however, to fully convince the audience that the phrenologist knew his subject much better than his own friends ; the best that could be said of him was said of him, but the disagreeable truth was not held back that he was an utterly selfish and unscrupulous man, and a willing slave to his lower nature. Some days after the examination of this notorious character, the pastor of one of the New York Churches called upon the Fowlers to congratulate them on the success of their introductory lectures, and to inform them that the delineation had caused quite a sensation amongst his

congregation. Several members of his Church were present, and were startled with the phrenological interpretation of the person in question, and pastor and people considered the public exposure well deserved. The man had been a member of his Church, but owing to various offences of a serious nature they had to expel him. He had caused them much trouble by his cunning, hypocritical ways, and vicious wrongdoing, and seemed to have no compunctions of conscience.

It was a little unfortunate that so unpleasant a character passed through their hands on their inaugural appearance in New York, which afterwards became the American home of phrenology. But the manipulation of such a low type of head, enabled them to give the audience a short, telling object lesson regarding the serious side of phrenology—for it was made clear to all present that, while phrenology had its bright, amusing side, it was also stern, severe, and relentless, when it was applied to a perverted specimen of human nature. During the remaining lectures of their first series in New York, they had the pleasure of publicly examining several distinguished well-known men. An able editor and author, who possessed remarkable ability as a moralist and theological reasoner, gave them an opportunity for a full, minute delineation of a man of great intellectual power. A celebrated but eccentric linguist and author was described as being endowed with high critical and analytical powers; he was rigidly honest, rather dogmatic, but, having an extravagant organ of approbateness, he would be very boastful, and fond of telling of the great things he had done. The pleasant, jocular way in which this last mentioned trait of character was dealt with, caused much merriment, and the examiners learned afterwards, that in describing him as rather vain-glorious, and very fond of self-congratulatory talk, the cap fitted him to a nicety. The examination of these, and other strongly-marked characters, gave much satisfaction to the examiners and proved a rare treat to their auditors. When the individuals selected for examination were men of mark—men of whom something interesting and exceptional could be said, a most agreeable half-hour was spent. With a worthy subject on the platform, the lecturer, as well as the audience, thoroughly enjoyed the examinations. The phrenologist finds it an agreeable exercise to interpret the character of a healthy, capable, honest man; be it observed, however, that he can only construct a worthy, noble character when suitable mind-stuff is placed under his hands.

One evening, the gentleman nominated by the audience for examination at the close of the lecture was led on to the

platform with his face completely hid from view. The lecturer could not get the slyest peep at his face had he desired to do so; and if he could not indicate the character of the man in the mask without being allowed to see his features, then a point would be scored against phrenology, and the point so lost to phrenology, would be put to the credit of physiognomy. In those far-off days, as now, anti-phrenologists were quite willing to admit that a man's mind-mood could be divined in the face; but they would not accept the theory that the various faculties were located in particular parts of the brain, nor did they believe that the phrenologist could diagnose character from the brain alone. Several of this class of objectors had made up their minds to puzzle Mr. Fowler by depriving him of the aid they thought he received and mainly depended upon from the face. The man in the mask was described as active, zealous, and go ahead in whatever he took in hand, and radical in his views and feelings. He was sure to be a leader in the church to which he belonged; he would be known for his plain-speaking, and was very likely a prominent and influential advocate of temperance, etc. The gentlemen who had proposed that the face of the nominee should not be seen by Mr. Fowler were reluctantly compelled to admit that the description was true to the life. When the mask was taken off, the gentleman was immediately recognized by the audience, who were not till then aware of his identity, and greeted with a hearty round of cheering. He was a thorough-going Christian worker, an elder in a Presbyterian Church, and one of the most out-spoken and influential temperance reformers in that part of the country. The point scored was put to the credit of phrenology.

While lecturing in Albany, in 1834, Mr. Fowler was requested to visit a young ladies' school on their final examination day. They were all arranged in rows round the schoolroom, and he was invited to select, by merely looking at them, the cleverest girl in the room. He pointed out a young lady, and said she was the best scholar in the school, and probably knew more than her teacher. When the examination took place this young lady was found to be far and away the best scholar. In after life she took a very high position, and exerted a powerful influence for good as a writer and lecturer; she occupied at one time the responsible post of superintendent of the female department of Sing-Sing Prison, New York. During the same visit to Albany Mr. Fowler examined publicly quite a different character—a man of energy and ability, but a

vagabond. In careful, concise language he was described as selfish, artful, and deceitful; he was told that he had ability and the inclination to employ cunning and hypocrisy in everything, but more especially in getting money. It required considerable courage to deal so faithfully with a rogue; but while Mr. Fowler frequently refused to examine such rascals in public, he now and again let them have his fearlessly-expressed opinion of them, which was sometimes rather more than they bargained for. About a year afterwards, while travelling from Columbia to Harrisburg, he was told by the captain of the steamer some of the audacious villainies perpetrated by the sly, dodging money-catcher he had examined in Albany. It is to be feared that in this particular case the plain talk, and the advice which followed it, turned out to be "good seed cast on stony ground."

In answer to a challenge from the Fowlers, a very excited assembly—one thousand strong—met in Clinton Hall, on January 28th, 1837, to witness a tug of war between the phrenologists and their opponents. It was agreed on before the meeting commenced that the double examination test should be applied. One of the Fowlers, therefore, retired from the hall in company with a gentleman chosen by the committee to keep watch over him, while the other brother remained on the platform to make the first examination of the person selected for that purpose. When the first examination was completed, lecturer number two was brought into the hall by the gentleman who had him in charge; he proceeded, without a moment's hesitation, to indicate the character of the gentleman, who had just been examined by his brother. Delineation number two bore a close, remarkable resemblance to number one; this, and the stubborn fact that the character outline almost perfectly represented the gentleman described, even in some eccentric details, was too much for some of the more bitter of the anti-phrenologists present, and they brought forward the insulting charge of "collusion." This spiteful accusation was promptly shown to be entirely groundless. It was proved beyond the possibility of even the slightest doubt that the Fowlers knew nothing whatever of the person nominated by the committee; they knew nothing of his character, profession, or business; they had never seen him until they met that night. The "collusion" clique of objectors were not easily silenced, for they were driven to their "wits end," so to speak, by the masterly way in which the examiners had portrayed the character of the man they had themselves selected. The silly

charge was rejected by a large proportion of the vast audience with undisguised contempt. One of the numerous points made by the examiner was the statement that the religious faculties were "almost wholly wanting," and consequently the gentleman was in all likelihood a "total sceptic" so far as revealed religion, with its popular form of doctrine, was concerned. He had, however, many estimable qualities, and they were clearly indicated and aptly illustrated. At the close of the dual reading, and after the ridiculous charge of collusion had been peremptorily dismissed, an elderly man, named Mr. Vail, rose and asked leave to address the meeting. He said that the gentleman who had been examined, as some of those present knew, was Mr. Benjamin Offen, a distinguished infidel lecturer; he had known Mr. Offen intimately for eight or nine years, and he declared the description of character and talents given him by the phrenologists to be "remarkably correct throughout." Mr. Offen frankly confirmed what Mr. Vail had said as to the correctness of the delineation; he admitted that he had been sceptical regarding the truth of phrenology, but the remarkable accuracy with which both the lecturers had delineated the features of his character had changed his mind in regard to it, so far, at least, as to compel him to believe that there was much in it. This is one of the many red-letter incidents which distinguished the Fowlers in their battle for phrenology forty and fifty years ago. It is only one of hundreds of similar triumphs achieved by them in their endeavour to establish the science, but the bitter hostility which reached a climax at the public examination of Mr. Offen, gave a prominence to the phrenological controversy which told, unquestionably, in favour of the phrenologists.

Mr. Fowler had many a sharp encounter with theologians and preachers. About the year 1836, Dr. Warren, of New York, a prominent and able theological professor, took every opportunity to combat the claims of phrenology; he accused Mr. Fowler of spreading error and irreligion, and denounced him as being in league with the devil. One day the theologian and the phrenologist were brought unexpectedly together in a railway car. Phrenology being one of the burning questions of the day, was touched upon in course of talking, but the doctor of divinity would scarcely speak when he came to know who his fellow-passenger was; when he did speak, it was to denounce phrenology and its advocates. Mr. Fowler asked him if he knew anything about it. No, he did not, and he did not wish to know anything about it. Mr. Fowler tried him on another tack. Would he allow him to examine his head, to see if he could tell his character? The

divine hesitated. He consented, however, as they were total strangers, and they were alone. The examination surprised him; he confessed that his character had been correctly described, and some things were hinted at which no one knew but himself. He could not understand it; how was it done? The answer was, "phrenology is true;" and he promised to look into it. He attended a course of lectures; he also joined a class organized by Mr. Fowler for special instruction in the science. At the closing lecture of the series he publicly stated that all his objections to phrenology had been overcome; now that he understood it, he considered it a handmaid to Christianity, and advised all to study it and apply its principles.

Briefly told, the above is a story of the conversion of a theologian to phrenology. Dr. Warren had a close, personal friend, Dr. Wood, professor of anatomy in one of the Philadelphia colleges. To him he confided the interesting fact that he had become convinced that phrenology was true. The professor laughed at him, and told him that he could take phrenology in one hand and anatomy in the other, and demonstrate by the latter that there was no truth in phrenology. This was a poser, and set the theologian a-thinking. His best thought and most skilful argument, however, failed to move the professor. The name of his phrenological teacher was then introduced; he was the one man he knew who could expound and defend the system against all forms of attack. The result was that the professor of anatomy challenged Mr. Fowler to discuss the subject with him, and they met. "Come now," said the doctor to Mr. Fowler, "here is a man direct from the North, whom you have never seen before, and can know nothing about, whereas I know him like a book. Tell me his character." The doctor's order was obeyed; and he promptly admitted that the description was true. "You don't know me," he said, "tell me my character." Again the phrenologist did the doctor's bidding; the divination seemed to astonish and perplex him, for it drew from him the admission that even his wife could not have outlined his character so accurately. The anatomist and the phrenologist were a good deal in each other's company during the next three months; and they thoroughly discussed the pros and cons of the whole phrenological doctrine. At the close of one of Mr. Fowler's lectures, Dr. Wood bore hearty testimony regarding the truth and value of phrenology. Once, he said, he had strong anatomical objections to it, and thought he could prove anatomically that there was no truth in it, but since he had come to thoroughly understand it he found that no

anatomical objection could be urged against the phrenological system as illustrated and applied by Mr. Fowler.

At a private party in Carlisle, Pennsylvania, Mr. Fowler's presence led to a good deal of table-talk concerning phrenology. The discussion was supplemented, as a matter of course, by examinations. After several of the guests had been examined, an elderly gentleman put himself in the hands of the professor. The head was large, the most remarkable head in the company; the intellectual organs were very large, giving great power and depth of intellect, and correctness of judgment, etc. The mental diagnosis was full and exhaustive, for the master phrenologist warmed to his work when he found that he had to deal with a man of exceptional powers. He concluded by expressing the opinion that the gentleman must be one of the most distinguished men of the nation, and had the pleasure of being introduced to Chief Justice Gibson, of Pennsylvania. The trial of the famous phrenologist before so eminent a judge, and the pronouncement of Chief Justice Gibson, that he had unlocked the palace of the mind with the golden key phrenology, was the talk of the town for rather more than the proverbial "nine days."

It is but a step, and sometimes a short step, from the presence of a judge to prison; and so one is not surprised to find Mr. Fowler in prison not long after his interview with Chief Justice Gibson. He differed from ordinary prison visitants, however, in one important particular. The ordinary prisoner pleads for a ticket-of-leave to get *out* of prison, whereas the gentleman in question had to procure a ticket-of-leave to admit him within the precincts of the prisons he desired to visit. Mr. Fowler received permission to visit Pittsburg prison to examine the heads of the prisoners; and in only one case out of the thirty or forty which he examined did he fail to indicate the nature of the crimes of which they were guilty. This man had no natural proclivities to crime, and Mr. Fowler could not decide on his case, unless he had been made the tool of others to commit some misdeed. Strangely enough, this was the case. The prisoner was undergoing punishment for murder, but he had been hired and paid for it; he had no malice or desire to commit crime himself. The Pittsburg papers sent reporters to take note of Mr. Fowler's behaviour during his brief visit to the penitentiary. His lectures at the Young Men's Hall had created great interest, and the visit to the prison was arranged to test his phrenological skill. "He passed through the ordeal," one of the papers reported, "in a manner calculated to demonstrate not only the authenticity of the science, but also his own

claims to an acquaintance with its principles. In no instance did he seem to err, either in relation to the nature of the offence in question, or in the particular details of character, which he generally stated minutely." Writing of the same event, another paper said, "The correctness of his conclusions was generally corroborated by the admission of the subjects, as well as by the statements of the keepers themselves, who were acquainted with the crimes for which they were convicted."

In a town in Mississippi he went into the gaol to see the prisoners. A gentlemanly-looking prisoner was brought to him ; he found nothing specially vicious or criminal about him, but remarked that he was very ambitious, gallant and polite. Mr. Fowler could not think of any crime he would be liable to commit, unless it was in defence of woman, or some act of gallantry ; he could not suggest anything more definite than that. He was not far from the exact truth. While the prisoner was walking with a lady along the street, a passer-by made an insulting remark to his companion ; he walked on a few paces, left the lady, turned back and shot the man ; and he was in prison for that act. In another prison his examinations were all pronounced correct with one exception. In this case Mr. Fowler said the man was probably committed for murder ; that was not true, strictly speaking, for the prisoner was undergoing punishment for burglary. It was the fact, however, that he had killed a man previous to that, although at that time he was committed for burglary. A lawyer, who was examined in Augusta, Georgia, in 1838, was told that his greatest danger was his temper and self-will ; he was proud, determined, and vindictive ; and the last words Mr. Fowler said to him were, "guard your temper, for there is your danger." The next evening he went to a concert and sat by the side of a young lady, who came with a lieutenant, and monopolised her attention much to the annoyance of the lieutenant, who had little opportunity to speak to her. Next day the lieutenant wrote to the lawyer, asking for an explanation of his conduct the previous evening. The lawyer refused to apologise, whereupon the lieutenant challenged him to a duel. The lawyer did not accept the challenge, but during the following day they met in the street, when the lawyer shot the lieutenant in the back, killing him. A sad fulfilling, indeed, of the unheeded warning of the phrenologist three days before—the lawyer's greatest danger was in his temper. While examining a man in New Orleans before an audience, Mr. Fowler stated that he was a very unstable, imprudent man, and on the spur of the moment, in a temper, he would not hesitate in killing a man. At the close of the

examination he startled the audience by confessing that the examination was quite correct, he "had killed a man."

At Baton Rouge, Mr. Fowler challenged a company of noisy disbelievers in phrenology to take him into the prison, blindfold him, give him a batch of subjects to examine, one half of them to be criminals, the other half respectable citizens, and he would tell them which was which, and also indicate the probable crimes the prisoners had committed. The novelty of the proposed experiment, the quiet, provoking confidence of the challenger, and their fierce antagonism to phrenology, left them no loophole for escape. They accepted the challenge, and hurried the challenger off to prison. With only his hands to guide him, the blindfold phrenologist promptly separated the criminals from the citizens, in every case correctly, to the evident relief of the respectable-looking men. What would have been the result if the magical manipulator had made a mistake—if mistake it would have been—and placed a respectable citizen amongst the criminals, is left to the imagination of the reader. The anxiety of the citizens selected for examination with the criminals was quickly dispelled, for the separation was speedily made. It is to be hoped that the anti-phrenological citizens left the prison "wiser men." It need hardly be said that the opponents of phrenology gained nothing by hurrying the irrepressible phrenologist off to prison. With the above amusing incident we close this tangled chapter of instances of Mr. Fowler's ability to decide upon the actual as well as the natural character of "all sorts and conditions of men."

(To be continued.)

MEN AND WOMEN OF OUR TIMES.

MISS WINIFRED L. LEALE.—The general physical organization of this lady is strong. She has a large chin, which indicates great vitality and long life; a large nose, which indicates powerful lungs; and the entire make up of face and base of the brain indicates that she enjoys life and physical existence. Her head is broad at the base, which enables her to go through with the trials of life, and show a great amount of energy, and even force if necessary. She has a strong bony, muscular structure, which aids her in resisting disease, in overcoming obstacles, and in proving herself equal to the trials she has to go through. She is broad between the eyes, which gives consciousness of forms and

outlines; and all the perceptive faculties being large she has good sight, which enables her to see small objects at a great distance. She is naturally methodical, able to plan, look ahead, and devise ways and means. She will appear to the best advantage in times of danger and emergency, for she has great presence of mind. Her mental and physical powers are finely and firmly knit, without showing a masculine type of organization.



MISS WINIFRED L. LEALE.

Miss Winifred L. Leale, the young lady whose portrait, rifle in hand, has been taken by Messrs. W. and A. H. Fry, came upon the camp unexpectedly, Entering as a competitor merely to give a little piquancy to her visit to Bisley with her father, Surgeon-Major Leale, of the Guernsey Regiment, Miss Leale suddenly attained a greater popularity than so modest and little self-assertive a lady might desire. But, as a loyal member of the National Rifle Association, and with an eager desire for its success, Miss Leale has proved her courage in taking the *premier pas*, and, by doing so, and opening the way for other ladies to appear as competitors at

future camps, she will have effectually revived the interest of the public in the meeting of the Association, and so paved the way for its future success.

Miss Leale, who is said to be tall, slight, and dark, is a native of Guernsey, where her father is a doctor, and Surgeon-Major of the Channel Islands Militia, and, although as a child she was in the habit of occasionally amusing herself with a toy gun, it is only during the past two years that she has practised with a regulation Martini-Henry rifle. The workmanlike manner in which Miss Leale has handled her rifle during the competitions has been universally admired, but, as a matter of fact, had she not been perfectly skilled in the matter, it would have been impossible for her to have used a Martini-Henry at all, as the heavy recoil would have been both painful and injurious to any but an expert markswoman.

Miss Leale is a womanly woman. There is no mannish affectation about her, either in her dress, her manner, her conversation, or her appearance. Gifted with a low, sweet voice, that "most excellent thing in woman," and with a most winning and unassuming manner, Miss Leale is the very antithesis of the popular and utterly mistaken idea of a rifle-woman, and during the time spent by her at the college in Guernsey she succeeded in obtaining many prizes, showing particular efficiency in Scripture and mathematics, while, since the death of her mother a few years ago, she has managed her father's home with thoroughly womanly discretion and zeal. Indeed, there has been nothing exceptional in any way either in Miss Leale's natural or cultivated tastes, and it is therefore a very reasonable assumption that, with the offer of proper facilities, plenty of lady-competitors would be forthcoming. Miss Roberts, the daughter of General Sir Frederick Roberts, is stated to be an excellent shot, and there would, no doubt, be little difficulty in obtaining a sufficient number of entries to make a contest one of the most attractive in the list.

THE CROWN PRINCE OF NAPLES.—Is a fully organized young man ; and favourably developed both in body and mind. There appears to be a fair harmony between body and brain. Circumstances being favourable, he could do a great amount of physical work, and endure much fatigue. His forte lies in the equal power of his organization, for he enjoys physical exercise and labour ; also is very much interested in intellectual subjects. He has considerable scientific ability—is able to go into the details of a subject. He has a systematic, mathematical mind, but shows uniformity of mental capacity,

and could sustain himself in scientific or philosophical pursuits. All things considered, he prefers to study principles as applied in some practical form. His head being high, it gives him considerable moral power, hence, he will increase in mental strength and ability as he grows older. He possesses an amount of will and tenacity of mind, that will hold him to his task, enabling him to persevere until his end is attained; hence, he will show thoroughness as a speaker, and be reliable as a business man. He has all the qualities for courage, both physical and mental. Give him a case worth fighting for, and



CROWN PRINCE OF NAPLES.

he will stand his ground to the last. He also has favourable abilities as a speaker, and if he devoted himself to the life of a statesman, or lawyer, he would distinguish himself. He will require the force of circumstances to fully energize his mind so as to show off to a good advantage, for under ordinary circumstances he does not appear to a good advantage. As a military man, he would study tactics with success, and be able to sustain himself. He is an all-round kind of a young man, and is fortified by nature, if circumstances are favourable to give him proper drill and experience, to become a marked man of his day and generation.

“ORION.”

HAPPINESS.*

BY G. B. COLEMAN

MAN is a complex being, and is universally admitted to be the highest form of animal upon earth, where he is supposed to have existed for about 100,000 years. Whatever object the Creator may have had in calling man into existence, our aim throughout life is to obtain happiness; but the ideas of the true meaning of the word are almost as numerous and varied as are those who continually seek its realization.

Happiness, considered as such, may be defined as a state of continued agreeable feeling, from various causes of both mind and body; but among the ancient school of philosophers it was regarded not so much as a generic term for many feelings, as something which implied a state of mind arising from a simple cause.

The followers of Epicurus and Zeno were opposed to each other in their notions of happiness. The former regarded sensual enjoyment as the only real pleasure, and everything not directly sensual, as valuable only in relation to it. The latter sect maintained that true happiness was only found in the practice of virtue and rectitude of conduct.

It requires but little consideration, especially when looked at with the aid of phrenology, to see the objections to the views of these rival sects—the one limiting all pleasure to the senses and perceptive organs; the other, although taken from a higher stand-point, confining theirs to the intellectual and moral brain alone. It is very evident that many of our pleasures in this life have no direct reference to our senses, and also that we may have legitimate enjoyments that do not emanate from either our intellectual or moral organs. For example, that love which renders home the dearest spot on earth, or the love of a parent for a child, or a child for a parent, has no direct connection with the senses, and yet—to some—these supply the most intense forms of happiness, and consequently does not coincide with the physical exposition of the subject by Epicurus. The same example and objection may be used with regard to the Stoical theory, for we need no intellectual or moral power for the maintenance of such enjoyment.

We see then that, despite the philosophy of the ancients, their views upon this subject were narrow and capable of much expansion; and our increased knowledge has enabled

* Paper read at the Members' Meeting of the Fowler Institute July 25th.

us to discover more of the causes of happiness, and thereby the possibility of regulating its effects. It has doubtless been from our ignorance in science, philosophy and religion—and be it remembered that each of these are false and worthless unless they contribute to the general happiness and elevation of man—that both national and individual existence has been filled with such a succession of calamities and consequent misery. Bearing in mind these facts, together with the natural desire of all throughout life, viz., happiness, may it not be considered our duty to investigate this vital problem, and thus endeavour to ascertain, if possible, the truths upon which it is founded?

We can then ask with Havard,

“What art thou happiness, so sought by all,
So greatly envied, yet so seldom found?
Of what strange mixture is thy composition,
When gold and grandeur sue to thee in vain?”

Some of the replies that might be expected to these questions from a mixed assembly, would possibly be as surprising as they would be interesting, while the majority would probably suggest wealth, health, power, contentment, virtue, love, generosity, etc.

Let us then analyze the subject somewhat, by admitting first, that man is composed of the physical and spiritual—material and immaterial—and second, that the physical may be subdivided into the animal, intellectual and moral. The physical portion of a human being of course consists of the whole body, while the spiritual is the life, or God-element implanted in each one of us; but owing to the depravity into which humanity has fallen, this, the highest and purest part of our natures, has been sadly neglected.

It is absolutely necessary that the animal nature of a person receives pre-eminent attention, or the intellectual and moral will be incapable of proper development. Nature, when left to herself, acts in a most reliable and pleasant manner; for instance, we notice in a new-born child that the first organ which seeks gratification is alimentiveness, and there is little doubt that the most agreeable period of an infant's existence is during this gratification. As time advances, other organs are slowly awakened, adding further pleasures to the young life, but alimentiveness still demands much attention, for the health of the future man or woman depends greatly on the food with which the constitution is built.

“Health is the foundation of our physical happiness,” and as physical happiness is the basis of all happiness, it follows that those things relating to health, and especially diet, should

receive the attention of one and all. I say, "especially diet," because it is more particularly in this direction we err, although we know that such subjects as fresh air, cleanliness, etc., must also be studied.

I do not believe the natural inclinations of a human being are to slaughter an animal for food, and thus render himself, in a sense, a cannibal; but the conviction is forced upon me that our tastes have been perverted and rendered unnatural, by the long-continued indulgence in an impure diet. It has been conclusively proved by analysis, that a meat diet carries with it the maximum of waste matter, together with the minimum of nourishment, besides stimulating the base of the brain, and thereby making man almost as much an animal as the pig he devours. Not only does this class of food excite the lowest faculties, but it possesses the doubly injurious effect of preventing the spiritual nature from having full play.

Another item worthy of mention, as being one of the great causes of sickness and consequent unhappiness, is the use of yeast in the manufacture of bread. It has been proved by the microscope that yeast is identical with the white corpuscle found in the blood of all animals, including man. Therefore, in eating animal flesh, and fermented bread, we take into our system that which is associated with it—white corpuscles or disease. The microscope has also revealed the fact that the blood of consumptives contains a much greater proportion of the white corpuscles than red, the reverse being found in healthy individuals, so that we may reasonably suppose it—the white corpuscle—to be, not the protoplasm or physical basis of life, as taught by some leading physiologists, but the physical basis of death.*

We are all aware of the digestive process through which the food passes, turning it into more or less healthy blood, which in its turn nourishes, according to its quality, the whole system. But if the food we take contains disease, as I have endeavoured to show it undoubtedly does, how can we reasonably expect it to provide the proper material for our constantly decaying tissues? Again, why select those foods which are the least nutritious and the most unhealthy? Merely because man's taste has been perverted and become depraved, consequently his liking for stimulating foods has increased, and he has neglected in a great measure the more pure and simple diet of fruit and farinacea. Pure food produces pure blood, pure blood a pure and strong body, and without these we cannot

* For a fuller explanation of this theory, see *Physianthropy*, by Mrs. C. L. H. Wallace.

have either a pure and strong mind, or purity and strength of happiness.

I have no desire to make this a paper upon vegetarianism—so called—but considering as I do its highly important bearing upon the general well-being and happiness of mankind, I deem it advisable to touch upon the subject. It is perhaps unnecessary to quote cases where life has been well supported to an extreme old age upon a very simple diet, but having previously mentioned the names of Epicurus and Zeno, I would remind you the former was a vegetarian, while the latter sage limited himself to bread and fruit—unfermented bread though I imagine—and lived until 98 years of age, when he took his own life.*

We all probably agree upon the importance of maintaining our physical health and happiness—which terms must be synonymous—before the intellectual and moral organs assume complete control, because mental action requires greater support than mere bodily activity.

In many cases, owing possibly to want of training and education, the animal nature alone of an individual is developed, and consequently his enjoyment is limited to the animal or most debased side of his nature. He may live as a pig, and enjoy what a pig enjoys, but the more elevated forms of pleasure would be unknown to him. Men differ in quality and power of constitution, and also in the quality and power of general happiness.

As we ascend in the brain so do we ascend in the quality of the happiness emanating from that particular part of the brain. Thus we find, great as the pleasure is—to some persons—in taking food or making money, it is not so great or of so high a character as that obtained by bringing into play the higher intellectual organs. Here knowledge gained in the past can be stored up to be used for our benefit in the future. By the aid of intellect we can study science, art, philosophy, and the various means of utilizing these for our universal welfare, thus providing an enjoyment or delight—both in their study and use—incomparably beyond any pleasure arising from the animal faculties. Were it not for man's intellectual power, of which he is justifiably so proud, his pleasures would be immeasurably decreased. He would have no reason or object in his actions; and contentment,

* Mr. Hill, a well-known iron founder, employs only vegetarians as puddlers, bringing them up from boyhood, and finds they are considerably finer men physically than the meat eaters, and also that they are able to work eight hours at a stretch as against a four hours' shift of ordinary workers.

urged by so many as being happiness, with the exception of gratifying the animal instincts, would be entirely unknown to him. Thus, by a combination of the animal and intellectual faculties, we obtain a more perfect being than when either act singly ; but one still more perfect when the moral brain is allotted its due share of activity, blending the whole nature into an harmonious trinity-in-unity.

In considering the moral or religious portion of man's nature we must place on one side all sectarianism, for phrenology does not teach it. We have noticed the grades of happiness produced by the animal and intellectual parts of the brain, that the latter is superior to, and forms a sort of resting-place for the former ; the same equally applies to the intellectual and moral groups of organs, the moral being the resting-place for the intellectual.

Whether recognized by we "creatures of habit," or not, there has been established by the Creator in man's constitution a true religion. Not merely the outward exhibition of various forms of stereotyped worship, but established in a reverential love for all that is beautiful and divine in Nature, in an all-embracing love for humanity, in the virtue of those who surround us, in the faith and hope of future spiritual existence. Established in that love for truth, integrity of purpose, and determination which helps us to overcome the difficulties of life, and to reside in a peaceful and tranquil condition of mind. This I regard as true religion, and whether under the name of Protestant, Catholic, Mahommedan, or Buddhist, the foundation remains the same. The practice of such a religion as this is simple : we must learn what is true, that we may do what is right—physically, intellectually, morally. What is right must be in accordance with the unfailing laws of Nature, and it is in the obeying of these laws that we must look either directly or indirectly for all happiness.

Religion of this kind can fearlessly embrace science, for both being true, how can they do other than harmoniously agree in every particular ? It is only when man interferes with this portion of Nature's work, and forms a dogmatic creedal theology, that science and religion cannot be regarded as one. There can be no higher or purer form of happiness in man than this moral power, especially when proportionately developed in relation to his inferior qualities. But as no human being is perfect physically—only the spiritual portion being perfect—none can have complete happiness. And even admitting such an individual to exist, could he truthfully claim to be perfectly happy ? No ! With a strong love for humanity, for truth, justice, etc., could such an one be happy

to see the wrongs which are hourly committed? Perfect happiness then can never exist while the animal has such power within us, while the moral has so little, and, in fact, while man is man.

I have thus far briefly reviewed the three sub-divisions of man's physical nature separately, but in our progress through life they are, or should be, used in conjunction with each other. Some spend their time in searching for happiness, neglecting the present and preparing for a future life, but we must honourably perform our duties in this life before we are fitted for that which is to come; and it being necessary we should work for food, clothing, and shelter, man is provided with the hands and brains wherewith these requirements can be obtained. In doing this he exercises his physical powers—and it will be remembered that the pleasure said to proceed from any of the above-named sub-divisions was due to their activity—and herein lies one of the essentials of happiness. Nor is this all, for Herbert Spencer tells us: "Exercise increases function, and this function increases structure, which structure is transmitted." Work then, being a physical necessity, should be, and is, when properly selected, a pleasurable occupation; but, owing to the want of knowledge of our own natures, we but too often find a man wasting his time and talents in a wrong groove, and consequently, not only is his work reduced to toil, but his abilities, perhaps, fade from the want of proper exercise. There are two great classes of humanity who would be much benefited if they could be taught—and were able to put that teaching into practice—the value of a legitimate amount of labour. The one described by Carlyle, who says, "The object of one class is, not how profitably to employ time, but how to waste it painlessly;" and the other, by far the greater, who work so long and hard that most of their higher powers are absorbed by work, and the vital force remaining is insufficient, even supposing there be the desire, to elevate themselves intellectually and morally. Their pleasures, therefore, are chiefly confined to the animal side of their nature, and yet we often wonder at their want of appreciation in intellectual pursuits. The former class we can but pity in their ignorance, and doubt, if analyzed, that their happiness—if indeed its true meaning could be realized by them—would be even so elevated as their so-called inferiors.

The object of some in working is merely to acquire certain luxuries—often unnatural—for which they crave, and when ultimately obtained the craving ceases, and it is discovered that happiness was found, not in gratified wants, but in

gratifying them. Here again we see that happiness is due to activity itself, even more than the results of activity. The moral of this is: let our cravings be from the superior part of the brain, and their gratification will bring results already described under the "moral" sub-division. Ruskin points out very clearly the necessity and pleasure of work in saying, "If you want knowledge you must toil for it, if food you must toil for it, and if pleasure you must toil for it. Pleasure comes through toil, and not by self-indulgence and indolence. When one gets to love work his life is a happy one." All who work require rest, which can best be obtained, not by total inactivity, except where sleep is necessary, but by the use of other faculties.

Before education can be of its full value to mankind, ensuring or pointing out the course to pursue in order to obtain a life of felicity, it will be necessary that the faculties of the human mind be more generally recognised, and each in due time receive suitable training. In youth the brain is in a pliable condition, and readily submits to education and culture; but at a more advanced age it becomes partially set, and less easy to be called into activity. Therefore the sentiments we rely upon to ensure a peaceful old age must be cultivated during young life.

Even the present generation, proud of its increased knowledge, falls far short of a proper system of education, and consequently the immutable laws established by Infinite Wisdom are ignorantly disobeyed, and the necessary penalty has to be paid, while perhaps the offender does not recognise the cause of his suffering. Hence the necessity of studying Nature, and educating the young on a plan having Nature's laws for a foundation, without which the educational edifice can never be complete. Education then would enable us to better understand the causes of happiness, when the principles only require practical application, which, to a certain extent, is always within our power. The endeavour of the present-day teaching seems to be instruction rather than education; mere book learning, or memory straining, instead of mind training; and by this means we defeat our own object, producing a distaste where we endeavour to create an interest. In consequence of this state of affairs, it is probably not recognised until some years after school life that there is boundless pleasure to be had from the acquisition of knowledge, and by the use of that which has been acquired. Such happiness, arising from a proper education, would entirely dispel the idea that the sole object of a man's existence should be to make money when young and enjoy when old. One

would have learnt that he who acts in a kind, just, and courteous manner, claims universal respect. If to this be added a love for the beautiful, a taste for science, art, and the best literature, then will he have stored up such a fortune for old age that the wealth of the world could not purchase. This fortune can alone be accumulated by the daily and harmonious exercise of our faculties.

We are, many of us, inclined to allow the petty annoyances of life to interfere greatly with our happiness. The opinions and criticisms of others are to some a continual source of vexation; but, if these criticisms be just, they should be welcomed and used for our benefit; if unjust, why should they be allowed to distress us? There are many such trifling matters which, if deliberately considered, would pass us uninjured, and would rather assist in preserving a state of serenity which it is the duty of all to cultivate, not only for one's own immediate increased benefit, but for the benefit of those who follow after us. It would, indeed, be difficult to state what does not affect our happiness in some form or another. Our friends have the power to do so materially, prosperity in business, the government of the country in which we live, also the government of other countries. Climate produces marked changes in the cheerfulness of some people; and, therefore, those bodies which help to cause variations in climate—the sun, moon, and even the most distant planet in our solar system—all contribute their share towards our general happiness.

All life terminates in death, or what we call death, but to my mind it is merely a dissolution of the elements of which a being is composed; and in the human animal—if not in others also—is the development of the spiritual portion of man, or life. Death being a perfectly natural operation of the body, it should be entirely painless and peaceable, if not actually a source of enjoyment. Those then who have inherited a sound constitution, or those who have lived in a natural manner, thus perfecting their physical natures as far as possible, may look forward to retiring from this life of activity, and to enter the next, which, undoubtedly, will be one of still greater activity, without any of the dread which is so often apprehended.

“Think not I dread to see my spirit fly
Through the dark gates of fell mortality.
Death has no terrors when the life is true;
'Tis living ill that makes us fear to die.”

Of what then may we consider true happiness to consist? First, the healthful exercise of all the bodily functions; and

second, that right feeling of mind which alone can be had by the healthful exercise of all the mental powers. Therefore, it is literally true that health and harmonious activity of both mind and body is happiness.

Admitting these facts, we see how much of the happiness of life lies in our own hands, the effect of which cannot be retained altogether within ourselves, but will radiate its influence among those with whom we associate.

“He who is virtuous is wise ; and he who is wise is good ; and he who is good is happy.”

THE BRITISH MEDICAL ASSOCIATION.

THE British Medical Association, which met this year at Bournemouth, was one of unusual interest, and brought to our shores men of eminence from the various corners of the globe, and consequently there was present in the discussion a great diversity of opinion upon the subjects of medicine, therapeutics, psychology, surgery, etc., etc. Under the first subject, Dr. Samuel Winks read a paper on “the Effects of Alcohol,” in the course of which he reviewed its present position in reference to its medical aspect. He said the physiologists would say that it had an inhibitory action on the vagus. Dr. Brunton, on the other hand, tells us that sipping any fluid has a similar effect. When taken in large quantities alcohol is absorbed and acts as a stimulant, as is seen by the flushing of the face and the increased mental vigour. If these effects are seen on the surface, it should be remembered that similar ones must take place in the interior. After its stimulating effects had passed off, it then produces a marked lowering effect on all the functions of the body, its more immediate effects being seen in the brain and the digestive system. The great central fact relating to alcohol was its direct effect on the nervous system in diminishing and lowering its functions. After a time it caused degeneration of the nerve centres, and produced general paralysis, manifested by the trembling lip and the shaky gait. The nerves became hardened and thickened. It seemed that the digestive and nervous systems also suffered. No one had yet seen a person who lived on alcohol, although there was evidence of persons taking large quantities of alcohol who yet preserved their weight with a minimum of food, and that supported the theory that, although alcohol was not nutritive in itself, it prevented the wear and tear of the body. The opposite theory also

existed that alcohol acted as a spur to the nervous system, and quickly wore it out. He could not disapprove of the use of wine and beer, if taken in moderation, by the masses of the people; and as to spirits, or spirits and water, he had not made up his mind that they were in any way useful, and he seldom recommended them. In the discussion that followed, Dr. Norman Kerr, Dr. Ridge, Sir Risdon Bennett, and Dr. Lemmola and Dr. S. Skerritt took part. Dr. Norman Kerr made a powerful speech, in which he proved that alcohol could not be classed as a food, a fact about which the writer of the paper seemed uncertain.

In a valuable paper on "the Uselessness and Danger of Intoxicating Remedies," Dr. Norman Kerr spoke in strong terms against the unscientific and unprofessional advice given by medical men, in the too often recommendation of alcoholic stimulants for influenza. Alcohol was not a stimulant, but an anæsthetic; not a tonic, but a paralyzant. By their narcotic action alcoholic intoxicants added to the deep depression of the obscure poison producing influenza symptoms, the further depression from a poison of which they had considerable knowledge. In case after case Dr. Kerr had seen apparently moribund patients begin to recover as soon as intoxicants were withdrawn. Dr. Kerr protested most emphatically against the misuse of medical authority in the recommendation, in non-medical periodicals, of the medicinal use of intoxicating liquors. The British people were possessed enough already by the superstition that intoxicants were innocent and strengthening foods. What would be thought if "a judicious use" of opiates, or of irritant, poisonous drugs were so loosely and recklessly advised by medical men in the lay press? Yet self-medication by the public with intoxicants was fraught with immeasurably more serious risks than self-administration of prussic acid or arsenic.

In the section of Public Medicine, Dr. A. Carpenter read a paper on "Diphtheria," and Dr. Franklin Parsons on "Influenza Epidemics of 1889, 1890, and 1891." Dr. Parsons said that influenza was first present in London in December, 1889, and became epidemic about January 1st, but did not reach the hilly districts until March. In suburban places city men were found to be first to suffer, and clerks suffered in higher proportion than engine-drivers, though the latter were more exposed to the air. Deep-sea fishermen and lightship keepers at sea almost entirely escaped. Medical men and nurses suffered in large proportion, but the disease showed little tendency to spread in hospitals. The succeeding epidemic was more protracted and more fatal in London than that of the

previous years, but was less rapid in its development.—Sir Peter Eade followed on the same subject.

Under Psychology some interesting papers were read upon Insanity, Crime, Heredity; the ventilation of some worn-out theories will, we trust, give rise to change of opinion from the more enlightened investigations of modern science. We give the opinions below to show the continual need of agitation on the subject of Heredity, etc.

Dr. Clifford Allbutt opened the discussion on "the Hospital Treatment of the Insane" by a paper on that subject. He advocated a system which would reduce all asylums to a number of inmates not exceeding 1,000. He would increase the efficiency and pay of the assistant staff, and break up asylum buildings into detached villas with cheerful surroundings.

Dr. F. H. Walmsley, in connexion with Dr. Clifford Allbutt, read a paper upon the advisability of throwing open to medical students and medical practitioners the large asylums of the kingdom for purposes of study and post-graduate courses.—Dr. Savage spoke upon the inquiry of the London County Council for the establishment of lunatic hospitals as a good sign of the spread of knowledge on the question of insanity. He expressed the opinion that a hospital of some kind was an absolute necessity.

Dr. Savage initiated a discussion by a paper on "the Influence of Surroundings on the Production of Insanity." He pointed out the influence of the surroundings generally in the growth of the organism throughout Nature, and showed how conditions of surroundings may lead to health or disease. The idea that lunatics are born, not made, is one which requires to be firmly faced. Heredity produces some insanity, but he preferred to think that from neurotic parents arose more frequently diseases of sensation, of motion, and of the moral nature. Insanity may be merely a defect of accommodation to surroundings. Brain degeneration does follow certain external conditions. Education infers changes of growth and adaptation of the nervous system. He believed that as many criminals are created from the influence of the surroundings as are begotten. Insanity is a social as well as a medical question, and education and surroundings may colour as well as produce it. There is a cleavage of mind just as there is a cleavage of crystals, and the line of cleavage will depend upon the form of building up; surrounding conditions may produce some of the ordinary symptoms of insanity. The development of self-conceit is very interesting as manifesting the relation of ordinary ideas of insanity. He referred to the striking absence of general

paralysis of the insane among the celibate clergy of France as an example of the influence of surrounding conditions.

Dr. Wallace (Glasgow) followed with a paper on "the Truth of the Idea of Heredity." He held that the popular notion regarding heredity was altogether erroneous, and questioned whether the mere re-appearance of a characteristic was sufficient evidence of the truth of the fact of its transmission. He brought forward in support of his theory the compression of the feet of Chinese women, to be transmitted to their offspring. He denied that likeness was transmitted from parent to offspring, for no proof existed that likeness was dependent upon hereditary transmission.—Professor Benedikt (Vienna) believed more and more in the influence of heredity in nervous diseases. The development of heredity itself depended upon the condition of surroundings.—Dr. Mercier said it would appear that whereas our inherited organization is our fate, on the other hand, in the influence of our surroundings we find our hope of modifying that fate. The result of the papers was to confirm in his mind the doctrine that he had long held—that insanity was the product of two factors, heredity and stress of circumstances. He considered that so strong was the influence of circumstances that there was no nervous system, however stably compacted, that it might not be liable to upset upon the incidence of a sufficient stress.—Dr. Fletcher Beach was surprised to hear Dr. Wallace say the father did not transmit characteristics to his children. He had always understood that the germ cell was composed of gemmules from all parts of the body, and that the father not only transmitted his own characteristics, but those of his ancestors also.—Dr. Warner referred to observations showing that "among 2,576 children seen as presenting cranial abnormalities, 43 per cent. were found by teachers to be dull at school lessons." This brings the subject at once into the area of mental science, which we have expounded for years, namely, that if phrenology is rejected by a man from its popular side, pathological and psychological proofs are so numerous that he could accept its general principles on those grounds. Repeatedly cases of mental feebleness are brought to phrenologists to be explained or accounted for.

A paper was read by Dr. Voison, of Paris, on, "Can a crime or an offence be committed under the influence of Hypnotic Suggestion," which took the affirmative side. Professor Benedikt said he had given the matter of hypnotism much attention. He did not believe that crime could be committed under the influence of hypnotic suggestion. He had witnessed what he might term the comedy between the doctor and the

patient enacted at a sitting. He did not for a moment attempt to doubt the genuineness of M. Voison's experiments, but he doubted for various reasons—chiefly the general absence of the necessary mechanism and accessories for crime—that these experiments had any scientific significance. He ventured to express the opinion that these experiments could not, as a general rule, be made upon English or German patients. A resolution was moved to the effect that popular exhibitions of hypnotism and of persons under the influence of hypnotic suggestion should be prohibited, which was carried by a large majority.

Dr. Victor Horsley read a paper on "Cranometry," assuming that the brain in micro-cephalic idiots grew quicker than the skull. He was led to perform Landois operation by removing a strip of bone about half an inch broad from nearly one whole side of the skull. He operated upon a child who showed all the symptoms of idiocy, being restless, uttering loud cries, and being non-intelligent. The results of treatment were such as to remove all traces of the disease. Another child was born without fontanelles, who presented all the symptoms of an idiot. During the operation the child's temperature began to rise, and in a few hours was 104° . The respiration and pulse became weaker in a few days, and the temperature went up to 107° , and the patient died. This was not a case of shock, though the first risk in such cases is shock. He thought that in this case he had shown that the experiments of Eulenberg and Landois were verified, for he showed that there was in this case injury done to the heat centres in the motor cortex of the brain, and there could be seen in the brain, which he produced, injuries which would be seen as small punctiform hæmorrhages. He thought that in such cases the operation should be divided into two parts. First, the pressure ought to be relieved by a previous opening, because the brains of idiots were so close to the dura mater as to make operation almost impossible to perform without injuring the brain. After the primary operation he thought the secondary removal of a portion of the skull-cap could be easily performed.

Under Obstetric Medicine, Dr. Pringle, of Lewisham, read a paper on "Native Obstetrics in India." He stated that the medical treatment of women in India varied greatly in the three Presidencies; for while in Madras and Bombay the poor women, from being less secluded, enjoyed more medical treatment; in the Bengal Presidency, except in Calcutta, from the strict seclusion in which they were kept, they were absolutely without any medical treatment whatever. Speaking for the Bengal Presidency, in which he had served for

thirty years, Dr. Pringle stated that there was no such person in India, whatever might be said or written to the contrary, as a Native female doctor, and that the only individual who entered into the seclusion of the Zenana for the purpose of treating the inmates is the *janai dhai*, or midwife of India. Here, as Dr. Pringle pointed out, lies the necessity for fully qualified lady doctors in India. Anything short of full qualifications only risks the life of the patient and the character of the supposed doctor.

LONDON,

September, 1891.

AN interesting meeting of members was held at Mr. Fowler's residence on the afternoon of July 25th. The weather was everything that could have been desired, Dame Nature being dressed in her sunniest garb. The programme for this afternoon was a ramble to Eltham Abbey, and to some strawberry fields where the fruit was to be had in great abundance. On returning from their walk the members met others who could not come down earlier. At eight o'clock all settled down indoors to hear the paper on "Happiness," which had been prepared by Mr. G. B. Coleman. The paper itself we leave every individual member to read and discuss for himself, as it will be found on another page. Suffice it to say that the paper provoked a lively discussion, a discussion which was brought only too quickly to a close at ten o'clock.

Mr. L. N. Fowler said that happiness was man's obedience to certain fixed laws--that perfect liberty did not yield happiness, for we owed a duty to one another which necessitated the carrying out certain modes of procedure, in order that all might be happy. In all large subjects like the one under discussion, as a general rule the writer has a certain hobby, or a certain bias of mind. Sometimes it runs into the area of philosophy, and we hear a metaphysical disquisition; at other times we hear a purely scientific or demographical discourse. Thus it is agreeable to hear how the minds of various thinkers express their particular views on the same subject. Some minds no doubt expected, and would have liked to have heard, somewhat more upon the mental working of the faculties of the mind that has produced happiness--not contentment merely--by a state of mental activity even higher than contentment; which has been reached not by sloth, not by laziness, not by an exemp-

tion from anxieties, perplexities, and records of sorrow and disappointments, but through the noble courage that meets all life's problems as they should be truly met, with fortitude. For this, certain combinations of faculties are necessary, and in some cases happiness has to be dearly fought for, because some faculties are too large, others not sufficiently active. The whole subject, however, hangs upon this proposition, that happiness is not to be bought at a fixed price, for gold, but worked for, "by the sweat of the brow," intellectually as well as physically speaking.

Mr. Hall considered happiness to be the healthful exercise of all the powers of our body and mind. The normal action of the base of the brain as a motor power in guiding the moral, intellectual, and spiritual.

Mr. Gilbert considered we received nine-tenths of our happiness through the physical need of pure air, and one-tenth from the soil.

Mr. Smith made some practical remarks, and gave some appropriate quotations on the subject. He cited several acquaintances, whose lives bore no fruits of happiness, who must have lived in the fifth circle of wretchedness, as their pessimistic views of life prevented the windows of their souls from ever being cleaned. He thought that persons living in the country were more hopeful and happy than city men and women.

Miss J. A. Fowler drew together the thoughts that had been expressed, and gave some of her views on the conditions necessary to conduce happiness.

After Messrs. Friz, Marshall, Piercy, and others had spoken, Mr. Coleman replied to the hearty vote of thanks that had been tendered to him for his paper, and answered the questions that had been asked him. The pleasant and profitable evening and meeting was then brought to a close.

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THE Congress of Hygiene and Demography, or the Science of Vital Statistics, has been a representative exhibition of all race-types, as it includes representatives of most of the great civilized nations. The Congress has been described as a Parliament of Health. It is in one sense interesting to note how, when the Imperial Parliament has closed its sittings, the International Medical and Scientific Parliaments pursue their course with vigour. The fact that the Health Congress keeps many in town who would otherwise have been at the seaside, or on the moors, during August, is sufficient proof of the universal interest with which the meetings have been attended.

Were we to give an impartial judgment as to which Parlia-

ment really did the most good, the balance would, we think, judging from this last year's work, be cast on the side of the international one, as these have no party politics to block the ventilation of new ideas. The necessity of modern times is marked by these changes of thoughts and experiences, whether on medical, hygienic, scientific, social, educational, labour, peace, electrical, or demographical questions. They have been truly called "diffusers of useful knowledge, removers of misconceptions, and harbingers of good." It is impossible for representatives of every class, trade, and profession, to interchange notes or to examine practical experience without there being a large quota of mutual benefit.

We find teachers, scientists, doctors, masters of industries, members of nearly every society and association in the alphabet, men and women who can say with Emerson, "they have reached the right perception of truth, because they have been reacted by it, and are ready to be its martyrs." They make all nature akin, and society is reduced to one level, and that, the level of practical common sense. Every man is possessed of the same number of nerves, muscles, bones, and organs, yet has his experience to tell in a new light (or thinks he has); thus teachers become students, and students in their turn become teachers.

Nations are bound together in this intellectual way, and through the intermingling of social intercourse, which comes along with these Congresses, friendly feeling is reciprocated and extended, and links are formed in life's chain which are not easily broken. This is the vital and lasting benefit that is derived from these gatherings. They are, in short, our greatest preachers, though they do not speak the gospel from Westminster Abbey or St. Paul's Cathedral. The white and coloured men meet with equal rights to discuss great problems of the day. The French, Germans, Italians, Greeks, and Russians shake hands in the lobbies and theatres of Burlington House as though they were in closest touch at home; and as the healthy tone of rivalry is present in each country when it is visited, and hospitality vies with hospitality to do its best, the results of truest happiness are in this social way as effectually carried out as by the intellectual grasp and communion in the lecture rooms.

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THE Fowler Phrenological Institute will open its Autumn Classes for 1891, on Monday evening, September 7th, at 7.15. Looking back upon the work of the past year, phrenology has made some decided progress, both through the testimony given "by those who ought to know;" by the wider circula-

tion of books on the subject ; and the interest of students, far and near, in the all-important study of mental science—notwithstanding the statement of a certain popular monthly for July, to the effect, that “many attempts have been made to develop phrenology into a science, but, practically, without effect.” We predict for the coming autumn and winter months an impetus and encouragement, in the study of which many scores of earnest, intellectual minds, will be proud to share. One member comes back to us from Sweden, full of hope and enthusiasm regarding the science which he has been promulgating there. He has come in touch with the leading Swedish scientists, and although there is acknowledged ignorance on the subject, a universal desire to know more, and a deferential respect for theories not thoroughly understood, we are buoyant with anticipation regarding the future of phrenology in this “opening country,” especially as our friend is a Swede. Allow us to explain once more, that to study phrenology at the Institute is not to study bumps. Neither is the examination one that can be passed by the study of a shilling text book. Phrenology means the study of man—the study of man means his entire being, but more especially the anatomy and physiology of the brain (the surface of which, according to an anti-phrenologist, who “has examined a good many brains,” “is perfectly regular and smooth,” encased in its membranes, no doubt the writer meant to add). Heredity must also be a matter of consideration, and the physiological study of motor centres according to Ferrier and others, and how they correspond with Gall’s system. The hygiene of the brain is also of immense importance in this course of study. And no one who has attended the recent Hygienic Congress, and listened to the papers read in section four, but will have been convinced that phreno-hygiene formed a pretty strong thought in the minds of the writers, which was a proof to us that the science of phrenology cannot be ignored.

Nor are these the only branches of study that come under the Examiners’ survey, but they are sufficient to show that thorough work must be aimed at. So many would-be students have written for particulars regarding “the text book” used, that we give the above explanation, at the same time state that a students’ book is in preparation that will, in a large degree, cover the requirements of the many.

A SERIES of Matinees will be given in October by Miss Jessie A. Fowler on “Hygiene.” A special lecturette on “Rational Dress”

will be included in the course, when Mrs. Hancock's new costume will be on view ; also other costumes and improved articles of clothing.

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THE next Artizan Class will commence on Friday, Sept. 11th, at 7.15. *Special attention* is drawn to the fact that in connection with this class a friend has kindly offered *eight* "*Exhibitions*"—four for men and four for women—which will cover the cost of instruction for one course, to the above number of students who pass a test examination at the close. The Secretary will furnish any further information if desired. Address—Sec. of the Fowler Institute, Imperial Buildings, Ludgate Circus, E.C.

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THE lecturettes on Wednesday evenings, in connection with the Fowler Institute, will commence on Wednesday, September 9th. Subject, "Human nature," by L. N. Fowler. Will our local friends make this as widely known as possible ?

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THE HYGIENIC CONGRESS.—We shall take occasion to mention hereafter, points of phrenological interest, which were, like golden threads, interwoven here and there in the papers at Burlington House, and the Royal School of Mines.

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THE sketch and portrait of Mddle. Rose Lyon will shortly appear under Men and Women of our Times. She was a delegate from The Union Internationale des Sciences et des Arts, Paris.

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THE October number will contain the portrait of Dr. Huggins, President of the British Association, also some notes on the papers read.

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THE Christmas number of the PHRENOLOGICAL MAGAZINE will be double in size, and of special interest to phrenologists and others. It will contain in addition to usual matter and illustrations, special articles by W. J. Dawson, editor of *Young Man*; L. N. Fowler, on "Phrenology up to date," and other writers.

Portraits and sketches will also be given of some well-known phrenologists in England, America, India, and Australia, besides interesting facts on hygiene and longevity. With the already short announce-

ment of this number, large orders have been received. Every subscriber should make a point of ordering at least one extra copy, for friends.

* * *

A MEMBERS' page will shortly be commenced in the PHRENOLOGICAL MAGAZINE, which will be edited by a member of the Institute, who is to be chosen at the Members' Meeting in September.

Hygienic and Home Department.

REST AS A MEDICINE.

A physician, writing of rest as a medicine, recommends a short nap in the middle of the day, for those who can take it, as a beneficial addition to the night's sleep. It divides the working time, gives the nervous system a fresh hold on life, and enables one to do more than make up for the time so occupied. It is a tonic, and invalids would do well to take it instead of spirits. A caution is given against the indulgence of too long a sleep at such a time, under a penalty of disagreeable relaxation. There has been much discussion regarding the after-dinner nap, many believing it to be injurious, but it is, nevertheless, natural, and wholesome.

WHY HE DID NOT EXERCISE.

1. Did not have time.

He had time to be ill five days.

2. Could not spare the money to get suit and slippers.

He spared about £1 for a physician's services.

3. Did not need it.

He needed a doctor, medicine, and nursing for some time.

4. It makes him so sore when he begins exercising.

He endured cramping pains for nearly a week.

5. Tried it once and did not see any change.

He had to take two four-ounce and one pint bottle of medicine, to say nothing of the capsules, before he began to recover from his illness.

6. It is so lonesome to go into the gymnasium and exercise by one's self.

He endured the lonesomeness of lying in bed alone all those days, whether he liked it or not.

NERVOUS HEADACHE.

Nervous headache is, perhaps, the most difficult of all to describe or to treat, inasmuch as it is not a disease but a symptom, the cause of which may be in some remote part of the system. One form of nervous headache, which is unmistakable, though not always understood as such, consists of a dull grinding pain at the back of the head near the base of the brain, where the nerves of the spinal cord enlarge and ramify for the formation of the brain. Pain in this locality, frequently down the neck, is a sure indication of impaired nervous action, and should be treated accordingly. In another direction, nervous trouble produces a violent headache—that is from the medium of the stomach. With many people any deep or sudden emotion, such as grief, fear, or even joy may partially or entirely paralyze the action of the stomach; there is an utter absence of appetite, and the serious headache which results is simply the indication of the trouble. When it is removed, and the stomach resumes its accustomed action, the headache will disappear.

WHEN WE GROW MOST.

The brain of a child is proportionately much larger than an adult's, but of much softer consistency, and its convolutions are not complete until the seventh year. This is one of the reasons why early study is dangerous.

The child's heart beats much more rapidly than that of an adult, and the growth of the heart, instead of being regular, like the growth of the body as a whole, is accomplished by fits and starts. The more rapid action of the heart renders the child peculiarly liable to fever, and the liability is further increased by his weaker vital resistance. Hence childhood is the special season for scarlet fever, measles, whooping cough, and other similar complaints.

The irregularity of the heart's growth may give rise to disturbances of the organ of a seemingly dangerous character, but with proper care they will pass away as the heart attains its full development. Such proper care includes ample nourishment, sufficient sleep, and the avoidance of special strain.

The season of rapid growth and development, say between the ages of ten and twenty, needs particular attention. Nature is then at work, as it never will be again, in building up the tissues and developing the nervous sensibilities. This is the period which

makes the largest demands for an out-door life, for pure air, sunlight, active exercise, abundance of nutritious food, a vigorous digestive tract, a ready assimilation, and an active elimination of waste.

It is the period of study and ambition, as well as a wisdom that thinks itself wiser than it is. The increasing mental activity needs to be regulated by experienced teachers and considerate mothers, lest the brain be worked at the expense of other organs and tissues.

Duller minds should not be forced to keep step with those which are naturally more active, and the influences of the home and the schoolroom should be tranquilizing and adapted to invoke the kindlier feelings. Fretful parents and scolding teachers may do a lifelong injury during this susceptible period.

It is a period when neither study nor night excitements should interfere with sleep; when trashy novels do their worst work; when mothers need to know what their children read, and to be their counsellor in all delicate matters; when the use of tobacco is specially perilous, almost surely giving rise to affections of the heart, and when spirituous liquors and all opiates are peculiarly pernicious.

Get into a perspiration by active exercise, and be very careful and not get chilled immediately afterward, is given as a remedy for a cold.

The *Women's Herald*, June 20th, contains an unusually interesting account of the rise and progress of Swedish gymnastics in England, together with a likeness of that excellent exponent and authority, Mme. Bergman Österberg, late of the Royal Institute of Gymnastics, Stockholm, and founder of the first physical training college in this country. Mme. Österberg significantly draws attention to the fact that for six years the whole of her energies were concentrated in the all-important question, the "To be, or not to be," of the Swedish training system in our London Board schools, and as a consequence of being totally undisturbed by committee resolutions, untrammelled by inspection, and never interfered with by inexperienced advice, she was enabled to plan and carry out the whole of the work in the manner she thought best, with the result that, on leaving the Board in 1887, the Ling or Swedish system was thoroughly established in 300 girls' schools, and she had the additional satisfaction of leaving 1,000 trained teachers to carry on the work so ably inaugurated. During her interview, Mme. Österberg discloses much that cannot

fail to be greatly appreciated by all practical teachers, and, indeed, the whole paper teems with valuable information.

WORK FOR WOMEN IN INDIA.—The Women's Foreign Missionary Society, connected with the North India Conference, have just issued their twenty-first annual report. It is a pamphlet of a hundred pages full of information concerning the work among women in the bounds of the conference. It is a great fact that over sixteen thousand Native women in village and zenana are receiving instruction through the agency of this society, The missionaries have visited over twelve hundred villages, and many are not only receiving a religious education, but are being trained in some kind of handywork. Turning to the schools, we find nearly six thousand children under the care of Christian teachers. Twenty-two missionaries of the society, with twenty-five wives of missionaries, aided by thirty-two assistants, 257 Bible readers, and 145 Christian teachers, are the agents for carrying on this great work. The report of medical work shows 20,000 patients have been treated during the year. The report is full of incidents. One tells how the women learn and then communicate the news to others. One Native woman spends all her leisure time in teaching the women, and goes through the villages talking and persuading the women to give up their idolatry, and does it gladly, receiving no salary. A wealthy widow came to one of the dispensaries, where she heard the Gospel for the first time, and was told that idolatry was a sin. Day after day she seemed earnest in her inquiries, and finally announced her belief in the "one true God."—*Northern Christian Advocate*.

Notes and News of the Month.

JAMES RUSSELL LOWELL.—England and America have been called upon, unitedly, to mourn the loss of a specially gifted man. He was critic, poet, orator, and diplomatist; but he was more, for Englishmen claimed him as a friend, and Americans thought of him as their much-beloved countryman. He inherited his sound common sense and high principles from his father, and his poetic and imaginative nature from his mother. His character had a strong touch of the Pilgrim Fathers' determination and fire, and he served his native country by serving England as one of her Ministers in a right loyal manner. He was in his seventy-third year, and leaves a gap which cannot be easily filled.

We should take a hopeful view of life; it is good for us, and it enables us to work with vigour and efficiency.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

THE *Phrenological Annual*, edited by Jas. Coates, Esq., to be published on the 1st of November, promises to be of unusual interest, as many new contributors are announced.

During the week, believers in phrenology—and unbelievers too—have been interested by the lectures of Prof. McBlain, on craniology and kindred subjects, also by his public examinations of the heads of several ladies and gentlemen. The professor is evidently thoroughly proficient in the science, and his lectures were very instructive as well as interesting, while his happy style of reading the characters of his subjects was appreciated.—*Kootenay Star*, U.S.A.

Answers to Correspondents.

F. S.—Yes, Mr. Fowler is in attendance at his office daily.

T. W.—See the new “Illustrated Self-Instructor,” as it gives special rules for finding the organs.

SICKLY—Light dumb-bell exercise, or better still “Dowd’s Home Exerciser,” would answer your purpose; this is designed so that a child or adult person can use it, and any part of the body can be developed at will; and then, having brought up the weak parts, can go on with a harmonious development of the body. Write to publisher of this magazine for price and particulars.

BUMPS (Africa).—O. S. Fowler never visited England; he died August 18th, 1887, aged 78.

FRED.—Yes, if your questions are of sufficient general interest, they will be printed, together with the answers under the “Answers to Correspondents” column. It is the intention of the editor to make this column of interest to all. Let your enquiries be short and to the point.

J. C. S. (Melbourne).—Yes, we agree with you that an occasional letter from some of our Australian or New Zealand readers would be interesting. Perhaps one or more will oblige.

Science Clippings.

Two marked improvements have recently been made in the use of gas for lighthouse illumination. One is a process of enriching gas made from ordinary coking coal by the addition of hydrocarbons and heated air, the other in the new dioptric lens.

A CURIOSITY is on exhibition at Casper, Wyo. It is an imprint of a monstrous palm leaf, caused by the leaf falling into the clay and the clay afterwards petrifying. The rock was found on Salt creek, and indicates that years ago, when the big coal beds were being formed, Wyoming possessed a tropical climate.

THERE was recently exhibited in Dublin a new burner for lighthouse use, possessing twice the illuminating power of the largest burners now employed. It is calculated that this new burner, in connection with a specially devised system of lenses, will transmit light equal to about eight millions of candles, which far exceed the most powerful light at present used.

PROF. TOLOMEL, an Italian chemist, concludes that the ozone produced by electric discharges in a thunderstorm coagulates milk by oxidizing it and generates lactic acid. Mr. Treadwell, of the Wesleyan University, in discussing this, states that the action is not a mere oxidation, but is in part produced by the growth of bacteria, which is very rapid in hot, sultry weather.

FRENCH scientists are puzzling over a spider which was discovered in a cavity in a stone. It is estimated that the stone must be 4,000 years old; notwithstanding this, the spider is quite lively and very youthful in its antics. It is blind and has no mouth.

He that may hinder mischief and yet permits it is an accessory:—
Foreman.

It will be curious, characteristic of the age, and complimentary to womanhood, if it should be found that the future success of the annual meeting of the National Rifle Association is due in a large degree to a lady. Yet the candid critic of the Association's meeting this year is almost forced to some such conclusion.

Children's Column.

THE BUMBLE BEE.

Beside the schoolroom desk I sit,
And through the window see
About the dewy clover flit
A happy bumble bee.

He drifts along the sunny dell,
So fragrant and so bright,
Then pops into a flower bell,
And vanishes from sight.

I envy him while through the cool,
Deep shade he gayly hums—
He doesn't have to sit in school
And worry over sums.

O'er books he never has to bend,
In any dusty room.
But all day long may idly wend
His way from bloom to bloom.

Oh, should he see me he'd be sad,
And for the woodland flee,
And murmur, "I am very glad
I am a bumble bee!"

—R. K.

IN an article on "Formative Influences," Mr. Edward Everett Hale, says:—Among the better formative influences in a boy's education, is a "liberal share of disagreeable duties." He tells of a task which his father once gave him, for which he was almost wholly unprepared, but in working it out he both learned an important lesson and acquired larger ability. Some parents make a great mistake in trying to make life too easy for their children. They shield, excuse, and help them, carry them on flowery beds of ease through the formative period of life, and when they reach maturity they are soft and worthless. Hardships have their uses. They develop fibre and strength. Those who allow their children to grow up without wearing any yoke, or performing any duties which are disagreeable, spoil them in mistaken effort to benefit them.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

G. B. (Rockingham).—Has a favourable balance of brain and body. The strength of the mind appears to be equally distributed. He should be known for his harmony of life, consistency of conduct, his safe judgment, and for his good conduct. He requires considerable motive to call him into action. He seldom fails in his undertakings. His intellectual and moral brain predominate, and if he lives up to his organization, he should be known for soundness of judgment, kindness of disposition, general moral power to regulate his conduct, for a favourable degree of self-respect, and independence of spirit. He is too well balanced to allow any eccentricities, or any extremes in his general manifestations. There is much sameness in his general character; he requires force in general circumstances so as to call him out, and to test his real strength of mind. He has not a wordy mind, but he talks intelligently, and every word means something. Order is large, which, combined with his evenness of brain, will allow him to be methodical, systematic, and careful in laying his plans. He is cautious and comparatively reserved. Has not large destructiveness, and is not particularly forcible; he requires no aid from anyone to keep him in his place. He gives every subject due consideration, and is about equally successful in any profession he may follow, but accuracy is a characteristic feature. His sentimental brain is large. He loves poetry. He will excel as a teacher, and as one to regulate the minds of other people.

J. G. C. (Birchwood).—Length of fibre is a characteristic feature in this gentleman. He finds it difficult to get directly to the point; would be likely to tell a long story, preach a long sermon, and make a long day's work out of his job. He is not so showy, and quick, but practical, plodding, persevering, and tenacious. He does not change his views suddenly, and is rather opposed to give up anything good for something that positively may be better, that has not been proved. He has a full share of industry, economy, and conservative power. Knows how to manage his own business. Is characterized for good common sense. He looks on life just as it is, and is governed by his experiences rather than by his imagination. He has a literary mind, and cares but little for mere show and display. He is not wordy in conversation, nor very rapid as a speaker. He does not jump at conclusions, but wants time to make up his mind. He is a kindly-disposed man, and willing to make personal sacrifices to

accomplish an end, where others are to be benefited. He has the qualifications for a physician, a leader, overseer, and manager. He never trifles, does not attempt to do more than he really can do, but finishes as he goes along. He has had a strong desire for travel ever since he was a boy. He would like to explore where no one else has gone. He has a regulating influence in society. If all were like him, the police might all go to bed at bed-time and sleep until morning.

J. B. (Lincoln).—Has a singular organization; hence is liable to be contradictory in the manifestations of his mind. His face indicates that all the animal faculties are large; hence he is subject to extremes, where his feelings are concerned. The great conflict in his mind is between the animal, and the moral nature. If he follows his impulses, he is liable to contradict himself, for he is very set in his feelings, strong in his inclinations, powerful in physical strength, and very ambitious to bring everything to a result as soon as possible. He is liable to be too impulsive, and to bring too much force to bear on a subject. As a hunter, where there were only rabbits and small game, he would put powder enough into his gun to kill an elephant, for he does not husband his strength well. He would lift at the heavy end of the cart to work up his strength, rather than to be idle. He has great powers of endurance, and exceedingly tenacious in having his own way. He does not contend for the fun of it, but he is the last one to give up when there is strife. He can resist disease, and go with impunity where others could not go on account of contagious disease. He would be able to sustain himself where many others would succumb for the want of physical strength and power to resist. He will have to fight all his life, between his animal, and intellectual, and moral forces. He should, by all means, live a temperate life, and eat moderately, if any, of butcher's meat; had better not take strong tea or coffee; in other words, he should live a plain, simple, true physical life, and keep his passions and impulses in good subjection.

W. G. S.—Has been placed under greater obligations than the majority of young men, and with a suitable education he is capable of exerting a very extensive influence. He possesses a very ardent, earnest mind; takes large and liberal views of subjects. He must strike out into the broad way, and take upon himself considerable responsibility, for he will find his strength equal to his ambition. He is adapted to public life, and should not confine himself to physical labour, unless it were for special purposes. He has a desire to be in a profession. He delights to deal with minds, and must be much interested in general education. He has fair abilities for a speaker, but more especially as a reasoner, and as one capable of influencing an audience. He is magnetic, and will succeed in a public effort; rather inclined to put things sharp, to come right to the point, and clench the argument as he goes along. He is highly ambitious, particularly anxious to excel, and if possible will do a wholesale business. He possesses a positive character, a strong will, and all the feelings that would lead to be a philanthropist.

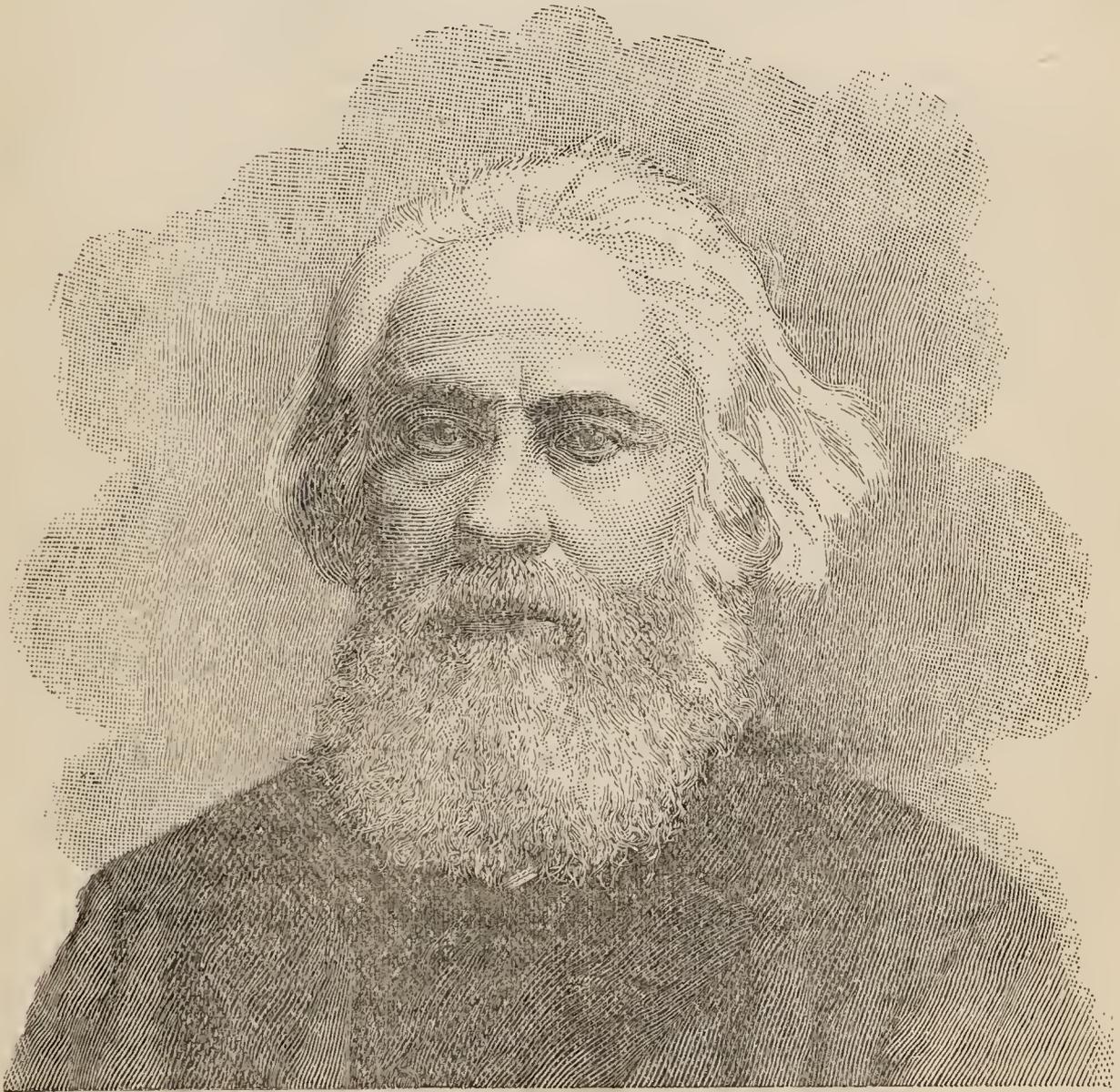
T. R. O.—Has a vigorous mind, a strong body, a distinct will, and is disposed to do for himself. Is generally mild in disposition, but not easily conquered by an opponent; has correct powers of observation, great intuition of mind, and desire to study character. His judgment is formed on the spur of the moment, and his first impressions are as good as any he has afterwards. His mind culminates quickly, and he is liable to talk with his index finger. He does not qualify what he has to say, but speaks as though the laws of the Medes and Persians could not be altered. He delights to have a truth to tell, and he is afforded great pleasure to lay down the fundamental law. His mind is like a wedge entering into a tough piece of wood, and, like General Grant's, will peg away on that line until he has conquered. Laziness is not a sin he is guilty of. He would make a good fore-runner and his name should be John. He delights to go ahead and open the way, and prepare the field for action.

J. F. B.—Has a capable mind for culture, and could easily qualify himself for a public life. Should excel as a scholar, a speaker, lecturer, and teacher. He loves to talk and say what he has to say. Has a very available intellect as well as large imagination. He had always a desire to study, is liable to sacrifice his health for knowledge. He must be careful of his health, and by taking care he will do better in a professional line than as a common labourer. Hard work on a farm, or mechanical work, would never agree with him, but he can work all day with his brain. He appears to have a well-balanced brain. His mind is aspiring. If he gave his mind up to religion he would manifest a very strong religious nature, and exert quite a beneficial influence. He is not animal, gross, or coarse, in the tendency of his mind, but he is very liable to overdo in an intellectual sphere of action. He had better cultivate his talking talent and be a public speaker.

F. P. C. (Forfar).—Is a bone and muscula man. His life would be shortened if he could not work, and he prefers to work out-doors. He is liable to damage himself by over-doing, for he does not know when to stop, and he greatly endangers his digestive powers by doing too much. He must learn to take life more easily, as he has not enough of the vital temperament. He is naturally qualified for a physician, also for the study of mind; he is prolific of thought; has opinions on all subjects; his mind is very restless. He would sustain himself as a lecturer and speaker, for he likes to communicate to others that which will be beneficial for them to know. He has the elements of an orator. Had he commenced early in life to study oratory, he would have made a good thing of it, not because he is so fluent a speaker, but because he has the general elements of oratory and of figurative speech, for he delights to illustrate what he sees. As a speaker, he will be full of action, but could get into a certain style of speaking. He is naturally systematic in his mode of thinking. He delights to lay down the law, and have a good foundation to work upon, but he can work in the intellectual and moral channel better than anywhere else.

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Phrenological Magazine.

OCTOBER, 1891.



(From a photograph taken by Elliott and Fry.)

DR. WILLIAM HUGGINS.

DR. WILLIAM HUGGINS.—This gentleman is governed by his brains. He is not wanting in animal-force and vital power, and he has superior brain-power to regulate his conduct and direct his energies. There is much sameness in his general character; his life must have been a regular, systematic one; he preaches and practices the same doctrine. He is not subject to extremes; he does not contradict himself; he is a thoroughly utilitarian man; if left to himself, he would devote his mind to study,

to intellectual and moral pursuits, rather than to gain money, or an official position. He could not well help being a public man—not because he would push himself forward, but because his quality of organization is such as to place him at the head, or in some important, responsible position. His plans are well arranged. His life is regulated by his principles. He is more anxious to do what he does correctly, and to have good come out of it for others, than to make a display of his own qualities. He has a favourable physiognomy for long life, and must be descended from a long-lived ancestry. He has great power to persevere; although many would succumb under the same difficulties, he will sustain himself, and go through them with ease. He is a great believer in plenty of air and outdoor exercise, but he is not fond of any violent exercise. He should be noted amongst his friends for his common-sense, his discernment of character, his intuitive perceptions of truth, and for his desire to employ all important principles in everyday life. He is a great economist in this respect; hence he is particular about his own influence, and the results of his actions. He does not talk so much as some who know a great deal less than he does, but he talks to the purpose, and he makes each one of his audience feel that he is talking to him. He does not try to be witty, but he says many truisms that entertain and create decided interest in what he is talking about. He is rather pleasant and humorous without trying to be specially witty. He makes very safe calculations, he runs very few risks, and is very glad to add to the happiness of others when he can.

He is orderly and systematic in his life and mode of doing business; he makes but few mistakes, and seldom has to do his work over a second time. He is a philanthropist, though circumstances may have turned his mind into some other channel. He would make a good judge, a head man in some institution, or a writer on political economy. As a speaker, he would be graceful and easy in his style. He makes no enemies, and yet he can say very severe things, and tell the truth without offending. He is not one of the worldly, erratic kind, but has a regulating and modifying influence over others. He has more moral, than physical, courage, and exerts an influence superior to those who are much more boisterous than he is. His motto would be to rule by love, and punish with kindness rather than severity. He is a thorough humanitarian.

L. N. FOWLER.

DR. WILLIAM HUGGINS, F.R.S., D.C.L., Hon. F.R.S.E.,
D.C.L. (Oxon), LL.D. (Cantab., Edin., and Dublin), Ph.D.

(Leyden), was born in London, February 7th, 1824, and received his early education at the City of London School. He afterwards continued his studies in mathematics, classics, and modern languages. He devoted much of his time to experiments and to natural philosophy, and he collected apparatus by the use of which he gained considerable practical knowledge of the elements of chemistry, electricity, magnetism, and other branches of physical science.

In 1852, he was appointed a member of the Microscopical Society, and for some years he applied himself with assiduity with the aid of the microscope to the study of animal and vegetable physiology. Mr. Huggins erected an observatory in 1855, and occupied himself for some time with observations of double stars, and with careful drawings of the planets Mars, Jupiter, and Saturn. He always desired to follow his own astronomical observations, and to bring to bear upon the science of astronomy the practical knowledge which he had obtained of general physics. He received one of the Royal Medals in 1866, for his important discoveries and researches by means of the spectroscope applied to heavenly bodies, and in 1867 the Gold Medal of the Royal Astronomical Society. Dr. Huggins has since continued his prismatic researches by a re-examination of the nebulæ with a more powerful spectroscope, by which he has been able to confirm his former observations. He has also examined the spectre of four comets, and has found that the greater part of the light of these objects is different from solar light. He is a member of various learned societies at home and abroad. Dr. Huggins was President of the Royal Astronomical Society from 1876 to 1878, and is the President of the British Association for the Advancement of Science for 1891.

BRAIN AND MIND.

THOUGH we have still very little positive knowledge regarding the functions of the brain, the fundamental ideas of Gall, the originator of psychological physiology, are, as I have repeatedly asserted in the pages of this Magazine, universally accepted. Different authors express themselves differently, but the essence remains the same.

Mind is an element or entity, which, like a first principle or fact, is incapable of demonstration or proof. It exists. It energizes through the ponderable organ, the brain, and the material organ subserves the immaterial essence. The abrupt space that intervenes between the last portion of matter and

the earliest dawn of intelligence is an unfathomable gulf. The mind may be either active or latent, as in sleep or in suspended animation ; but not so the brain, which obviously rests upon grounds of enquiry altogether different from the element of which it is only the instrument.

Ascending from the lowest organic beings, which have only a rudimentary nervous system and likewise a rudimentary intelligence, to the highest, we find as the brain becomes more and more developed so does the mental manifestation increase. In man, who occupies the highest stage of the animal creation, with his large and highly finished brain, we have the most exalted intellect. Again, mind, whether of man or brute, is uniform—one and the same in both ; understanding is possessed by all animated beings in various proportions and degrees : as the sagacity of the dog, the sharpness of the ape, and the intelligence of the elephant, which are proverbial. Even moral affections are enjoyed by animals and insects. The horse is docile, the lion courageous, the spider deceitful. All these qualities are fragmental portions of the understanding, distributed severally throughout creation, for the particular use and purpose of each being ; and are, when taken together and summed up into one, the human understanding complete, and, were not the various qualities of the understanding manifested by animals identical with that possessed by man, there could be no inter-communion between man and animals, for without this mutual intelligence the rider could not manage his horse, nor the sportsman direct his spaniel, nor the pig-boy drive his pigs, nor the blind man be led and guided by his dog. Animals and man must understand each other, otherwise animated nature would be a confusion. Even sounds of the voice and the meaning of words are frequently understood by animals as distinctly and fully as they are by ourselves ; and the intent and object of our actions are perceived by them in the same sense as we intend them to be perceived. Thus the horse knows the sound of the trumpet, the smack of the whip, and the driver's bidding ; the hound responds to the huntsman's horn ; the cat minds the maid-servant's call, and the cow obeys the cry that hails her home to be milked. Stories are told of serpents that have become familiar with man, of insects that have mated with the prisoner in his cell, and of hares that have sat like cats before the fire. The mechanism of the beaver is like our own, because ours is the same as his ; and the fox pilfers our poultry yards with the same adroitness as the thief pilfers our coffers. Thus the intelligence of animals is the comparative anatomy of the understanding of man ; what is one in us is

several in them. They are the analysis of the mind, of which we are the standard and type. By pursuing this train of reasoning, we might show that the less perfect understandings in man approximate to the lower understandings of animals. Thus we say, as stupid as an ass, as filthy as a swine, as timid as a lamb, as cruel as a tiger. The higher human understandings admit of no such debasing comparison, since they cannot be likened to anything less than themselves. Great minds are so elevated that they cannot be lowered by any comparison. They comprehend within themselves all the mental qualities of every animated being below them. It is this excellence that can never be predicated of any of the inferior animals, and entirely excludes them from the idea of possessing a soul, in the philosophic meaning of the term.

But the mind in its fullest and soundest development is, so to speak, at the mercy of the healthy or diseased condition of the body. A slight ailment quickly overthrows it, or tarnishes its vivacity and brilliance. Genius is often cut short by it. Rossini lost the faculty of musical composition somewhere about the middle period of his life. He lived to be old, and died at seventy-six years of age; but he never recovered his original talent. Some change must have swept over the fibres of the brain, and damaged their congenital tenacity and fineness, to account for so irreparable a bereavement. So delicate is the tracery of the nervous structure that the damage of a single fibre or set of fibres destroys the unity of the whole. It is like a grand orchestra, in which one instrument alone out of time or tune disturbs the harmony of the rest, and the finest musical composition of the world is entirely spoilt by the discord.

The preservation of the intellect to the latest period of age depends upon circumstances, over many of which we have no control. The nerves may be weak by nature, or there may be a scrofulous or gouty taint, the heirloom of the family, or a failure in the functions of the heart or stomach, natural or acquired. The early part of life may have been corroded by anxiety, weakened by privation, or overstrained by toil, which neither we nor our progenitors could either foresee or prevent. Wine or ardent spirits may have been too freely indulged in, and their use apologized for upon the plea of social engagements or a feeble constitution. Fortune may have arrived when she has ceased to be sought for, and reputation or celebrity bestowed or achieved when it is too late to facilitate the happiness of ourselves and those about us. In each of these instances the mind decays early, and

the earlier the sooner the stimulus of necessity is withdrawn or suppressed.

No doubt alteration of the brain is taking place *pari passu* with these alterations of character. It may be atrophy, indicated by loss of memory, slowness of speech and manner, and debility of gait and action. Or the circulation through the encephalon may be checked or impeded by ossification or softening of the cerebral arteries, or by some distinct disease about the heart and large vessels ; or the neurine may be undergoing a change, particularly on its peripheral surface, as well as on the surfaces of its several ventricles or cavities. The convolutions become paler, and the furrows shallower. The weight of the whole cerebrum and cerebellum is lighter, less complex, and seems to be reduced to the condition of the brain in early life. Softening of the surface may set in, or a very slight fit of apoplexy and paralysis occur ; so slight, indeed, that it passes away unperceived, and is recognised only in its after consequences and permanent effects.

To the old themselves the imbecility of age is not so painful as it is to those who wait upon them. With the return of his second childhood, man loses the consciousness of his prime. The loss of any of the senses is accompanied with the oblivion of its enjoyment. The blind are cheerful, the deaf happy, and the aged content. So that one might be tempted to conclude that those exquisite lines of Goethe express a poetic fiction rather than a medical reality :

“ Give me the active spring of gladness,
Of pleasure stretched almost to pain !
My hate, my love, in all their madness—
Give me my youth again ! ”

Humboldt is an instance of intellect undecayed by age. He died at ninety-one, and his mind was vigorous to the last. Michael Angelo, who died at eighty-eight, preserved his mind and genius to the end of his days. On the other hand, the brightest efforts of genius have been conceived and executed before the meridian of life ; of which Byron, Scott, Pope, Mozart, Weber, Tasso, Sir Isaac Newton, and many others, are illustrious examples.

The state of a man's brain, and the activity which go along it, are things which every other man can perceive, observe, measure, and tabulate ; but the state of a man's own consciousness is known to him only, and not to any other person. Things which appear to us and which we can observe are called objects or phenomena. Facts in a man's consciousness are not objects or phenomena to any other man ; they are capable of being observed only by him. Then it is not a

right thing to say, according to Prof. Clifford, that the mind is a force, because if the mind were a force we should be able to perceive it. If man would not possess consciousness, he might be considered a machine, which goes by itself according to physical laws, that is to say, is automatic. An automaton is a thing which goes by itself when it is wound up, and we go by ourselves when we have had food. Excepting the fact that other men are conscious, there is no reason why we should not regard the human body as merely an exceedingly complicated machine, which is wound up by putting food into the mouth. But it is not merely a machine, because consciousness goes with it. The mind, then, is to be regarded as a stream of feelings which runs parallel to and simultaneous with a certain part of the action of the body, that is to say, that particular part of the action of the brain in which the cerebrum and the sensory tract are excited.

The battle about this question which commenced in consequence of Gall's discoveries is raging to-day as fiercely as ever. For, it is no longer a disputed thing, that the various powers have special seats or organs in the brain. This fact has generally been admitted to be true of animals, but man's peculiar powers were thought to be lowered or dishonoured when compared with those of vertebrate animals. If the sensations of pleasure and of pain, and the more purely mental manifestations of fear and of affection, have in the lower animals some inseparable connection with an organic apparatus, I do not see why we should be jealous of admitting that the still higher powers of self-consciousness and reason have in man a similar connection with the same kind of mechanism. If painful and pleasurable emotions can be destroyed by the cutting of a nerve, so also can the powers of memory and of reason be destroyed by any injury or disease which affects some bits of the substance of the brain. But, argues the Duke of Argyle, self-consciousness, and reason, and affection, and fear, and pain, and pleasure, are in themselves exactly what we have always known them to be; and no discovery as to the physical apparatus with which they are somehow connected, can throw the smallest obscurity on the criteria by which they are to be identified as so many different phenomena of mind. Our old knowledge of the work done is in no way altered by any new information as to the apparatus by which it is effected. This, the Duke considers to be the bungle committed by those who think they can found a new psychology on the knife. Sensation and memory, and reasoning and will, remain the same what we have known them to be. The known element in

psychology is always the nature of the mental faculty ; the unknown element is always the nature of its connection with any organ. We know the operations of our own minds with a fulness and reality which does not belong to any other knowledge whatever. We do not know the bond of union between these operations and the brain, except as a sort of external and wholly unintelligible fact. And even, if it be proved that we are automata, there would be, according to the Duke of Argyle, nothing terrible in such a fact. For, though there may be great knowledge in the work done by a machine, the knowledge is not in it. There may be great skill, but the skill is not in it ; great foresight, but the foresight is not in it ; in short, great exhibition of all the powers of mind, but the mind is not the machine itself. Whatever it does is done in virtue of its construction, which construction is due to a mind which has designed it for the exhibition of certain powers, and the performance of certain functions. The doctrine of animal automatism, thus scrutinized, becomes even comforting. For what stronger assurance can be given us but that our faculties, when rightly used, are powers on which we can indeed rely.

BERNARD HOLLANDER.

THE BRITISH ASSOCIATION, OR THE PARLIAMENT FOR THE ADVANCEMENT OF SCIENCE.

ALL lovers of science, and of astronomy in particular, will rejoice in the election of Dr. Huggins to the Presidential chair of the above Association for the ensuing year.

Dr. Huggins' very excellent address took away his audience from the material surroundings of four square walls, to examine the advances made by the science of astronomy through the spectroscope, a survey of which, from its birth at Heidelberg, 1859, to the present time, proved most interesting. He said that the light from heavenly bodies may consist of the combined radiations of different layers of gas at different temperatures. The invaluable aid which is furnished by photography in some of the applications of the spectroscope to the heavenly bodies was justly enlarged upon. Although it was in 1839 that Niepce and Daguerre discovered the possibility of taking photographs of the sun and moon, and later on, Bond, De la Rue, Draper, Rutherford, and Gould, held foremost places in this art, still it has remained for recent days to produce the gelatine dry plate. The latter has proved the advantages it possesses over the method of Daguerre, and

the wet collodion film on glass, which, though a great advance on the silver plate, went but little way towards putting into the hands of the astronomers a photographic surface adapted fully to its wants. The modern silver bromide gelatine plate, except for its grained texture, meets the needs of the astronomer at all points. The present year will be memorable in astronomical history for the practical beginning of the photographic chart and catalogue of the heavens, which took their origin in the International Conference, which met in Paris in 1887. The three years since 1887 have not been too long for the detailed organization of this work to elaborate preliminary investigations, which have been ably carried out by Professor Vogel and Bakhuyzen, Dr. Trépid, Dr. Scheiner, Dr. Gill, the Astronomer Royal, and others.

As each plate is to be limited to four square degrees, and as each star—to avoid possible errors—is to appear on two plates, over 22,000 photographs will be required.

Some recent photographs by Mr. Russell, of Sydney Observatory, show that the great rift in the milky way, in Argus, which to the eye is void of stars, is, in reality, uniformly covered with them.

The deciphering of this wonderfully intricate constitution of the heavens, will be, undoubtedly, one of the chief astronomical works of the coming century.

From all parts information is accumulating: from photographs of clusters and parts of the milky way, by Roberts, in this country; Barnard, at the Lick Observatory; and Russell, at Sydney; and from the exact portraiture of the heavens in the great International Star Chart, which begins this year. Since the time of Newton, our knowledge of the phenomena of Nature has wonderfully increased, but man asks, perhaps, more earnestly now than in his days, "What is the ultimate reality of the perceptions? Are they only the pebbles of the beach with which we have been playing? Does not the ocean of ultimate reality and truth lie beyond?" And thus, Dr. Huggins closed one of the finest astronomical speeches ever delivered before the British Association.

In the Anthropological Section, presided over by Prof. Max Müller, a paper was read on the "Antiquity of Man in America," by Prof. G. F. Wright, which bore upon recent discoveries on the relation of the glacial period in North America to the antiquity of man.

Dr. J. R. Garson delivered an interesting address upon some human remains found in barrows in Yorkshire. He dealt principally with a round barrow, in which skeletons with very

long skulls had been found. These skulls were very much longer and narrower than the heads of the existing inhabitants of this country, and corresponded with those of the Iberians. These people were short, had dark hair, straight noses, flat foreheads, and had no lobe coming away from the ear. It was a race quite distinct from the Celtic, which afterwards came in from the East. But the most interesting address in this Section was that which was given from the Presidential chair, by Prof. Max Müller, in which he said, "the study of man in every part of the world had ceased to be a subject for curiosity only; it had been raised to the dignity, and also to the responsibility, of a real science, and it was now now guided by principles as strict and as rigorous as any other science. Instead of attempting to classify mankind as a whole, students were now engaged in classing skulls, hair, teeth, and skin. Many solid results had been secured by these special researches; but as yet no two classifications, based on these characteristics, had been made to run parallel. The most natural classification was, no doubt, that according to the colour of the skin. This gave them a black, a brown, a yellow, a red, and a white race with several sub-divisions. That classification had often been despised as unscientific, but it might still turn out valuable. The next classification was that by the colour of the eyes, as black, brown, hazel, grey, and blue; and within certain limits the results had proved very valuable. The most favourite classification, however, had always been that according to the skulls. The skull, as the shell of the brain, had by many students been supposed to betray something of the spiritual essence of man; and who could doubt that the general features of the skull, if taken in large averages, did correspond to the general features of human character? That distinction had formed the foundation for scientific classification into brachycephalic, dolichocephalic, and mesocephalic."

SUGGESTIONS TOWARDS OBTAINING AN
IMPROVED PHRENOLOGICAL NOMENCLATURE.
PART II.

ALL polished languages contain sign-words which stand for whole sentences, just as a shorthand character stands for the letters of a word. Many of these abbreviation-words do not stand for sense-ideas, or emotional sentiments, but are the word-signs, or symbols, of a whole series of other words linked together, of which this one symbol is the represen-

tative. Before the sign-word can call into action the Mind, *i.e.* (in our sense) “remembered sensations,” the student should be able to convert the shorthand sign into the expanded sentence which it represents, and *vice versâ*. Unless this power is possessed by the reader, these beautifully-representative words are merely so many letters linked together without meaning, *i.e.*, have nothing to say to us. To read with profit, unless a power of translating words of this kind into the sentences for which they are the signs be acquired, reading will be almost valueless, and the gathering up of sound knowledge become almost an impossibility.

Words, too, the signs of general ideas, cannot convey particular meanings unless translated into the words which give the primal sense-impressions. Take the word extension (*ex-tens-ion*) as a sample, and we shall give it in full form of explanation, in order to show what is meant by this whole class of words. First, then, the prefix *ex* means out; *tens* the etymon, or root, means stretch; and the postfix *ion* the something, the anything. The general word extension, then, stands for the following words, or sentence: “something that impresses the organs of sense after the manner of things which stretch out.” This is the general and full meaning so far; but these words convey no definite, distinct, or particular idea whatever. To know this, we must ascertain the original meaning, or sense-thing, for which the word *tendo-tensus* (the participle) was first coined. If that is not known, let us suppose it was the “wing of a bat,” or “a piece of Indian-rubber.” Having translated the general meaning of the root-word, *tens*, into the particular meaning “stretched;” and *ex*, into out; and *ion*, into something, anything; then, *ex-tens-ion* will stand as the sign of the following sentence, *viz.*, “something, anything, doing what those things do when ‘stretched out (like the wings of a bat, or of a piece of Indian-rubber);’” or shorter, “something that stretches out like a bat’s wing, or a piece of Indian-rubber;” or, putting the termination *ing*, for that of *ion* (for they have both the same meaning, *viz.*, act of), then, the word extension when reduced from the general to the particular meaning will be, “the act of a bat-wing stretching out, or the act of Indian-rubber, stretching out.”

All words, then, ending in *ion* or *ing* must be viewed as the symbols of a whole concatenation of words, many or fewer, and can communicate no knowledge till the general word is translated into the particular sentence of which it stands as the representative sign. In this way all words of this class may be explained in the short way, thus—

MOTION.

General meaning—something, doing that which those things do that move ; particular, if *mot* means moving, and *ion* a bird, then motion means, “ bird moving, or bird motion.”

EQUITATION.

If *equitat* means riding generally, and *ion*, particularly, the Duke of Wellington ; then, equitation, will mean, “ the Duke of Wellington riding.”

SENSATION.

Translate *sensat* into feeling, and *ion* into pricked finger, then, the *verbal* meaning will be, “ a pricked-finger feeling :” then, by actually pricking the finger, a person would know the *natural* meaning of the word-sensation.

CAUSATION.

General meaning—something, anything, doing, what causes do, viz., produce effects : translate, *ation* into the particular,—say—sun-rising ; then, causation will mean *sun-rising*—the cause of darkness being dispelled.

POST.

This is one of those marvellously abbreviated forms of expression that strikes one with wonder. Think for a moment what the words—“ I have received a letter by post,” signifies, which when expanded into its full verbal form, thus :—“ Something, which was sent to me by the men, employed by the Government to carry things from people living in one part of the kingdom, to people living in another part.” This is the full general meaning of which the above short sentence is the particular expression. What a long-winded affair this is ; and yet how short the expression—“ I HAVE RECEIVED A LETTER BY POST.” Well might Horne Tooke (quoting the sententious Greek maxim) call this class of most convenient and handy words—“ The winged words of language ;” and this is the case with vast numbers of similarly-formed Words.

TO KNOW,

Is to get the impression of things through the senses ; and afterwards, by the aid of the perceptive and the intellectual organs to elaborate these sense-impressions into different, and higher forms of knowledge.

To LEARN a subject, either by self-culture, or by instruction from another, is to acquire sense impressions ; and by elaborating these into knowledge either at first, or at second hand, we get to know a subject.

BELIEF

Is *Ge-leaf-an*—to grant, to allow, or take for granted. Belief is something—anything taken for granted without self-

investigation. Knowledge, is the first impression of things through the senses, worked up into new forms by means of the soul's organs. Belief, is the permission which we give to *words* to stand in the place of *things* acting through the senses. Knowledge is truth through the influence of things; belief, is faith, through that of words; *i.e.*, words stand in the place of things, and thereby produce conviction.

Has the Soul a cerebral organ called "THE UNDERSTANDING?" or an organ termed "THE WILL?" or an organ called "THE REASON?" No! If not, how have these words come into such common and hackneyed use by writers on Soul science? Perhaps, these words also may turn out to belong more to language and verbal usage, than to be indicative of spirit-meaning, or of soul-action, as they have no special organ to act with. Let us look in what light these metaphysical words are to be viewed: and first, of THE UNDERSTANDING. The soul has no such cerebral organ to manifest itself by, called the "understanding:" at least, we never met with such an organ described in the works of Gall; or of Spurzheim; or of Combe, or of other writers of this class. The fact is, there is no such organ, and, consequently, no such soul-faculty; and this word exemplifies another of those beautiful contrivances of language in order to facilitate the rapid transmission of thought. "The Understanding" is a general expression, devoid of meaning, until translated into the particular Words of which it is the sign. The word "understanding" is the symbol-word, to represent the action of all the intellectual faculties at one time—upon one given object or subject. To understand a subject, of whatever kind, we must bring to bear all those soul-organs or faculties—intellective, perceptive, or emotive—which have any special relation to it, either in whole, or in part. We must "stand under" (understand) these intellectual trees, observe the different objects around, and see whether anything worthy of note can be seen amongst the branches.

This searching investigation by all the faculties of which the word Understanding is the sign, is a contrivance, by means of language to record, that a subject has been sifted to the bottom, and that the use of this symbol-word is the sign that this investigation has taken place. But let it be borne in soul-thinking, by all schools of philosophy, that THE UNDERSTANDING has, *per se*, not one single cerebral organ, nor has it merely one soul-function, but is a short-hand, or rather general word, to aid man in using language more easily, and more expeditiously, in the investigation of Truth.

THE WILL.

There is no cerebral organ for the function of what is called "The Will." This word too, is merely a general sign, whereby a determined wish, to express through two or more of the intellectual organs or thinking powers is to be fixed on at one time—it may be a moment only—upon any one subject, or any range of subjects, looked at as unity. The word is general in meaning till reduced to particulars. General words give rise to a sort of transcendental, etherialized conception, or misty notion, but can never call forth the original sense-impressions of things; not that even which the utterance of the word first coined to express the original sense-meaning, unless indeed this sense-impression had been previously felt by the party who hears the words pronounced for the first time. Words cannot give the meaning of words—nothing can do that, but the sense-impression of things: for the first, or original meanings of words are sensations, and sensations only.

The word Man is a general word, and can produce no distinct idea (something seen) till some particular man is thought of, and conceptually perceived; then, the utterance of this man's name will call up his bodily properties, and soul peculiarities, but not otherwise.

All words are, at first, sense-words, and can only have the original sensation called out, when the word, first given to the sensation, is pronounced. If the sensation had never been cognized by a party, even pronouncing the word, first affixed to the sensation, could not call it forth from its hiding place. How should it? Out of nothing, nothing can come—*ex nihilo nihil fit*. So then, the word "Will," is not expressive of one cerebral-organic action, but of several intellectual organs brought, more or less into operation, according to the motive, or a number of motives, circumstances may have called forth: so that, as the objects and motives vary, so the meaning of this word "Will" will vary accordingly.

REASON,

Derived from the French *Raison*, or the Latin *Ratio*, which is derived from *Res*—a thing, which we have before shown means something, anything talked about. There is no one-soul-power, or one Cerebral Organ called Reason, either in the corporeal, or spiritual organization of man. The word is a shorthand character for expressing the functions of causality, of comparison, and of differentia, whose functions are to trace out the agreements and differences amongst the relations of things. To know the meaning, natural and verbal, of the word Reason, it will be necessary to become acquainted

with the workings and functions of the three above-named cerebral organs.

The highest function of Reason is to THINK—the spirit, or the soul, or both together, prompting, or suggesting the trains of thought—the O D force being the connecting link of the two organizations, of the inner and the outer man.

The second, or inferior function of Reason, is called into action when THINGED, or operated upon from without, through the senses carrying the impress on to the brain, to the soul, and then onwards to the Spirit or Pneuma. The word reason, as before stated, is the sign of causality, comparison, and the differential organ, commonly called “Wit,” whose real cerebral locality will be found, somewhere amongst the Sentiments, and not as one in the tier of the Intellectual group; *i.e.*, Reason, through Causality, has the power of tracing effects to their causes; through that of Comparison, of perceiving analogies; and through that of Differentia of detecting the differences in the relations of things. This last function is no other than, GENIUS, in its grandest form of manifestation.

The resultant action of these three several organs or soul-powers, in a consecutive train of thought, is what is termed Reasoning. The several parts of the reasoning process are called reasons or arguments; and, if the minor premise is included in that of the major, and an inference is drawn therefrom, the reasoning-form is what is called the syllogistic.

To reason, then, is to think consecutively, by exercising causality, comparison, and differentia; and, by means of language, to elaborate trains of thought, in forms suited to the development of truth, whether that be the logic of common-sense, with its two propositions; or the logic of the Aristotelean syllogism, with its three.

From what has been stated, it is obvious, that a number of our metaphysical terms are merely verbal signs for lingual convenience and despatch, and have really little to do with the functions of soul and spirit manifestation. Hence, from a misconception, on the part of philosophers, of the meaning of words and the uses of language, many errors have arisen and passed current in the departments of Logic, of Mental Science, of Theology, and of Polemic Warfare, which might have been avoided, and the world have been much benefited by the omission.

SAMUEL EADON, M.A., LL.D., Ph.D.

THE streams of religion run deeper or shallower as the banks of the Sabbath are kept up or neglected.—*Calcott.*

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

V.—PHRENOLOGY AND THE INSANE: A MAD-HOUSE EPISODE: GOVERNOR SEWARD AND PHRENOLOGY: BOSTON TESTS PHRENOLOGY: OFF TO ENGLAND.

In the preceding chapter, reference has been made to some of the difficulties and opposition which our pioneer Phrenologist encountered during the early part of his public career; a few instances were also related illustrating the mode of attack adopted by the Anti-phrenologists in their determined but unsuccessful efforts to ridicule phrenology, and confound its inexperienced exponent. We had a peep at him while he was giving some of his after-lecture delineations; we heard of him in sharp conflict with an able doctor of divinity, and a celebrated anatomist, and were gratified to know that both these gentlemen, and many other equally distinguished and determined opponents, were won over to his side; we were witnesses of his amusing trial before an eminent judge; from the presence of Chief Justice Gibson, we faithfully followed him to prison and penitentiary, and watched with lively interest his clever manipulation of the heads of various types of criminals; and we felt a touch of the relief experienced by the good folks of Baton Rouge, when the blindfold Phrenologist accomplished the difficult task of separating the respectable citizens from the prisoners. Keeping still on his track, another class of subjects must be briefly noticed before we see him take ship for old England; we refer to the idiotic and insane, a section of the human race whose sad condition evoked Mr. Fowler's kindly sympathy. Impelled by a desire to know man at his worst as well as at his best, Mr. Fowler made numerous visits to the lunatic asylums throughout America. In these humane institutions he had the sad satisfaction of examining the heads of many strange characters.

His visits to the lunatic asylums were in many respects quite as successful as his conquests among the jaol-birds; he has admitted, however, that amongst the insane there may be special cases that would puzzle the most profound to decipher. He found it exceedingly interesting to investigate the subject of mania or insanity from a phrenological standpoint, and he emphatically asserts that phrenology explains and assists in curing insanity more successfully than any other system of mental philosophy. With thoughtful delicacy, and wonderful precision, he indicated the peculiar idiosyncracies of the insane patients, at the same time divining pretty

accurately the particular faculty, or group of faculties, through which the mental disorder was manifested. He took especial pains to give his delineations of the insane a practical turn ; and the doctors and other responsible officials of these institutions received with unfeigned satisfaction the hints and suggestions he gave them regarding the most beneficent mode of treating the patients under their charge. He was delighted to find that many physicians were greatly aided by phrenology in curing the insane ; he also took note of the fact that the greatest success was attained in those asylums where the patients were treated by medical attendants who thoroughly believed and acted upon the phrenological doctrine that there is a plurality of the mental organs. Mr. Fowler's varied and extensive experience supported and confirmed the opinion expressed by Dr. Andrew Combe, "that the manifestations of the mind never became morbid unless the health of the brain be previously overset."

It may be observed, in passing, that in the new edition of Dr. Combe's "valuable and eminently interesting book," entitled "Observations on Mental Derangements," published three years ago, all the controversial and expository matter relating to phrenology is cut out. Sir Arthur Mitchell, M.D., LL.D., who edited the book, and is responsible for this unwarranted concision, explains that the exposition and defence of phrenology has been left out "because the soundness of the fundamental principles of phrenology may be considered as no longer in dispute." This is a fair sample of how the modern medico-phrenologist ignores the discoveries of the early phrenologists ; for, while Dr. Mitchell has deleted the phrenological nomenclature, he frankly admits that Dr. Combe's "Observations" "still rest on the essential principles of phrenology." It is something, however, to have Sir Arthur Mitchell's public admission that the soundness of the fundamental principles of phrenology are no longer in dispute ; and it is but rendering honour to whom honour is due for him to credit Dr. Combe with being mainly instrumental in shaping the existing lunacy laws of England and Scotland, and in giving a wider and truer meaning to the term insanity.

The reader will not be surprised to learn that Mr. Fowler had many conflicts and discussions with the mad-doctors ; but here, as elsewhere, the phrenologist was able to hold his own, although the battle-ground was rather uninviting and precarious. In his rounds amongst the asylums he also encountered the seemingly irrepressible disbelievers, combative as usual, and eager as ever to controvert the contentions and arguments of the phrenologist. One would imagine that the

would-be disprovers of phrenology would have hesitated to play their obstructive game within the precincts of a mad-house; but no,—frequent attempts were made to catch Mr. Fowler unawares, and several of these cunningly-devised schemes were carried out by the doctors themselves. We have only space for one of these mad-house episodes.

At the conclusion of a series of lectures delivered by Mr. Fowler at Charleston, Mass., in the summer of 1859, several gentlemen were publicly examined. After the examinations one of the gentlemen craved permission to address the meeting. He prefaced his remarks by explaining that he was Dr. Luther V. Bell, and had been for many years Medical Superintendent of the McLean Insane Asylum, at Somerville, Mass. In the month of November, 1838, said Dr. Bell, Mr. Fowler paid a visit to the McLean Asylum, for the purpose of examining the heads of some of the patients, and describing the cause of their mania. After the professor had examined a number of the inmates, Dr. Bell was introduced to him by the other doctors and attendants, as a raving maniac; his eyes were wild and staring, his hair was dishevelled, and he was dressed exactly the same as the unfortunate patients. The disguise was so complete that his identity was never for a moment suspected. The delineation was taken down by a reporter at the time, and preserved by Dr. Bell as a memento of the interesting occasion. Seeing that Mr. Fowler was to lecture in Charleston, continued Dr. Bell, he had looked up the original report of the examination, and brought it with him to the meeting; he proposed to read it if the audience were agreeable, as he thought it would substantiate the correctness of the description which Mr. Fowler had given of him that night. The audience eagerly assented, and Dr. Bell read the report of the delineation which Mr. Fowler had made in 1838, under the impression that the person he was examining was insane. We give a few extracts from the two reports:—

1838.

Phrenological Examination of Dr. L. V. Bell, made in November, 1838, by L. N. Fowler, at the McLean Asylum; Dr. Bell being introduced to him among insane patients in such a manner that the real person was not suspected.

(1) Head large, more than common mental power when excited; ambition and determination are the ruling features of his mind; unwilling to give up the subject of pursuit. (Firmness.)

1859.

Phrenological Examination of Dr. L. V. Bell at a public meeting in Charleston, Mass., in June, 1859. Mr. Fowler examined Dr. Bell along with several other gentlemen, and all were entire strangers to him.

(1) You have a strong constitution, a great amount of mental power, have a strongly-marked brain, a distinct personal character, uncommon self-possession, independence and will-power.

(2) You are remarkable for your ability to control and govern others—should be at the head of some institution where you were required to manage those who could not manage themselves. You could quell a mob, always command respect and secure obedience; you have personal authority, never trifles; in a combat would be the last to give in.

(3) Has mechanical ingenuity; has a philosophical mind, naturally refined and delicate; elevated in his feelings; judgment of principles better than details, conscientiousness and veneration large.

(2) Loves power, rank, standing; naturally dignified, never trifles with others, and cannot bear to be trifled with. Mind dwells long upon one thing, often absent-minded, love of property, weak—would desire it only to give him influence; is not intriguing; powers of resistance to opposition and encroachment strong, but not first to begin a difficulty.

(3) You have great sense of justice and moral obligation, also kindness and humanity of feeling; are philosophical, original, methodical; are remarkable for originality of thought, have uncommon intuition of mind; are clear-headed and fond of argument.

Perhaps the most striking point of resemblance was the reference to the subject's almost phenomenal self-possession, independence, and will-power. When Mr. Fowler examined Dr. Bell in the Somerville Asylum in 1838, he said that his self-esteem and firmness were enormous—more so than one in a thousand. In course of the examination, one of the doctors or attendants put a question to Mr. Fowler; could he tell them the nature or cause of the patient's madness. Mr. Fowler said he could not tell, unless it was because he could not have his own way, and was hindered from carrying out his own ideas. Almost the identical words were used during the second examination twenty-one years afterwards; "if ever insane, it would be because you could not have your own way." This incident gave a slight flutter of excitement to the evening's proceedings, and both lecturer and audience listened with close attention to the doctor's recital of the McLean Asylum test examination, in which he had taken a prominent part so many years before. Dr. Bell was a very talented man, but dogmatic, determined, domineering; he would rather be at the head of affairs or nowhere; he must have his own way, or no way.

Concerning the criminal-idiotic subjects Mr. Fowler came across in prisons, asylums, and elsewhere, much might be said; here is the short sad story of one of these badly-born mentally twisted creatures. A lad fourteen years of age was convicted of murdering his father in the State of New York, and was sentenced to death. Mr. Seward, the Governor of the State at the time, saw that the boy had the head of an idiot; he had no reasoning faculties, but strong animal propensities. Before he would be guilty of his death, Mr. Seward determined

to see more of him, and he took the culprit to his own home for a few days, so that he might satisfy himself as to his sanity. The Governor was soon convinced that the boy was idiotic, and he refused to take part or lot in the hanging of a human creature who had only the brain of an idiot. Mr. Seward had a practical knowledge of phrenology, and when he first saw the lad he had serious doubts regarding his responsibility. The close watch he kept on him in his own house confirmed him in the opinion he formed on observing the configuration of his head ; the prisoner was irresponsible, and ought not to be put to death. The humane interposition of the Governor was successful, and the lad was sent to prison for life. Half-a-dozen years afterwards, Mr. Fowler visited Auburn States Prison, one of the largest in America. A number of convicts were brought to him for examination, etc. Of one of these he spoke somewhat as follows : if that young man has been convicted of a capital crime he was not responsible for it, because he has neither the moral nor the intellectual faculties ; he should be restrained, to prevent him injuring anyone, for his destructiveness is very large. Mr. Fowler was informed that the young convict was the boy-murderer who had been reprieved through the timely action of Governor Seward. In season and out of season Mr. Fowler pleaded for the seclusion and humane treatment of this class of the community ; it is better, he says, that they should not have their liberty when they are not capable of controlling their actions. To those who raise the fearsome folks' objection, "fatalism," Mr. Fowler replies that phrenology is not responsible for the shortcomings of the unfortunate individuals in question ; and surely, he argues, phrenologists ought not to be found fault with for pointing out physical and mental defects, and placing within the reach of all concerned the most merciful and beneficent remedy.

The time is mid-summer of 1859 ; the place is Boston, the "Hub of the universe ;" the scene is the private residence of a prominent citizen ; the performers are a number of Boston gentlemen who were under bond to each other to try yet again the skill of the gentleman known all over America as Professor Fowler, the eminent phrenologist, and at the same time to put the science of phrenology to a crucial test. The professor was willing and ready ; had they any suggestions to offer regarding the examinations? Well—yes. Would he consent to be blindfolded? Mr. Fowler had no objection, although, as he said, examinations made blindfold are exceedingly difficult, because he was obliged to judge of the organization, or temperament, by feeling alone, whereas sight is a great

assistance in doing this. This unique trial of phrenology, conducted by a number of leading Bostonians, was fully reported and discussed in the newspapers. One of the daily journals described it as follows :—

“We mentioned, a few days since, an interesting test examination conducted by Professor L. N. Fowler, the eminent phrenologist, at the residence of a gentleman of this city, where the professor consented to be blindfolded, so that he would make his examinations wholly upon the cranial developments. These examinations originated in the question put to Mr. Fowler, by one of our physicians, whether he would be willing to make examinations blindfolded, and without any knowledge of the parties, as a test of his phrenological skill. He assented without hesitation, and accordingly a small number of gentlemen were called together for the purpose of having the test made. It was understood that the affair was strictly private, and no one was aware that any reporter was taking notes of the examinations, or expected any publicity would be given to the affair ; at least beyond a general notice. But the results were considered, on the whole, so significant and satisfactory, that we have procured the notes of the examinations, and publish a number of them—enough to give a good general idea of the test. The gentlemen were assembled in a room, and the Professor was led in blindfolded, and without any knowledge on his part who was present. The gentlemen’s names, whose heads were examined, were not mentioned, nor was there any conversation carried on during the examinations. Professor Fowler proceeded rapidly and briefly to give the delineations which we publish below, and the language is exactly that used by him, being taken down at the time phonographically. It must be acknowledged that Professor Fowler, being blindfolded, must have laboured under many disadvantages, knowing but little of the temperament in either case, while yet many of the examinations were considered remarkable for correctness.”

We need not further transcribe the Press comments, nor is it necessary to reproduce the phonographer’s report of the various delineations. The gentlemen examined were :—

Dr. J. V. C. Smith, Ex-mayor of Boston.

Dr. Chas. A. Phelps, Speaker of the House of Representatives, Mass.

Dr. Morris Mattison.

Dr. David Thayer.

Judge Thomas Russell, of the Superior Court.

Thomas Ball, Sculptor.

Dr. Winslow Lewis.

Z. K. Pangborn, Editor of a Boston daily paper.

Dr. Geo. B. Windship, noted as the strongest man in the world.

Surrounded by this group of representative Americans, we find Mr. Fowler in the prime of life and at the zenith of his fame and popularity. The two or three years previous to his departure for England, was, in many respects, the most active and eventful period of his whole career; they were full of entertaining surprises and welcome encouragements. The fruit of his earlier labours was appearing on all hands. It was satisfactory to know that he had been successful in creating a deep and wide-spread interest in phrenology, and it inspired him with new zeal and higher expectations to be assured that he had been instrumental in benefiting and blessing vast numbers of his countrymen by his rousing appeals and practical counsel. He had proclaimed his message in every part of the American continent, and with his twenty-six years' experience, he felt that he had pluck enough and push enough to lay siege on the British Isles. He had lectured with good success all over the United States, besides Canada, Nova Scotia, and New Brunswick. His zeal and enthusiasm; his masterly expositions; his common-sense manner of illustrating and applying the science, attracted intelligent attention, and commanded profound respect. He was all alive to what he had been able to accomplish, but his past successes made him all the more anxious to proclaim, still further afield, the truths of phrenology. He was not weary of America, and it goes without saying that his countrymen would have preferred him to stay at home; but he had had for some years a wish to pay a visit—a short-lecture-visit—to England. His tour through England, Scotland, and Ireland, and what came of it, is a familiar story to those who know anything of Fowler, Phrenologist. It was happily said of him when he sailed from America for England, in 1860, that he left ten thousand friends behind him, and not a single foe.

(To be continued.)

SPEAKING of phrenology, Sir Henry Holland says: "The principle of division adopted, if principle it can be called, might have been carried greatly further." (Mental Physiology.) This is very true; but Gall was very careful to confine himself to what his observations warranted.

THE corollary to be drawn from the general argument on phrenology is that the human brain is an organized register of infinitely numerous experiences received during the evolution of life; or rather, during the evolution of that series of organisms through which the human organism has been reached.—*Herbert Spencer.*

LONDON,

October, 1891.

IS IT THE SMALL HEAD THAT WINS THE RACE?

AT the last meeting of the Royal Academy of Science, at Berlin, Professor Virchow reported some very interesting measurements that he had made of Athenian skulls, which were found in Schliemann's last excavations in Athens. There were eleven graves, of which ten belonged to the fourth, and one to the sixth century, B.C. Schliemann believed the sarcophagus of the last tomb to have been made of wood, as no fragment remained. All the graves contained human bones, but only four skulls were tolerably intact, and it is these that Virchow measured. They all belonged to adult males, and probably aged persons. What is noticed as being so remarkable about the skulls, is the small size of their volume and capacity; as was also found in the Athenian skulls, examined in 1871. Professor Virchow very wisely adds this warning to over-credulous persons, not to draw conclusions from the size and capacity of the skull as to the degree of culture of a people. We respect the Professor for the timely advice on behalf of a certain class of persons who believe things as they seem, not as they scientifically are. Phrenologists have been accidentally included in this class, but only by those who did not know what phrenology taught—for it teaches more clearly than any other science, that quality takes the lead, and stands before mere size; a small skull, with good quality, if harmoniously developed, is of far more value than a large skull of poor quality. Professor Virchow has added inestimable scientific information by his recent measurements of these ancient crania, which were found tolerably intact.

These skulls are noticeably similar to the Hellenic skulls, which were also small, as are also the Greek skulls.

A large head may, as a rule, be accepted as some indication of a large brain, though of course the latter may be of a very inferior quality. On the other hand, a comparatively small amount of brain and nerve capacity, or thinking material, may be more useable, because finely proportioned and endowed with a superior organization—an amount of grey matter which more than compensates for its inferior bulk.

This is no new idea, only the reiteration of information concerning the ancient skulls that has existed for years.

Some of the skulls of the Natives in Egypt to-day, have

preserved the old conformations that are noticeable in Egyptian skulls which are many thousand years old.

The Ethnological Society in London once attempted to find out the cause of the difference among men and nations, by ascertaining the size of heads and the brain capacity the different men and nations possessed; while size, quality, culture, and where the greatest amount of brain is located in the head, should also have been taken into account.

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* *

WE rejoice in the advance our Employment Bureau has made. Inquiries have been made concerning most of the applicants, and some have been successful in obtaining the required work. We have some names on our books who do not wish to be included in our published list, therefore, personal inquiry is invited from all classes, both by those requiring work to be done, and by those who are seeking it.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

17.—VENERATION.

Sentiment of adoration and worship for the Supreme Being—reverence for what is considered above us—respect for superiority, &c.

That there exists in the human mind a disposition to “worship God,” and that this disposition constitutes one of the strongest of the human passions, are matters of universal history and observation. Strike from the page of history, and from the customs of society, everything pertaining to religion, or, rather, everything connected with the worship of deified beings, and the unity, and even identity, of the whole would be destroyed. In producing this religious feeling and worship, education, doubtless, has its influence; but still they must be the exercise of some faculty of the mind. Education evidently cannot create this feeling. As well might we attempt to educate a man to speak who possessed no organs of speech, or to see without eyes; as well try to teach the brute creation to worship God, as to attempt to teach man to worship when destitute of a faculty by which to exercise this feeling or even to conceive what it means.

This class of functions is distinct and homogeneous; and if the mental economy requires a separate faculty for the exercise of any distinct class of functions, analogy shows us that this class, equally with any and every other class, must also be exercised by a distinct faculty. The history, and the manifestations of this faculty, prove that the functions ascribed to it are always reciprocally proportionate to the developments of a given portion of the brain. If, therefore, there

is any truth in phrenology, the sentiment of worship for a Supreme Being must be admitted to be the exercise of a distinct mental faculty—a faculty which is innate, and which, therefore, forms a constituent portion of the human mind. That the worship of a Supreme Being constitutes the primary, the legitimate, and the chief object of this faculty, is rendered abundantly evident by a reference to its nature, its discovery, its history, and the whole tenor of its manifestations; and that a reverence for those who are considered superiors, such as parents, the aged, the talented, the titled, etc., is only an incidental manifestation of ven., and is rendered equally evident by a similar reference.

This faculty also throws the mind into a deferential frame and creates a feeling of respect for all.



MOLTKE.—Large Veneration.

VERY LARGE.—One having very large ven., with conscien. large, will make everything subservient to his religious views and feelings; will experience great awe upon the contemplation of God, and manifest great fervour and intense feeling while engaged in religious worship and exercises, and take his chief delight in them; be pre-eminent for piety and religious fervour; will make the worship and the service of his Creator the paramount object of his life, and be liable to become over-zealous, if not enthusiastic, in his religious feelings and views.

LARGE.—One having large ven., will think of the Deity only with feelings of awe, if not of devotion; has a strong religious tendency of mind, and, indeed, can hardly be contented without some kind of religion; pays great respect to the religious opinions of others; always treats those whom he considers his superiors in age, standing, talents, etc., with deference, and his equals with respect; and will

never make light of what he considers true religion, nor of the Supreme Being.

One having large ven., with large adhes. and conscien., will experience a high degree of enjoyment in social meetings for religious worship and exercises; will earnestly desire the conversion and salvation of his friends, and, with large philopro. added, of his children, and will pray earnestly for these objects; and, with the addition of moderate concent., will be exceedingly annoyed in his devotions by the intrusion of wandering thoughts, against which he will strive, and for which his conscien. will condemn him; will find it exceedingly difficult to keep his mind fixed upon the prayer or sermon; greatly prefer short prayers and sermons, and greatly dislike those that are prolix; and will give variety to his religious exercises, and detest those that are monotonous or tedious: with large combat., will defend his religious opinions with great warmth and spirit, and contend earnestly for their advancement; and, with destruct. also large, will be liable to employ considerable severity and harshness of expression; with the addition of large firm. and self-e., and of only full benev., will be much set, and somewhat bigoted, in his religious opinions and practices; esteem his own sect, creed, and forms of worship, far more than he does any other, and even blindly and tenaciously adhere to them, and denounce those who differ from him; with only moderate firm., large ideal. and hope, and full or large marvel., will be apt frequently to change his religious opinions and connexions, yet will be zealous as a Christian: with large secret., acquis., and approbat., and only moderate conscien., if he pay any regard at all to religion, will be likely to make great pretensions to piety; put on a fair outside show of religion; and connect himself with some popular religious denomination, yet will possess very little practical piety and every-day religion; will have the "form of godliness without its power;" will neglect duty, disregard justice, violate moral principle, and take shelter under the cloak of his religious pretensions; will be a worldling all the week, yet a very strict Christian on the Sabbath, etc.; with moderate conscien. and small marvel., will not be likely to experience much religious veneration; and may be even infidel in his religious creed; but his ven. will be directed towards his parents, the aged, the talented, the patriotic, or, it may be, his superiors in rank, office, and station; with large conscien., benev., caus., and compar., will delight to study the character and the works, and contemplate the perfections of the Deity; will be a consistent, every-day Christian; rejoice to see the advancement of true religion, and labour zealously and judiciously to effect it; impart an uncommon degree of fervour and warmth of feeling to his religious exercises, and take great delight in them; adopt consistent religious opinions and practices, and be an honour to the Christian name, both in life and doctrine, etc.

FULL.—One having full ven., will pay a suitable respect to religion, and will worship his Creator with sincere devotion, yet will not be particularly devout. One having full ven., with large conscien. and

benev., will be pre-eminently religious, and, perhaps, make religion the great object of his life, yet his religion will be characterized by a regard for moral principle, a desire to do good, etc., more than by a regard for religious worship, creeds, and ceremonies; will place a much higher estimate upon the duties and the first principles of religion, than he will upon any external observances; with concien. and marvel. only moderate, will not be likely to pay much regard to religion of any kind, or, if he does, will be satisfied with the name and the forms of religious worship, etc.

MODERATE.—One having moderate ven., will not be particularly religious, nor very zealous in his religious observance; will not manifest a great deal of deference towards superiors, nor impart a great degree of warmth or fervour in his devotional performances. One having moderate ven., with large concien. and benev., if religiously educated, will maintain a consistent, religious walk, and “do works meet for repentance,” yet will pay comparatively little regard to religious creeds and observances; will be likely to be very zealous in reforming the world, and in “converting men from the error of their ways,” yet will despise sectarianism, and regard only the “weightier matters of the law;” will make great sacrifices in order to do good, promote pure morality, and prevent sin, yet will not be particularly devout; will make the chief burden of his petitions to the throne of grace consist in confessions of sin, and supplications for his fellow-men, rather than in adoration and worship; will follow the dictates of his own conscience, even though they oblige him to forsake “the good old way,” and adopt new measures; will think more of doing good than of attending religious meetings; will live an upright, and consistent, Christian life, and perform all the essentials of religion, yet will pay little or no attention to meats and drinks, etc.

SMALL—One having small ven., will experience but little feeling of devotion, or love of religious worship, as such; will manifest little feeling of deference or respect for parents, teachers, or superiors; and be deficient in the heart, and soul, and fervour, of devotion; will not be very pious, nor at all particular in observing religious ceremonies, nor particularly impressed with a feeling of solemnity and awe while engaged in religious exercises, etc.

One having small ven., with small concien. and marvel., will have very little regard for religion; seldom, if ever, attend religious meetings, and when he does attend them, will go from other than devotional feelings; will be very little affected by solemn or religious exercises, or by appeals to his conscience, or to his fear of offending God; be influenced but little by the restraints of religion; doubt almost everything connected with religious belief; be irreverent, irreligious, unprincipled, and sceptical; and with large mirth., and imitat. added, inclined to ridicule religious people and religious services by imitating or mocking them; and, with large combat., destruct., and self-e. also added, will oppose everything pertaining to religion, denounce it either as a delusion or as a

humbug, by which designing men impose upon the simple and the unsuspecting.

The office of ven. is simply to reverence and worship that which the other faculties select as the proper objects of its exercise.

It has been already remarked, that its primary and legitimate object is the worship of a Supreme Being; yet, as in the case of conscien., the other faculties, education, etc., modify the notions entertained of the character of the being to be worshipped. For example: one having full or large ven., with a deficiency of the intellectual faculties, will be likely to regard the Deity as exercising the various human passions, and swayed by human prejudices, and to worship Him accordingly; with large self-e. and firm., as an omnipotent Sovereign, clothed with authority, immutable and unchangeable, and ruling His creatures "according to His own will;" with full destruct., firm., and self-e., and large conscien., benev., and adhes., will regard Him as "a God, merciful and gracious, long-suffering, and abundant in goodness and truth, and who will by no means clear the guilty;" as perfectly holy Himself, and also as requiring holiness of all His creatures; as creating and governing His moral subjects with a special reference to their greatest ultimate good, and, in doing this, as rewarding those who obey His commands, and punishing such as disobey; as blending mercy with justice: or rather, as infinitely benevolent, yet as a God who will "not let the wicked go unpunished;" with very large benev., only full conscien., combat., and destruct., will consider the Deity too benevolent and too merciful to punish the wicked; with large ideal., will fancy that he sees Him clothed with splendour, and, while contemplating the beautiful, the perfect, or the sublime in the works of Nature, will worship Him with a fervid glow of devotion; with large individ., form, size, and local., will contemplate the Deity as possessed of form and size, a local habitation, etc.; with large caus. and compar., will view God as the great first-cause of all things, and as effecting His purposes by means of causes and effects; and, with the intellectual faculties generally large, as possessed of all possible wisdom and intelligence, and as governing His universe in accordance with the great principles of reason; with very large adhes. and benev., as a God of great sympathy and love; and, with very large philopro. added, as acting the part of a tender parent to His creatures, and as entering with a feeling of tenderness into all their little joys and sorrows; with very large destruct. and combat., and educated in uncivilized society, as capable of being propitiated by the sacrifice of human or animal victims, etc.

According to this principle of phrenology (which is considered as established), one with the moral and the intellectual organs large, and the propensities full, and all unperverted in their education and exercise, will form correct views of the character, attributes, and government of God, and worship Him with pure and acceptable worship. This is rendered the more evident from the fact that the views entertained of God by different nations and different individuals,

with the exception of the influence of association and education, generally correspond with their phrenological organizations. Consequently, if an individual possesses a well-balanced, and a perfectly developed phrenological organization, his views of the character, the attributes, and the government of God must therefore be proportionally the more consistent and correct.

This same conclusion is also strengthened by the principle of adaptation already alluded to. The mind of man must be constructed in perfect accord with those great principles which regulate the structure of the whole universe, and the moral faculties of man's mind, in accordance with the moral constitution and relations of things. Consequently, the mind of man must be so formed as naturally to view his Creator through the medium of truth, and to form only correct notions of Him.

This harmonizes perfectly with the doctrine taught by the great Apostle of the Gentiles, when he says that "the Gentiles, who have not the law," that is, who are destitute of revelation, "are a law unto themselves," and "show the works of the law written in their hearts, their conscience also bearing them witness." Not that a divine revelation is unnecessary, but that phrenology opens up to our view another revelation, to wit, a revelation of natural theology, which perfectly harmonizes with that which is given by inspiration—a volume which every man carries, or should carry, within his own breast, and which "he that runs may read."

LOCATION.—Ven. is located anterior to firm., in the middle of the top of the head, and nearly beneath the union of the coronal sutures, in the superior frontal convolution of the brain.

Veneration has three divisions. The back part gives the love of Antiquity; the central part gives love of Worship; the front part gives Respect.

18.—BENEVOLENCE.

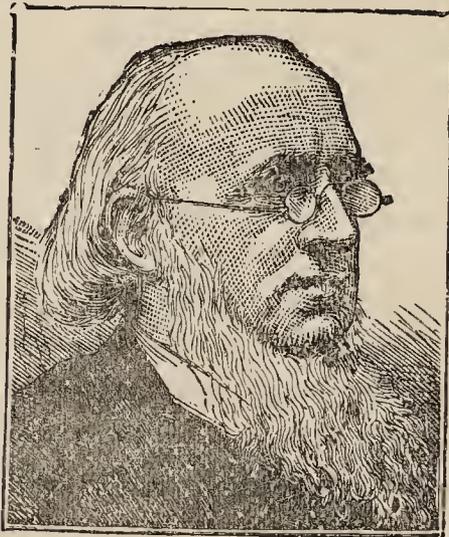
Desire for the happiness of others — sympathy, compassion — philanthropy—kindness, fellow-feeling, benignity, charity.

By creating in the breast of man an interest in the welfare of his fellow-men, this faculty prompts its possessor to perform those innumerable acts of kindness and generosity which, by gratifying his benev., greatly increase the happiness of the giver, and, by adding new comforts to those already possessed, proportionally enlarge the enjoyments of the receiver. Though it is blessed to receive, it is still "more blessed to give than to receive."

Let us suppose, for a moment, that every vestige of this feeling were blotted out from among men—let us suppose the human breast to be callous to the cries of suffering innocence, steeled against the wants and miseries of the world, and perfectly insensible to the happiness or unhappiness of all created beings, and what a picture of moral desolation—what a frigid region of suffering and sorrow—should we have presented to our view! Wrapped in his cold cloak of selfishness man might, perhaps, endure existence, but an existence

to which annihilation would be preferable. Never to give or receive a favour, to say nothing of the mutual advantage accruing to mankind from the principle of helping one another, he would, of course, be a perfect stranger to the delightful and thrilling emotion of gratitude either to God or man.

Let us suppose, in addition, that none of this feeling had entered into the Divine Mind, and that, in the construction of our bodies, and in the arrangement of the physical and the intellectual world, he had made no reference to, and constituted no adaptation of anything that concerns the happiness either of man or of the brute creation, and existence must have been the greatest of curses. But, on the contrary, we perceive that every possible arrangement and adaptation which could be devised by infinite wisdom and skill, prompted by infinite benevolence, and aided by infinite power, have been contrived by that adorable Being whose beneficence knows no bounds. Every



E. T. CRAIG, ESQ.—Large Benevolence.

work of God is a perfectly benevolent work, planned and executed evidently with a view to secure the greatest amount of happiness to His creatures ; and this fact incontestably proves, that the feeling of benevolence enters largely into the Divine Mind. This brings us to the important conclusion, that all the miseries which mankind endure are brought by themselves (collectively) upon themselves, or, that they “give themselves the pains they feel.”

Since, then, this principle of benevolence thus enters into the character and the works of God, and, also, into the whole constitution of things, it is evident, both *a priori*, and upon the principle that the human mind is adapted to that universe of which it forms a part, that the human mind must be so constituted as to appreciate and exercise the function of benevolence, or, in other words, that there must be some innate faculty of the mind adapted to the exercise of this class of feelings. That same train of argument which has been previously employed to show that other classes of functions are exercised by distinct faculties, proves that this class of functions is likewise

exercised by a separate, primary faculty, created expressly and solely for this purpose.

Of all the moral organs, this occupies the most prominent portion of the head, and has allotted to it the greatest surface, thus apparently implying that its function is designed to be one of the cardinal human virtues, and that to do good to those around us is both our privilege and our duty. Yet how frequently is the soothing voice of benevolence drowned in the din of business, of pleasure, and of fashion! Indeed, to learn to live in, and become a part of society as it now exists, is to learn to be supremely selfish; and to "acquire a knowledge of the world," is to become acquainted with the maxims and the practices dictated by selfishness.

This faculty originates that feeling of sympathy which manifests itself in an obliging disposition, and in reciprocal interchanges of kind offices, and also that feeling of humanity which willingly makes a sacrifice of personal happiness in order to relieve the miseries and promote the enjoyment of others.

VERY LARGE.—One having *benev.* very large, with large *conscien.*, will possess, as it were, a deep and an overflowing fountain of kind and tender feeling, and have a heart full of sympathy and goodness; cause trouble to those around him with great reluctance; grieve over the miseries of mankind, and sacrifice almost any personal comfort and interest upon the altar of his *benev.*; be pre-eminent for his philanthropy and his real goodness of heart, and all from feelings of disinterested *benev.*; and, with large *ven.* added, will gladly devote himself and spend his all in promoting the salvation of his fellow-men, and in advancing the cause of humanity and religion; with large *adhes.*, will be likely to ruin himself by assisting his friends, and will ask what they want, rather than what he can afford to give; and, with large *philopro.* and *conscien.*, will be pre-eminently qualified to endure the fatigues of attending upon the sick; watch, with the utmost anxiety over a sick friend, and perform ten thousand acts of kindness, which nothing but the strongest feelings of *benev.*, increased by the tenderest feelings of friendship, could suggest or support him under; with only moderate *destruct.* added, will be nearly overcome by the sight of suffering or death, &c.

LARGE.—One having *benev.* large, in the expression of his countenance, in his manners, and in all his intercourse with his fellow-men, will manifest a warm and glowing feeling of kindness and good-will; enter into the interests of others, and do much to advance them; "rejoice with those that do rejoice, and weep with those that weep;" and experience that strong desire to witness and promote the enjoyment of his fellow-men which will make him willing, and even glad, to sacrifice his own ease and interests in order to alleviate the sufferings or to augment the comforts of his fellow men, and even of the brute creation.

One having *benev.* large, with very large *adhes.*, will manifest this feeling to all, and be particularly kind and obliging to his friends; will sympathize deeply in their distresses or mis-

fortunes, and with acquis. only moderate, add liberality to friendship; be pre-eminently hospitable, willing to do and sacrifice much for those he loves, in serving whom he will often injure himself; and, with large philopro. added, will be extremely kind to children, to the infirm, the aged, and the destitute, and ready to perform those acts of kindness which they require, and which sympathy, mingled with affection, alone can prompt; with moderate acquis., only full approbat. and self-e., and large secret., ideal., and conscien., will proffer his favours in a manner peculiarly modest and delicate; with very large approbat., and only full conscien. and caus., will do and give partly on account of the approbation awarded to benevolent actions; with large approbat., conscien., and adhes., will give partly to please others, and partly to make them happy, which union of motives will greatly increase the manifestations of benev.; with large acquis., will be more kind than liberal; unless a case of distress strongly excite his benev., will give sparingly, yet freely bestow his time, services, and whatever does not draw directly upon his acquis., in his sympathy and kind feeling (which, after all, are the better manifestations of this faculty), will show a large share of benevolent feeling, yet will generally be considered very far from being benevolent; but, with large adhes., and only small acquis., will be ready to help his fellow-men, and particularly his friends, with both his services and his substance, and be quite too generous for his own good; with full acquis., and large ven. and conscien., may give freely to religious and philanthropic societies, to the advancement of missionary enterprises, and in cases of real distress, but not upon other occasions; with only moderate destruc., cannot endure to witness suffering or death, nor see pain inflicted without experiencing a pang himself; with large combat. and destruct., and an active temperament, will manifest a general spirit of mildness, and, when these organs are not excited, will be much moved at the sight of pain, yet, when his anger is thoroughly roused, will even inflict pain with delight; except in a fit of passion, will not cause corporeal suffering, yet will be extremely bitter and sarcastic in his expressions, and manifest strong indignation and resistance towards his enemies, and those whom he thinks would impose upon him; with large cautious., full secret., and only full destruct., will be careful not to do or say anything designed or calculated to wound the feelings of others; yet, with only moderate secret., will often speak before he reflects, and speak in such a manner as to injure the feelings even of his best friends, but will soon be sorry for it; with large adhes. and firm., when he undertakes to help a friend out of trouble, will help him effectually; but, with only moderate firm., will espouse the cause of a friend with great warmth of feeling, which, however, will soon become cool, and leave him in a worse predicament than he would have been in without his help; with large conscien. and caus., will be actuated to do good both by feelings of genuine benev., and also by a sense of duty; with large mirth., will endeavour to augment the enjoyment of all around him by his mirthful effusions; with large

caus., compar., and individ., will lay judicious plans, and employ the best means for doing good and relieving distress, take hold of benevolent enterprises in the right way, &c.

FULL.—One having benev. full, will experience, in a good degree, the phenomena described under large benev., yet will manifest less active benev. ; not be very willing to make personal sacrifices, or waive his own interests, in order to oblige others, yet will experience considerable benevolent feeling ; and will be more apt to give from selfish motives than one with large benev. With approbat. very large, and conscien. only full, may give “to be seen of men,” and take some pains to show others what he has done ; with approbat. or self-e. (or both) large, may give even lavishly, but it will be from selfish or mercenary motives ; with large combat., destruct., firm., and self-e., or approbat., to gain his will may assist in building churches, and in advancing good objects, yet the feeling of pure benev. will be only secondary.

MODERATE.—One having benev. moderate, will perhaps do favours which cost him little or no self-denial, yet will exercise but little sympathy for his suffering fellow-men, and seldom step aside from his own selfish pursuits in order to relieve their distresses, or increase their enjoyment ; and experience but few benevolent remonstrances or promptings.

SMALL.—One having benev. small, will seldom disoblige himself in order to oblige others ; seldom think or care how much loss or inconvenience he subjects others to ; and, with any or all of the selfish organs large, be selfish in the extreme ; with large combat. and destruct., will not only not be moved to pity by the sight of suffering and death, but even take delight in witnessing and causing them ; with large adhes., may love ardently, yet will never add kindness to affection, &c.

VERY SMALL.—One having benev. very small, will never feel his heart beat with the emotion of pity ; never heed the most heart-rending cries of distress ; and, with the selfish organs large, and the reflective only moderate, will be literally a fiend incarnate. This faculty is generally much stronger in females than in males, and creates, in the former, a much greater manifestation of sympathy, of tenderness, of “the milk of human kindness,” of benignity, of pure sensibility for suffering and desire to relieve it, than is manifested by the other sex. From this fountain spring those innumerable acts of kindness, and those ten thousand attentions to the wants and woes of others. Benevolence has three divisions : the posterior part gives Sympathy ; the middle part gives Liberality ; the anterior part gives Philanthropy.

LOCATION.—Benev. is located in the anterior superior portion of the head, just forward of ven., and of the union of the coronal sutures, and beneath the posterior superior portion of the frontal bone, and in the superior frontal convolution of the brain.

(To be continued.)

Hygienic and Home Department.

PHYSIOLOGY AND HYGIENE—INTERESTING FACTS ABOUT THE MYSTERIOUS ORGANISMS CALLED BACTERIA.—We hear much now-a-days in a general way about bacteria. As many of our readers will doubtless welcome more clear and definite information in regard to these minute but powerful organisms, the following is quoted from *Popular Science News*:—"Bacteria are not insects or 'bugs,' but plants. They have, however, the power of spontaneous motion. Like other living things, they take in matter and potential energy, and give off matter and manifest energy. In common with all vegetables not possessing chlorophyll they require organic food for the maintenance of life, but they can subsist upon food that contains no proteid, being able to take nitrogen and sulphur from inorganic sources, and with carbon from organic sources and with water, they build up proteid material. They share respiration in common with all living things, taking in oxygen and giving off carbon dioxide. Certain bacteria, however, do not require free oxygen, being able to unlock it from the substances in which they exist, and certain chemical processes attributable to them evidently depend upon this power of unlocking oxygen from stable compounds. Bacteria are very widely distributed, being present in the atmosphere in vast numbers, and also existing in earth and water. They cover the surface of our bodies and line our entire alimentary canals; fortunately, however, they are chiefly of the benign variety, which will not thrive in living tissues—hence called non-pathogenic. These micro-organisms are among the smallest objects which the microscope reveals. A very common form of bacteria is that known as the bacterium termo, which is an elongated rodlike cell about 1-25,000 of an inch in breadth, and less than twice its breadth in length. It is non-pathogenic, easily killed by antiseptics, and is always found in putrefying or septic fluids; hence it is sometimes called the carrion or septic fungus. Cold (32° Fahr.) suspends the animation of bacteria, but does not kill them—many withstand a much lower temperature. Boiling water kills many bacteria, but those that are in the condition of spores can withstand a much higher temperature, or can withstand the temperature of 212° Fahr. for a much longer time than can the mature bacterium. In general terms extremes of heat have a more destructive action to bacteria than extremes of cold. Heat without moisture does not necessarily destroy the lives of all bacteria, but renders some simply inactive.

Notes and News of the Month.

WHAT SIR FRED ABEL SAYS OF DR. HUGGINS.—"In him for many years past I have known, and in him I have revered, a worker in science, to whom all workers look up with pride. With such names as Bacon, Cavendish, Priestley, Spottiswood, Darwin, De la Rue,

men of science delight to associate the name of Huggins, by reason of the splendid achievement which we owe to the bearer of that name in the great department of physical astronomy. As a pioneer—as the pioneer in the application of the spectroscope to the examination of celestial bodies—Dr. Huggins reveals to us the true nature of the universe in which we live, and laid the foundation to true knowledge in regard to this matter. A quarter of a century ago, Dr. Huggins gave a remarkable address at the Nottingham meeting, when he explained some of the results of his wonderful labours, which were so lucidly described to us. Since that time, Dr. Huggins has indefatigably worked in the same direction, and has continuously produced most admirable results. He has been especially fortunate as a worker in the efficient, enthusiastic, and sympathetic co-operation which he has received from the partner of his labours and of his life.”

* * *

THE Advance Class is held on Monday evenings at 7 o'clock, when those wishing to work up for the diploma are advised to join at once, either by personal attendance or through correspondence. Several at a distance have decided to do the latter.

* * *

THE Artizan Class is full of bright and intelligent students, and meets on Friday evenings at 7 o'clock.

* * *

ON Wednesday evenings lecturettes are given on Phrenology and Kindred Subjects. Mr. Fowler opened the Autumn Session by a lecture on the “Utility of Phrenology.” There was a good attendance, and that Mr. Fowler appeared at his best was remarked by many who heard him.

* * *

MATINEES will be held during the month on Tuesday afternoons at 3.30 p.m. The lectures will be given by Miss Jessie A. Fowler on Health and Hygiene.

* * *

MISS J. A. FOWLER lectured on September 6th at the Livesey Hall; at Finsbury Park on the 17th; and at the Rectory Road Lecture Hall, Stoke Newington, on the 24th, when the Rev. C. Fleming Williams presided. These lectures were upon the Brain.

* * *

AMONG other things in the November Magazine, will appear the character sketch of Dr. Francis Galton. Under men and women of the day: Professor Max Müller, Mrs. French Sheldon. Reviews; new booklets, on “Memory,” “Wedlock,” and “Heads, and what they tell us.”

* * *

THE British Women's Temperance Association will hold its Autumnal Meetings in Great Grimsby, September 28th to October 1st, inclusive. A strong contingent of ladies from London, including Mrs. O Chant, will be present to take part in the meetings.

Fowler Institute.

MEMBERS' NOTES.

“ Learning the liberal Arts and Sciences thoroughly, softens men's manners and prevents their being a pack of brutes.”—OVID. 43 B.C.

THE September Monthly Meeting of the Members took place upon Monday, the 14th, when Mr. R. Hall read a highly interesting paper upon “Nero,” which described the inhuman character of his parents and their ancestors, thus confirming the phrenological doctrine of hereditary descent. A history of Nero's life showed that his luxurious and immoral surroundings, etc., all tended to deprave his mind, which already had a strong natural bias towards voluptuousness and degradation.

The numerous murders, his materialistic nature, the love of pomp and display, the hatred of virtue, the love of the sensual and physical beauty, music, architecture, landscapes, paintings, facts and experiments, together with his want of sincerity, his cruel, filthy mind, and, as Renan puts it, “his application of ferocity to æsthetics to produce Art by torture,” all help to prove the truth of phrenology.

His temperament had the sanguine vital predominating, which was degraded by dissipation. He was short-sighted, the eyes were blue, and hair chestnut. The brain, wanting in anterior coronal height and frontal length, was greatly in excess in both the basilar and posterior sections. Amativeness, destructiveness, constructiveness, secretiveness, acquisitiveness, alimentiveness, approbateness, comprised the largest organs. In the frontal lobe, locality, time, tune, wit, number, individuality, and eventuality, were active—in fact, the perceptive group was much more vigorous than the reflective, which was small. Benevolence, veneration, and conscientiousness were inert.

Mr. Fowler complimented Mr. Hall upon the suitable and scientific manner in which he had handled the subject.

Miss J. A. Fowler was of the opinion that there was a marked element of the motive temperament to be taken into account.

After Messrs. Smith, Piercy, and Coleman had made some comments, Mr. Hall responded to the vote of thanks, which he had well earned.

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At the close of the meeting it was announced that an editor was to be elected from among the members, for the members' items. Miss Maxwell, Miss Russell, Messrs. Brown, Hall, Smith, and Coleman, were proposed, and duly voted for, when the last named gentleman was declared as elected for the ensuing year.

Now that two pages of the magazine are to be devoted to Institute news every month, there will be an additional opportunity for the ventilation of ideas upon phrenology and kindred subjects. Since there is no science which does not relate to man either directly or indirectly, the science of mind is one limitless in its range, and thus there is scope for a great variety of news which might prove both interesting and instructive. Members are therefore invited to send

matter suitable for these "notes" to Mr. G. B. Coleman, the Fowler Institute, Imperial Buildings, Ludgate Circus, E.C.

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It has been decided that the October monthly meeting, which will be held upon the 12th, is to take the form of a discussion among the members, upon "Which is the more desirable, for practical, everyday life—Strength of Body, or Strength of Mind?"

Correspondence.

To the Editor of the PHRENOLOGICAL MAGAZINE.

DEAR EDITOR,—Kindly allow me to thank Mr. Fowler for the advice which he gave me about sixteen years ago, when he was lecturing in Oldham. I had a verbal statement, in which he said I must study phrenology, physiognomy, and kindred subjects; that I was to become a public speaker and lecturer. The advice then given me was a stimulus; I put it in practice; and, in order to test the truth of the science, I sent him my photo for delineation in the PHRENOLOGICAL MAGAZINE for September, which you find with the initials J. F. B. Sir, after sixteen years between the delineations, I think there should be no doubts as to the truthfulness of phrenology or its teachings. If there were more photo delineations it would certainly stimulate those who have had a phrenological delineation by the veteran phrenologist. I have practised phrenology, &c., for most of the sixteen years, and my present position I owe to the advice of L. N. Fowler. I have been able to advise hundreds who have thanked me. But, on behalf of all these my patrons, I have to confess I should not have been a phrenologist had it not been for the venerable L. N. Fowler. May he live to help thousands more is the prayer of

J. F. BRIERLY,

Phrenologist, &c.

Oldham.

To the Editor of the PHRENOLOGICAL MAGAZINE.

DEAR EDITOR,—I wish to tell your readers the following fact told me by Miss F. Turner, daughter of Mr. Turner, a gentleman who Mr. Fowler knows very well.

During one of his visits to Sheffield, and at the close of one of his lectures, he examined a gentleman's head—Mr. Leversidge. Among other things, he told him that he could not save money. When he had finished the delineation, the man stood up and said to the audience that "he had saved money; therefore Mr. Fowler must be wrong." Of course he could not contradict him; but it so happened that the very next day Miss Turner met him in the street, when the following conversation passed between them:—

"You see, Miss Turner, Mr. Fowler did not speak the truth about my character last night."

“Indeed,” said Miss Turner, “how was that?”

“He said that I could not save money; but I have saved money; I have saved seven hundred pounds.”

“Ah! but look here Mr. Leversidge, how much money did you save before you were married?”

“Not any, Miss Turner.”

“Then don’t you think that it is your wife who has saved the money, and not you?”

“Oh! I see now, Miss Turner; that throws a very different light on the case altogether. Mr. Fowler was right after all.”

I have no doubt that a great many so-called “mis-statements” of phrenologists might be explained in a similar way if the truth could be known.

I am, yours very sincerely,

Doncaster.

GEORGE GREEN.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

PROF. A. HUBERT has returned to Harrogate for the season, and has taken new premises in Parliament Street, where he will be pleased to see old and new clients.

PROF. AND MRS. JOHN THOMPSON, of Scarborough, commenced their autumn tour of the provinces, on September 21st, when they opened at the Mechanics’ Institute, Bradford, before a large audience. We advise our Bradford readers to attend these lectures, which are both instructive and amusing.

WE hear from our friends at Collyhurst Road, Manchester, that a class in Phrenology has been commenced, under the superintendence of Mr. Rookes. All students are invited to join them. The class meets every Friday evening at 8 p.m., and is visited twice during five weeks by Mr. Rookes. We wish them every success, and would strongly recommend our young friends, in all places, to start those classes where possible, as we are sure many of the phrenological lecturers would be pleased to organize classes for those desirous of commencing the study of phrenology.

LECTURE ON PHRENOLOGY.—Mr. Richard Gray, Ph.D. F.S.Sc. (Lond.), a resident phrenologist, delivered a lecture at the Congregational School-room, Folkestone, the object of which was to prove

the educational value of phrenology, and the advantages attending the study of the science. The Rev. A. J. Palmer occupied the chair. The lecturer at the outset defined phrenology as the exponent of the spiritual and magnetic anatomy of the body, and he quoted the opinions of several eminent professors whose views accorded with his own upon the subject. Illustrations were also given of the intricate action of the faculties, of individual peculiarities, and their remedies, and he laid down rules by which it might be ascertained whether talent and opportunity were being rightly used. The large audience appeared to thoroughly appreciate the lecture, and at its close, unanimous votes of thanks were accorded to both the lecturer and the chairman.

A LECTURE on "phrenology and physiognomy, or how to read character," was given by Mr. G. Howarth, in the Wesley Schoolroom, Preston, in order to aid the funds of the forthcoming bazaar in connection with the Wesley Circuit, Preston. The weather was most unpropitious, but there was a good attendance, over which the Rev. W. Briscoe presided.—Mr. Howarth, who described himself "as a student of the science of the brain and its manifestations in the skull and in the face, first spoke of the chemical formation and functions of the brain and of its muscular force. He then referred to the two theories in relation to the brain, one that it is a muscle of construction, and the other that it is played upon by a hypothetical and immaterial agent; and afterwards dealt with the motive temperament, explaining his meaning by describing Mr. Gladstone and Edgar Allen Poe. Having discussed the relative claims of phrenology and physiology, the lecturer said that up to 45, brain-power might be developed, and there was a consequent enlargement of the skull. Phrenologists made a mistake in speaking of bumps and organs, as if there were a number of organs in the head. There was one organ, the brain, upon which the mind worked, and they had the manifestations in the motor nerves. No animal except man had moral sentiments developed, neither had animals developments of hope, spirituality, and veneration. If the brain was at the back of the head it indicated there was no moral power, no reasoning power, and selfishness developed. The late Madame Blavatsky was an example of the mental faculty fully developed. Mr. Gladstone had perhaps the finest temperament in England, and were he without motive temperament his brain would have killed him long since. Herbert Spencer might be linked with Mr. Gladstone. The lecturer showed by limelight illustrations the grouping of organs, and Mr. W. Margerison exhibited by means of a powerful lantern the heads of notable murderers, leading statesmen, ministers of religion, etc., concluding with portraits of the Rev. S. Fogg and the chairman. The lecturer explained the points of difference in the individual characters, and the proceedings, which were very interesting, were brought to a conclusion by a vote of thanks to Mr. Howarth and Mr. Margerison, on the motion of the chairman, seconded by the Rev. S. Fogg.

BRITISH PHRENOLOGICAL ASSOCIATION.

The opening meeting of the winter session was held at 63, Chancery Lane, on Tuesday, September 1st, when the chair was taken by the President, James Webb, Esq., who also delivered a lecture upon "Nerves," well illustrated by diagrams, several microscopes, and a number of physiological specimens in spirit. Mr. Webb's lecture was of his usual type, brimful of instruction, and given in an easy and interesting manner. In his opening remarks Mr. Webb said :—

"Phrenology has made some progress since we were here last, in various directions. We also find that we have had a great many admissions in the public press of the value of phrenology. I think that the book to which I have already referred, by Professor Ferrier, entitled 'Cerebral Localization,' is remarkably interesting, and it contains a great many admissions from Ferrier on our side ; and these admissions are seen, when we carefully read the book and find out that they are admissions. I have been working since I have been away. I have not wasted any time in my trying to make converts to phrenology. In Switzerland I have in various ways tried to benefit it."

Mr. Webb's lecture will, we hope, appear in these pages.

Dr. Renout, in the course of some remarks on the endings of nerves, referring to the relation between the lower and the higher centres, said, "There certainly is a difference, inasmuch as all the impressions, which are brought to a certain sort of centre of lower order, most of them, or a great many of them, will end there, while the higher centres will get no message, and will take no cognizance of the occurrence ; it stops short. In sleep, as consciousness is absent, these lower centres have to take care of our bodies, and have to regulate the action of the heart, informing us to a certain extent of approaching danger, as what are called the reflex actions are not all abolished in sleep, although they may be slower. Respiration may best be described as reflex action caused by the action of the blood on certain centres in the brain. These have a certain stimulating action on the brain which expands the thorax and causes respiration. Then again, there are certain actions going on in different centres of different rank, and there is a constant interchange. There is a certain education of the lower centres, enabling them to do certain complicated actions, which they could not at first, but which they learn through exercise. Take how a child learns to walk. Every movement is a conscious act, hence the awkwardness of its gait. Later on, with the improvement by exercise, the consciousness has very little to do with it, and this enables grown up people to walk along with eyes, &c., occupied on something else ; and at the same time, the actions go perfectly, much better than when the higher centres interfere ; *e.g.*, a man can walk along a narrow slip of board with perfect ease, if the board be on the ground ; but raise the same slip of board to a precipice, and he cannot do it, for the simple reason that some other and higher centres would come in and interfere with the automatic action of the lower centres."

G. C.

Answers to Correspondents.

M. D. (Leamington).—Quality of organization is pre-eminently found in persons who are fine-grained, pure-minded, ethereal, refined, high-toned, full of human nature, exquisitely susceptible to impressions of all kinds, poetic in temperament, lofty in aspiration; and it can be perceived by the fineness of the bones, skin, hair, clearness of the eye, and tone of organization. Each temperament has its quality; a mental temperament may have a poor quality. The former may be marked six, and the latter only four; hence, you cannot be guided by temperament only as you supposed. What we must bear in mind is that bigness is not the greatest type of greatness. A whale weighs heavier than a man, but blubber, after all, is not worth so much as human thought and feeling. Bulk, indeed, is nothing; quality is all in all. China covers an area that would swallow up thousands of Londons; but the heart of the world beats here, not there, and the civilization of humanity derives its impulses from our seething Metropolis, and not from the stagnation of Pekin.

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

CLARA.—Has a very desirable amount of vital power, animal life, and good stock. Her chances are favourable for long life and much enjoyment. She is full of magnetism and would make a good physician, or nurse. She may not endure hard labour continuously, but she prefers employment rather than a sedentary, idle life. Her powers are favourably balanced. She will exert quite a distinct and harmonious influence. She has a public spirit, and would prefer to have to do with a public life, whether married or single. She possesses the powers both of body and mind that will enable her to make many friends and draw people around her. If circumstances are favourable she had better qualify herself for some profession, or special labour. She could be popular as a teacher, successful as one engaged in progressive work, in the sphere of a wife, or a missionary. She should by all means devote herself to doing good at home and in the family circle, but if she can have her choice she had better study, and follow some public sphere where she can do good. If her voice is rich she

would make a popular singer, if her education is suitable she would make a favourable teacher.

J. O.—Has a predominance of the brain and nervous system. She is favourably organized for a student, teacher and writer; she is characterized for thought, sound judgment, and capacity to guide others. She is not specially perceptive and knowing, but is decidedly original in the cast of her mind. She is rather reserved, excepting with particular friends; she can talk quite copiously when the occasion requires. She is more theoretical than practical, better able to teach than to put into practice. She can do other people's thinking for them, if they will do her work. She does not care to become generally popular and have many friends, but she wishes to have sincere ones, and to them she will be very devoted. She may not be very muscular, but she has a strong hold on life, and comes from a long-lived family on one side or the other. She is firm, steady, rather reticent, always in earnest, and does not try to be witty or to make a great show. Her memory does not serve her so well in what she sees, as in what she reads and hears. She will not make many mistakes in life, because she will give herself time to think before she acts. She can adapt herself to a business, waiting on customers, to dressmaking, to teaching, and to writing. The older she grows, the more authority she will exert in the sphere in which she moves; she is quite genial and capable of entertaining company. She appears to have favourable talents for music. She will go through with severe trials and difficulties with heroic pluck, and will not suddenly break down or give up.

E. L. (City).—The strongest bent of his mind is connected with art. He is broad between the eyes, which gives a good memory of faces, and forms. He has extensive powers of observation. He is capable of designing and manifesting artistic ability. He would make a good engineer or an artist. He will prefer to work with his head rather than his hands. He is full of ideas, and probably for the first half of his life he will be rather changeable, because he has so many plans, ideas, and ways of doing things that he cannot easily settle down to one thing. He is quite susceptible to new truths, is inventive, and has superior thoughts and talents. His brain is developed largely in the moral region, and probably later on he will take to a professional life, like teaching, preaching, or being employed in some labours of love. He is a little too fair and thin-skinned to do hard and heavy work, or to expose himself to severe out-door labour; hence, to study, to be an artist, a writer, or a teacher, will be more in his line. He has good musical talents, and is very intuitive in his perceptions of truth. If he has no special desire for public life he should be an artist, engineer, or electrician, or something connected with critical work. If circumstances are favourable, he had better put himself forward either in art or as a public man of some kind. He would also sustain himself in a financial sphere, taking care of accounts.

He has a decided talent for surveying, navigation, or for a position where he has to take many things into account.

W. H. A. (Preston).—Has a very ardent, earnest, intense state of mind ; is more feminine than masculine in his impressibilities. He is all alive to everything mental, and that has to do with character. He is more adapted to mental than to hard, physical work. He will never be satisfied so long as there is anything to be learned. He would go almost to the ends of the earth to see something curious, and that would gratify his intellect. As a speaker he will throw his whole soul into what he says, and make the people interested in the subject. He is quite alive to the duties of the day, and to the dangers that surround him ; is thoughtful and careful on all occasions. To sum up his character, he has great perceptive power, a good mechanical eye, favourable talents for book-keeping, arithmetic, and power to estimate. He has a lively sense of wit, and decided fondness for music, joined to considerable versatility of talent. He is exceedingly sensitive, decidedly ambitious, versatile, and scarcely staid, uniform, and quiet enough. He is industrious, anxious to acquire property, and can adapt himself to a great variety of circumstances.

J. W. A.—Has a favourable forehead, can succeed in planning, is quite original, given to reasoning ; he is a man of good judgment, more philosophical than scientific. His memory of details is not good, but his memory of ideas and principles is much better. He is decidedly mirthful, capable of entertaining company, has much taste, and rather strong imagination. He is a lover of art and beauty, and is liable to spend money on fascinating, beautiful things. He is capable of making a good speaker : he should have been educated with that object in view. He is rather interested in public affairs. He cannot well content himself in a quiet business. He has more ability for a statesman than anything else, provided his education was in that direction. He has a fairly balanced organization, and sufficient harmony to avoid inconsistencies and extremes. He is rather versatile in his abilities, can turn his hand to many different things if circumstances require it. He has much sympathy for others, and takes delight in such things as will make them happy. He is capable of exerting quite an extensive influence, and will be able to do much good. He has artistic talent, and is very anxious to improve himself, so as to be a man known for his mental capacity.

G. F. B.—Has too powerful a brain for his body ; he is spending too much life and vitality in thinking. He lacks vitality and animal life ; he also consumes his vital forces and nervous energies faster than he can manufacture them. He is very observing, has good practical judgment, and possesses a scientific turn of mind ; whatever he does is done thoroughly, and he is able to acquire a great variety of knowledge. He is methodical, orderly, and systematic, and is a thorough student so far as he goes. He has a superior memory of

places ; he must be very fond of the study of astronomy, and of experiments, and the application of principles in a practical form. He is not wordy, but uses language with great precision. He ought to be in a generous climate where he does not have to fight with the extremes of weather, needs a physical employment that will give him general exercise of the body, and his mind should be kept as quiet as it can be under the circumstances. The trouble with him will be to husband his resources, and add to the vital stock he already has. He is very sensitive, quite cautious, and decidedly energetic. The main thing that should concern him is to save vitality, and get from others what he can, rather than to give to others : hence, he needs to learn to be selfish so far as taking care of himself is concerned.

H. G. W.—Nature has dealt favourably with this man. He has all the life and vitality he needs for a full day's work every day of his life. Few individuals have so much vital stock on hand. He is rather remarkable for his perceptive power, his varied intuitions of mind, sense of arrangement, love of experiment, and disposition to improve in everything he does. He is remarkable for his interest in mankind, desire to do good and make the world better. He is full of hope and anticipation. He is decidedly inventive, and has very good control over his thoughts, so as to turn them to a good advantage. He is naturally industrious, quiet, energetic, and if necessary, forcible in accomplishing his desires. He is particularly critical and analytical in the workings of his intellect. He is naturally very fond of experiments, and has strong desires to test everything, to prove its utility or value. He is good in conversation, can explain matters, and takes great pleasure in imparting instructions by way of making others happy and successful. He acts on the principle of live and let live, and is pleased to know that others succeed, whether he does or not. He has a very strong individuality of his own ; he does not need to imitate others or to take them as an example. He borrows no trouble, sees the bright rather than the dark side of a subject, and is disposed to take rather mirthful and pleasant views of subjects. He is a very available, practical kind of a man. He would be a good judge of property. He would be quite in his element as a valuer of property. He would be specially successful in estimating character, and putting each man into his place according to his ability.

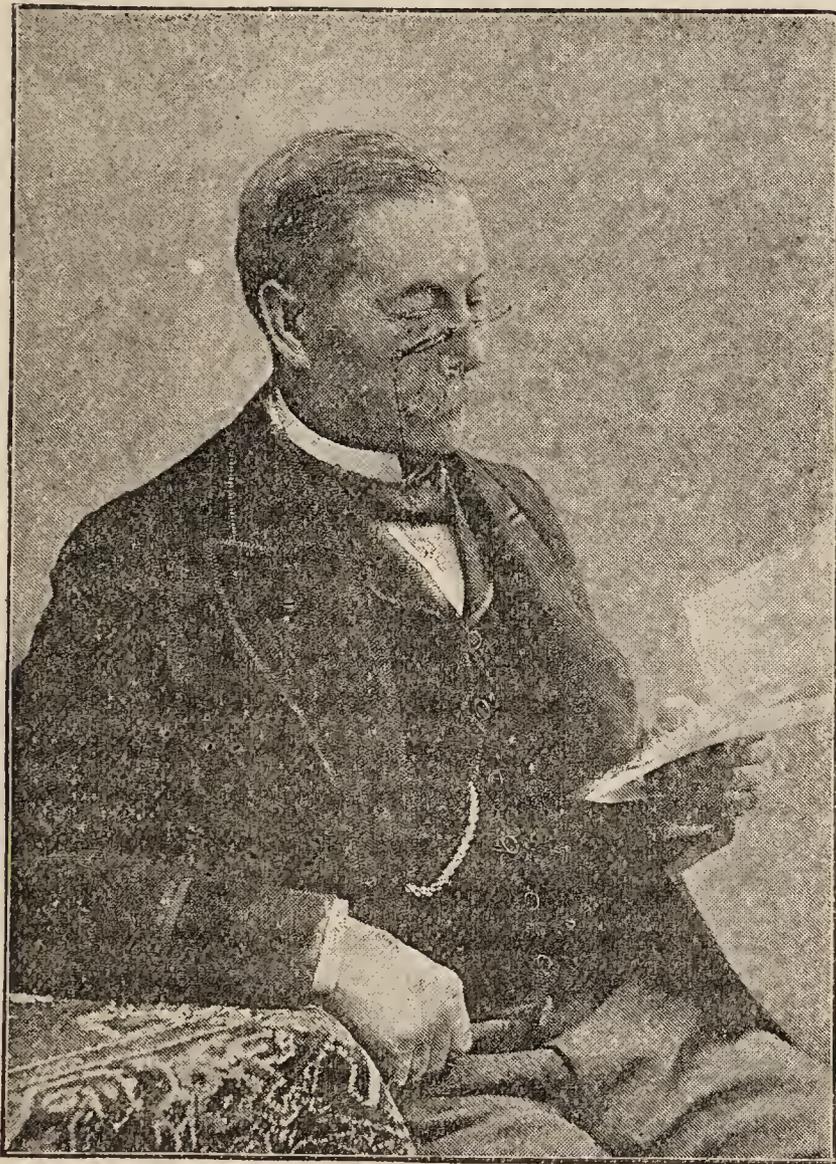
A LAZY man has to work hard to find an easy place.

THE men most eager to help themselves are never in a hurry to help others.

AFFECTATION is the greatest enemy both of doing good well, and good acceptance of what is done. I hold it the part of a wise man to endeavour rather that fame may follow him than go before him.—*Bishop Hall.*

THE
Phrenological Magazine.

NOVEMBER, 1891.



FRANCIS GALTON, ESQ., F.R.S.

THIS gentleman has a favourable temperament for mental manifestation. He is highly organized, and has a fine cast of brain. His head is particularly high in the superior anterior parietal portion, and not very large in the basilar region. The animal brain does not predominate. He has more moral than physical force. He is naturally inclined to study, acquire knowledge, think and investigate. He should be characterized for great grasp of mind; he takes in the whole subject, and is very fruitful in thought. His anterior intellectual lobe is high and prominent. He has the head of a student. He

has great powers of observation, an excellent scholastic memory, and is much interested in what is going on in the world. He is naturally fond of history and biography. He is particularly apt in making comparisons, in illustrating subjects, and making all his thoughts easily understood, either as a writer or a speaker. He has great powers of intuition, is a student of nature ; but more especially of human nature. He is mirthful in his disposition, takes pleasure in entertaining and instructing others. He is easy in conversation, but his talent in music is not so great as his talent for philosophy, history, and experiments. He delights to apply principles, and test everything. As a writer or speaker he should be successful in explaining his ideas, and in making everything clear. He may not be a mechanic or an expert in the use of tools, but he is a good judge of work when done. He has powers to design and draw, and has naturally an artistic turn of mind, but he is more particularly fond of literature. He takes broad views of everything ; he is not much of a sectarian ; he cannot be narrow and contracted in his views with such a head.

He possesses a high degree of activity, and may be sufficiently energetic as a business man, but he is better adapted for writing, speaking, and teaching than for labour. His organization would appear to a better advantage if he had more destructiveness, more base to the brain, and more of the animal nature. His regard for mankind is based on his humanitarian disposition rather than in having a strong social nature.

He has a remarkable faculty for gathering knowledge, retains scholastic education in his memory, and knows how to use all the powers of his mind.

His moral brain is superior in development ; he is very strict in doing what he agrees to do, and values his word highly. He is buoyant in spirit, enterprising in disposition, and is living with his eye on the future rather than the present.

He goes into society with a desire to impart or gain knowledge rather than for mere social entertainment. He is decidedly gifted in taking liberal views of subjects. He has sufficient imagination to do ample justice to his thoughts and feelings, and his spiritual nature is so large as to continually lead him on and give him curiosity to want to know what is coming next. He is prudent in speech, circumspect in action, and conscientious in keeping his engagements.

He is characterized for refinement, taste, and sense of perfection. He is exceedingly tenacious and adheres closely

to what he thinks is right. He is dignified and manly ; he never lets himself down, and commands respect wherever he goes. He appears to have more pride and sense of independence than ambition or love of display. He may be a good conversationalist, but he is characterised more for saying something worth listening to and remembering, than he is noted for saying things that are really funny and pleasing.

He will do very well as a pattern for many people to follow, for the tendency of his mind is upwards, and is exalted. Whatever he attempts in politics, philosophy, or religion, he clings to as a principle, and does not easily change from one platform to another. He has a rare quality and development of brain, which is well rounded out, and particularly high in the reasoning and moral brain.

L. N. FOWLER.

IDENTIFICATION BY FINGER-TIPS.

MR. FRANCIS GALTON'S ingenious paper on "Identification by Finger-tips," which appears in the August number of the *Nineteenth Century*, is sure, says the *Lancet*, to arouse considerable interest and discussion. "Everyone bears in his body," says Mr. Galton, "a visible token of identity which has the unique value of persisting throughout his whole life. It apparently becomes defined some three months before his birth, and it remains unaltered after his death until the final stage of corruption." This token of identity "lies in the system of ramifications of the minute ridges that run across the palms of the hands and the soles of the feet, and it more especially resides in the scrolls or other patterns that the ridges form on the inner surfaces of the bulbs of the fingers." If such a sign of personal identity could be decisively established and made available for ordinary use, there are many ways in which it might be turned to great practical account. As Mr. Galton says, "in criminal investigations it would settle questions of personation, of mistaken identity, and of previous conviction. In the army and navy it would afford a sure means of convicting deserters, and be a powerful deterrent from desertion. It would supply an invaluable adjunct to a severe passport system. It would be of continual good service in our tropical settlements, where the individual members of the swarms of dark and yellow-skinned races are mostly unable to sign their names, and are otherwise hardly distinguishable by Europeans, and, whether they can write or not, are grossly addicted to personation and other varieties of fraudulent practice."

To establish the feasibility and utility of this method the following points are, as the writer indicates, indispensable. First, it must be shown that the markings on the finger-tips follow definite patterns that are capable of minutely accurate description. Then there must be satisfactory evidence that the markings are persistent during the life of the individual. Next, some method of precise comparison between different fingers must be devised. Lastly, some simple plan of taking and preserving finger markings must be suggested. On all these points Mr. Galton has much that is ingenious to say, and he entertains no doubt that each and every difficulty may be successfully surmounted.

Everything obviously turns upon the nature, persistence, and recognisability of the patterns of the little ridges on the finger-tips. These patterns "are formed by the convolutions of delicate ridges, each of which is seen to be studded with small holes, which are the open mouths of ducts issuing from the perspiratory glands. As a rule the issues of all ducts are surrounded by slight elevations of the skin, but those on the inner surface of the hands and feet have the peculiarity of not being contained in separate elevations like craters in elevated cones, but of occurring along ridges, like the craters which stud the crest of some long mountain chain."

The ridges are based upon the subcutaneous papillæ, and serve to render more sensitive our sense of touch. The peculiarities of the patterns which these ridges form on the finger-tips are due to the finger-nail, "which disturbs their parallelism and squeezes them downwards at either side of the finger." Thus the ridges nearest the tip are the most arched, those that follow are less so, and the arching insensibly disappears about the level of the joint. When a print of these markings is obtained and scrutinised under a lens it is found "to abound in minute peculiarities, due to the branchings of existing ridges, and to the abrupt interpolations of new ones. It is in these minutæ, as well as in the general character of the pattern, and not in the measured diameters of its outline, in which the extraordinary persistence resides. The pattern grows together with the finger, and its proportions vary with fatness or leanness, while both are further deformed by usage, gout, and age, which make the hands of old people less slightly than those of young ones." Evidence is given of the persistence of even the most striking peculiarities. In the case of eight pairs of impressions there were reckoned 296 points of comparison, and every one of them was found to hold good—*i.e.*; each peculiarity in the markings on the patterns persisted in spite of the growth of the part or its

change in shape from disease, or other cause. In only one single case was it found "that the forked portion of one ridge in a child of two years and three-quarters had become fused by the time he was a boy of fifteen."

Some principle of arrangement and classification of these finger patterns is obviously required. Mr. Galton finds that every pattern can be easily sorted under one of three fundamental heads—viz., primaries, whorls, and loops. To understand these terms our readers must refer to the plates contained in the article, which render the classification much clearer than any written description could do. Each fundamental variety is further subdivided into two, according to the direction of its slope, either from below upwards and inwards, or (less frequently) from below upwards and outwards.

For the purpose of registering these finger patterns, Mr. Galton has devised a little apparatus, "consisting of a little box, three and a half inches square by seven and a half long, containing a slip of stout glass, a small and good printer's roller, a collapsible tube filled with very fluid printer's ink, a book of blank paper, and a phial of benzole, and some rags to clean the fingers. A drop of ink is squeezed out of the tube on to the glass, and is spread very evenly and very thinly over it with the roller. Then the fingers are lightly pressed, first on the inked surface of the glass, and afterwards on smooth paper; finally, they are cleaned."

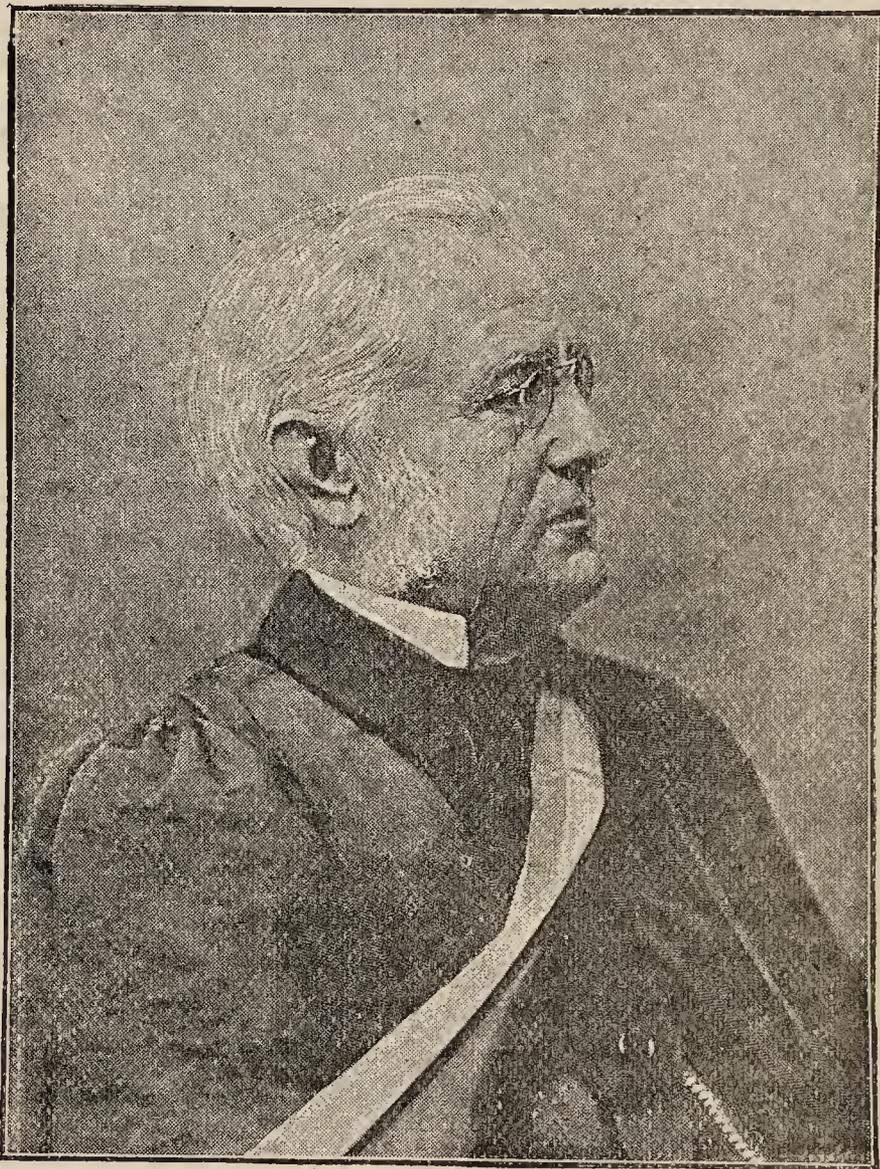
Mr. Galton concludes with the suggestion that, should finger printing come to be adopted as a useful custom, the carrying out of the process might be conveniently entrusted to the photographers as a body. "They are a class of men who are naturally gifted with dexterity of fingers, mechanical aptitudes, versatility, and some literary taste. So far as they are engaged in portraiture, they already occupy themselves in supplying one means of identification; therefore the pursuit of another means of identification would in some sense lie within their present province."

Without expressing any opinion as to the feasibility or utility of Mr. Galton's suggestion, we notice his article partly as one of a most ingenious nature, and partly as an example of minute observation and precise description. It is impossible to exaggerate the supreme importance of rigid accuracy in all scientific work. Broad, bold views and comprehensive generalisations are, no doubt, the condition of all great steps of scientific advance, but laborious accuracy and patient observation must precede. Mr. Galton has given on many previous occasions, and strikingly so in the article before us, an object lesson in the application of these qualities—a

lesson which will not be lost upon the workers in the fields of medical science.

MEN AND WOMEN OF OUR TIMES.

PROF. MAX MULLER.—The general organization of this gentleman indicates a favourable balance and harmony of power. He enjoys life. His features are decidedly regular, and yet strongly marked. His head is strongly developed,



PROF. F. MAX MULLER.

having an excess of benevolence, kindness, and sympathy; also a remarkably high forehead, which indicates unusual intuitive power, sense of truth, love of the real, and a desire to gain as much positive knowledge as possible. He decides on all subjects at once, whether he expresses it or not. He cannot be long in making up his mind on any subject: few men have so strong a development of intuition as he has. He also possesses great powers of comparison; he discriminates between the qualities and uses of things; he is

very practical in his suggestions, and very successful in reducing to practice his ideas. He is not particularly under the control of causality ; he does not run after new thoughts and principles, but is anxious to apply those which he understands. His perceptive intellect is large ; he gathers knowledge easily and retains it ; his mind should be known as a real storehouse of information. Order is one of his largest faculties, giving him method, accuracy, and system : hence he accomplishes much with less labour than most men. Language is large, which enables him to express himself and to use such language as the subject requires. He may not be very verbose by talking, but is very appropriate in his language. His general memory, especially of association, is great : also his memory of places, and he acquires all kinds of knowledge easily. He is good in making up estimates, calculations as to the cost, profit, and loss ; he is naturally gifted in science and figures. He has an excellent faculty to teach and impart knowledge to others. He at once enters into sympathy with his subject, and with the people to whom he is talking. He is thoroughly fatherly in his interest in others. All his social and domestic qualities are large. He is strongly attached to one place, and although other faculties may lead him to travel, yet he thinks there is "no place like home." He has patience to dwell on the same subject until it is done with. He is not dogmatical, but has self-confidence, and takes the place of a man and acts like one. He has all the energy that any ordinary occasion may require, without being boisterous, rough, or combative. He values property as he requires it. He would consider money an impediment if he had to stop to take care of it. He has the organization to make friends, but not to make enemies, for one of the leading tendencies of his mind is to take care of and make others happy : hence he should be characterized for his general sympathy and humaneness of mind ; for his intuitions and correct perceptions of truth ; for his uncommon powers to please, discriminate, and see the correct bearings of truth, and for his great practical talents. We refer our readers to last month's *MAGAZINE* and per another page for a report of part of Prof. Max Müller's address before the British Association.

MRS. FRENCH-SHELDON has a well-balanced organization, as indicated by the face and head. She has strongly marked, yet regular features, and uniformity of development, which favours strength and power of endurance. Her nose is very significant ; it indicates a powerful constitution, and great breathing capacity. The entire make-up of face indicates a

physiological condition most to be desired. Her head, so far as can be seen, indicates a very strong perceptive intellect, a desire to see, a practical judgment, a good memory of all she becomes acquainted with, a great capacity to acquire varied knowledge. She has good judgment as applied to things, their qualities and uses. She is apt in comparison, and successful in drawing inferences. She is very intuitive in her perceptions of truth, also in comparing persons, things, and circumstances. Her social brain is strongly marked, and gives warmth of feeling and earnestness of mind. She appears to be broad through the ear, which indicates force, energy, and



MRS. FRENCH-SHELDON.

executive power. So far as can be judged, she has great powers of application, and ability to be thorough in whatever she takes hold of to do. The entire organism, so far as the likeness indicates, favours uniform ability, and a kind of intellect that qualifies her for almost any sphere of life. She is capable of accomplishing much, of going through severe trials of strength, will, and constitution. She has the ability to retain information and communicate it correctly. Few individuals can sustain themselves in so great a variety of circumstances and labours as she can. She is decidedly feminine and lady-like, but has all the force of character and strength of will that belong to a man. She has also great power to resist

disease, to overcome difficulties, and to clear her way so as to act quite independently of others.

The narrative given by Mrs. French-Sheldon in the Geographical Section of the British Association created a feeling of bewilderment and uncertainty. Her motive in undertaking an expedition in Africa, was "to study the Native habits and customs free from the influence of civilization, and in their primitive condition." In personally directing and leading a force of one hundred and thirty men into regions hitherto unexplored, Mrs. French-Sheldon showed resource and self-reliance, and it is to be hoped that the result of her observation is accepted by her as an adequate off-set to the privations which were inevitable to such an undertaking. While she declares, without egotism, that the Natives treated her, not only with homage, but as if she were a potentate, she has a wonderful story to tell of the methods she adopted to gain absolute control over the men who formed her caravan.

ORION.

PROF. MAX MÜLLER'S ADDRESS BEFORE THE ANTHROPOLOGICAL SECTION OF THE BRITISH ASSOCIATION.

(Continued from the October number of "Phrenological Magazine.")

THE most favourable classification of mankind, however, had always been that according to the skulls. The skull, as the shell of the brain, had by many students been supposed to betray something of the spiritual essence of man; and who could doubt that the general features of the skull, if taken in large averages, did correspond to the general features of human character? That distinction had formed the foundation for scientific classification into brachycephalic, dolichocephalic, and mesocephalic skulls. Besides the general division of skulls into dolichocephalic, brachycephalic, and mesocephalic, other divisions had been undertaken, according to the height of the skull, and to the maxillary and the facial angles. The latter division gave them *orthognathic*, *prognathic*, and *mesognathic* skulls. Lastly, according to the peculiar character of the hair, they might distinguish two great divisions—the people with woolly hair and people with smooth hair, and those were subdivided into people with tufts of hair, and people with fleecy hair, straight-haired, and wavy-haired. Those peculiarities of the hair depended on the peculiar form of the hair-tubes, which in cross-sections were found to be either round or elongated in different ways. Now, all those classifications,

to which several more might be added, were by themselves extremely useful. But few of them only, if any, ran strictly parallel. It had been said that all dolichocephalic races were prognathic, and had woolly hair. He doubted whether that was true without exception; but even if it were, it would not allow them to draw any genealogical conclusions from it, because there were certainly many dolichocephalic people who were not woolly-haired, as, for instance the Eskimos. Let them consider whether there could be any organic connection between the shape of the skull, the facial angle, the conformation of the hair, or the colour of the skin, on one side, and what they called the great families of language on the other. If anything must be ascribed to pre-historic times, surely the differentiation of the human skull, the human hair, and the human skin would have to be ascribed to that distant period. No one, he believed, had ever maintained that a mesocephalic skull was split or differentiated into a dolichocephalic and a brachycephalic variety in the bright sunshine of history. But let them, for the sake of argument, assume that in pre-historic times all dolichocephalic people spoke Aryan, all mesocephalic Semitic, all brachycephalic Turanian languages; how would that help them? So long as they knew anything of the ancient Aryan, Semitic, and Turanian languages they found foreign words in each of them. That proved a very close and historical contact between them.

If, then, they had no reason to doubt that the ancestors of the people speaking Aryan, Semitic, and Turanian languages lived in close proximity, would there not have been marriages between them, so long as they lived in peace; and would they not have killed the men and carried off the women in time of war? And it stood to reason that the children of a dolichocephalic captive woman might be found, after 50 or 60 years, speaking the language of the brachycephalic conquerors. They had been told of late that there never was a first man; but they might be allowed to suppose, at all events, that there were at one time a few first men and a few first women. If, then, the mixture of blood by marriage and the mixture of language in peace or war took place at that early time, when the world was peopled by some individuals, or by some hundreds, or by some thousands only, think only what the necessary result would have been. It had been calculated that it would only require 600 years to populate the whole earth with the descendants of one couple, the first father being dolichocephalic and the first mother brachycephalic. They might after a time all choose to speak an Aryan language, but they could not choose their skulls, but would have to accept.

them from nature, whether dolichocephalic or brachycephalic. When students of philology spoke of Aryans they meant by Aryas nothing but people speaking an Aryan language. They affirmed nothing about skulls, skins, hair, and all the rest. Arya with them meant speakers of an Aryan language. When, on the contrary, students of physiology spoke of dolichocephalic, orthognathic, euthycomic people, they spoke of their physiological characteristics only, and affirmed nothing whatever about language. It was clear, therefore, that the home of the Aryas, in the proper sense of that word, could be determined by linguistic evidence only, while the home of a blue-eyed, blonde-haired, long-skulled, fair-skinned people could be determined by physiological evidence only. The physiologist was grateful, no doubt, for any additional skull whose historical antecedents could be firmly established; the philologist was grateful for any additional word that could help to indicate the historical or geographical whereabouts of the unknown speakers of Aryan speech. On those points it was possible to argue, but, as soon as they went beyond those mere matters of fact, everything became at once mere vanity and vexation of spirit. His experiences during the last 40 years had only served to confirm the opinion which he expressed 40 years ago, that there ought to be a complete separation between philology and physiology. Yet, if we were asked whether such a divorce should now be made absolute, he should say no. There had been so many unexpected discoveries of new facts, and so many surprising combinations of old facts, that they must always be prepared to hear some new evidence, if only that evidence was brought forward according to the rules which governed the court of true science. It might be that in time the classification of skulls, hair, eyes, and skin might be brought into harmony with the classification of language. But if the alliance between philology and physiology had hitherto done nothing but mischief, what right, it might be asked, had he to accept the honour of presiding over that section of anthropology? In spite of all that he had said against the unholy alliance between physiology and philology, he had felt for years—and he believed he was now supported in his opinion by all competent anthropologists—that a knowledge of languages must be considered in future as a *sine quâ non* for every anthropologist. So long as anthropology treated only of the anatomy of the human body, any surgeon might have become an excellent anthropologist.

But now, when anthropology included the study of the earliest thoughts of man, his customs, his laws, his traditions,

his legends, his religions, even his early philosophies, a student of anthropology without an accurate knowledge of languages, without the conscience of a scholar, was like a sailor without a compass. It might be said that anybody could describe what he saw, even though unable to converse with the people. He said, decidedly no ; and he was supported in that opinion by the most competent judges. It was no excuse to say that any traveller who had eyes to see and ears to hear could form a correct estimate of the doings and sayings of savage tribes. It was not so, and anthropologists knew from sad experience that it was not so. Without the power of interrogation and mutual explanation, no travellers, however graphic and amusing their stories might be, could be trusted ; no statements of theirs could be used by the anthropologist for truly scientific purposes. From the day when that fact was recognised by the highest authorities in anthropology, and was sanctioned by some at least of the anthropological, ethnological, and folklore societies, a new epoch began, and philology received its right place as the handmaid of anthropology. The most important paragraph in their new charter was that in future no one was to be quoted or relied on as an authority on the customs, traditions, and, more particularly, on the religious ideas of uncivilised races who had not acquired an acquaintance with their language sufficient to enable him to converse with them freely on these difficult subjects. He ventured to go even a step further, and he believed the time would come when no anthropologist would venture to write on anything concerning the inner life of man without having himself acquired a knowledge of the language in which that inner life finds its truest expression. That might seem to be exacting too much, but they had only to look, for instance, at the description given of the customs, the laws, the legends, and the religious convictions of the people of India about a hundred years ago, and before Sanskrit began to be studied, and they would be amazed at the utter caricature that was often given there of the intellectual state of the Brahmins compared with what they know of it now from their own literature. If anthropology was to maintain its high position as a real science, its alliance with linguistic studies could not be too close. Its weakest points had always been those where it trusted to the statements of authorities ignorant of language and of the science of language. Its greatest triumphs had been achieved by men such as Dr. Hahn, Bishops Callaway and Collenso, Dr. W. Gill, and last, not least, Mr. Man, who had combined the minute accuracy of the scholar with the comprehensive grasp of the anthropologist, and were thus

enabled to use the key of language to unlock the perplexities of savage customs, savage laws and legends, and, particularly, of savage religions and mythologies. If that alliance between anthropology and philology became real, then, and then only, might they hope to see Bunsen's prophecy fulfilled, that anthropology would become the highest branch of that science for which the British Association was instituted.

Dr. Huggins, in proposing a vote of thanks to the president of the section for the address which he had delivered, referred to the physiological breadth of thought and scientific insight which underlay the very eloquent words they had heard from him.

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

VI.—RE-OPENING THE BOOK OF PHRENOLOGY.

When Mr. Fowler landed in England, the phrenological outlook was not at all promising. He speedily found out that phrenology had almost drifted out of the world of human affairs. Interest in the subject had been allowed to lapse, through passive indifference on the part of the great mass of the people. Those who believed in it, and had faith that it would ultimately be recognised as a science, were but a small proportion of the community; and as they were scattered all over the three kingdoms, with no formal society to keep them together, and no means of co-operating or of conferring with each other, phrenology seemed to be well-nigh dead, and likely to be soon forgotten.

But things were not so bad as they looked. There were a considerable number of loyal adherents of the much abused Gall, Spurzheim, and Combe. They were making little ado, it is true, but the conflict between phrenology and its traducers was only suspended; it was by no means ended. This undemonstrative period of thirty years ago, may be partly accounted for by the fact that the fires of hostility and persecution had burned themselves out. Phrenology was quiescent, mainly because it was being let fairly well alone. Doubtless some of its opponents and revilers were of opinion that they had scotched, killed, and buried it; and not a few of the cautious men on the northern side of the Tweed, who had feared and fought phrenology with a fierceness not easily understood, comforted themselves with the hope that they had heard the last of it when George Combe was laid to rest in the Dean Cemetery, Edinburgh. (This unholy dread of

phrenology still haunts the minds of a certain class of modern opponents, who seemingly take their cue from the *Edinburgh Review* and Sir William Hamilton.) While the death of Combe brought an imaginary relief to the anti-phrenologists, the loss of that valiant champion was keenly felt and sincerely mourned by his friends and followers, as well as by phrenologists in all parts of the world. Taking into account the peculiar circumstances, it will be easily understood that the advent of L. N. Fowler, exactly two years after the death of Combe, was hailed with unfeigned delight, and as a happy omen for the future of phrenology in the old country.

Mr. Fowler addressed his first British audience at Liverpool in the month of August, 1860. Immediately on landing he set about the work he crossed the Atlantic to do; without loss of time he began to tell out his phrenological message. It is recorded of George Combe that he would not consent to lecture unless he was first assured that a sufficient number of interested persons had signified their intention to attend his expositions; he would only expound the new mental system to those who were desirous of studying and proving it. Our American visitor commenced his work amongst us on entirely different lines. He did not come merely to wrangle with disputants, nor did he court the patronage of any society; his aim was to reach the thoughtful multitude by means of the lecture platform. He made no selection, and imposed no restriction, but gave a pressing invitation and a warm welcome to one and all. He opened the neglected book of phrenology, and scattered its truths with no sparing hand.

In his own inimitable way he made it clear that phrenology was something more than a confused jumble of fanciful ideas and speculative theories. By incontrovertible evidence he proved that the phrenological doctrine is founded on a solid basis of stubborn facts; he showed that the system was not antagonistic to, but in harmony with the tenets of Christianity; he demonstrated that the phrenological theory of mind and brain solved many psychological problems; and he maintained that phrenology communicates a vital knowledge of the hidden springs of thought and action, and imparts a corrective and a guiding power to those who submit to its beneficent sway. Phrenology, which had been regarded by the unthinking multitude as a bundle of the wildest vagaries, and by the very learned as a patchwork of guesses, became in his hands a reasonable and understandable philosophy, a science of facts, a practical common-sense system, which bore a close relation to the commonest and the loftiest affairs of life.

The scientific and philosophic aspects of phrenology were

fully dealt with ; but Mr. Fowler's exhaustive exposition of the temperaments, which had been rather superficially handled by the earlier phrenologists, threw a new light on the subject. He directed special attention to the harmony which exists between phrenology and physiology, and the importance of a healthy body for the manifestation of a healthy mind. He pointed out the close relation which exists between the body and the brain, the mysterious connection which exists between the brain and the mind, and the influence which this inter-dependence exerts in the formation of character. Physiology and phrenology are so intimately connected that he found it impossible to present the claims of the former without considering those of the latter. Mr. Fowler's comprehensive grasp of the whole question, his inclusion and sympathetic treatment of phrenology, physiology, and psychology, enlarged the field of inquiry, and raised the controversy to a plain where it could be dispassionately considered. Blank ignorance, unreasoning prejudice, and unyielding dogmatism prevailed, but he dared to be true to his mission, and boldly delivered his message. The chatter of those who bothered and bored him with their "conscientious objections" to "the science of bumps," as they ignorantly called it, was brushed aside with contempt, and the phrenological system placed before the people of this country as it had never been before.

And while he defended the science against the unscrupulous attacks made against it, and proved it to be the true science of mind, he proclaimed with much earnestness the numerous advantages a knowledge of phrenology imparts. Mr. Fowler was quite as much concerned about the practical application, and the practice of phrenological principles, as he was for the soundness of one's phrenological faith. He was eminently practical in his advocacy. Phrenology teaches us self-knowledge ; how to develop the organization as a whole harmoniously ; it enables us to govern and educate each faculty, to control the propensities, to cultivate and direct the moral feelings ; it indicates the particular calling or pursuit by which we may succeed in life ; it assists the parent to be more faithful in the discharge of his duties to his children ; it is an important aid in the practice of the professions ; it teaches charity for the frailties of others ; it suggests to us a more humane and reformatory treatment of criminals ; it sheds a new light on the cure and prevention of insanity ; it guides in the choice of an agreeable and congenial companion for life ; it teaches that moral perfection is the most desirable end to be attained in this life. Each of these

and many other advantages he commended and enforced with a thoroughness which roused the most indifferent to attention, and compelled the objector to re-consider his hastily-formed, prejudiced opinion.

Mrs. C. Fowler Wells has told us that when the famous Scottish phrenologist was lecturing in America, they had considerable difficulty in following him ; his ideas were ably and earnestly expressed, but his broad Scotch dialect sorely puzzled them, and they failed to understand much of what he said. Mr. Fowler, it need hardly be said, did not perplex his English hearers by his dialect, or by any peculiarity in his mode of address. There is no doubt that he brought with him his American manners, and his sharp, crisp, curt style of speaking ; but neither his American mannerisms, nor his "I guess," and "I calculate," hindered, in the slightest degree, the British public from understanding and appreciating him. They took to him at once, and they have never repented their confidence. In one of his most entertaining lectures, Mr. Fowler says that, while John Bull requires and takes letters of introduction, delivers and receives them with ceremony, Brother Jonathan introduces himself without ceremony, and keeps his letters in his pocket. This cap fits Brother Fowler to a nicety ; and while we give him credit for keeping his letters of introduction in his pocket when he landed on our shores, we at least must be credited with having responded to his appeals, and bound him to us with ties which he now finds it hard to break. His genial manner, manly independence, sound common-sense, quaint humour, sparkling wit, ready retort, biting sarcasm, blended and brightened with a finely tempered enthusiasm, secured for him immediate and unreserved confidence ; time and talk has confirmed and sealed the compact.

According to a great living preacher, sermons would seldom be dull if they were more alive with aphorisms and epigrams. Comparatively, they are trifles, he admits, but nothing is trifling, he wisely adds, by which serious truth can be brought home to careless minds. Mr. Fowler's lectures were never dull ; they were seasoned and brightened all the way, through and through, with aphorisms and epigrams. The quaint sayings ; the wise counsel ; the humorous paradox ; the fervent warning ; the urgent appeal, set in memorable phrases and terse sentences, gave rise to stimulating thoughts, brighter hopes, agreeable reflections and noble aspirations. One of the secrets of Mr. Fowler's success with his first English audiences lay in the magical way he succeeded in securing the immediate receptive attention of his auditors ; he had something new

and true to communicate, and he had the happy faculty of saying it in a captivating way. From the first sentence to the last, one and all listened with rapt and deepening interest. He was full of his theme, and he did his very best to communicate his own thought, his own faith, his own enthusiasm, to others.

The effort made by Mr. Fowler to re-kindle the smouldering fires of phrenological inquiry, called forth his best energies. The task of reviving the almost defunct science seemed a hopeless one, and it would have been a thankless one if he had failed, as many predicted he would. He was met at Liverpool with the wondering exclamation, "Why, sir, we thought phrenology was dead." In all parts of England, Scotland, and Ireland, he was saluted with the same dismal refrain—"phrenology is dead." A live man, however, with a definite purpose before him, a conscientious faith in the rightness of his cause, and fitness for the work to be done, may achieve wonders. Charles Kingsley's advice to a friend, is recalled by Mr. Fowler's earnest endeavour to re-establish the truths of phrenology in our midst. "Get a hold of some one truth," Kingsley said, "let it blaze in your sky like a Greenland sun, never setting day or night. Give your soul to it, see it in everything, and everything in it; and the world will call you a bigot or a fanatic, and then wonder a century hence how the bigot and the fanatic continued to do so much more than the sensible folk around him." The time has not yet come for estimating the full measure of Mr. Fowler's success, but there need be no hesitation in now affirming that to him mainly, if not entirely, belongs the honour of having re-established the science of phrenology in Great Britain. By his unwearied and effective labours during the past three decades he has bridged over the wide gap which separates, in point of time, the old phrenology from the new. Phrenology blazed in his sky like a Greenland sun; he gave himself to it; saw it in everything, and everything in it; and although he has not often been called a bigot or a fanatic, he has had to contend with serious difficulties, and overcome bitter opposition; and the opposition has, in some instances, come from those who should have been working with him, instead of fighting against him. We are not a prophet, nor are we the son of a prophet, but we venture the prediction that by and by it will be discovered, and, let us hope, frankly admitted, that the new phrenologists owe a deep debt of gratitude to the pioneers of the old phrenology; and wonder will be expressed that they continued to do so much more than the over-wise anti-phrenologists who opposed them.

It is not our intention to trace Mr. Fowler's lecture tours and journeyings throughout the United Kingdom during the past thirty-one years; nor is it necessary to give instances of his contests and conquests, although his experiences amongst the anti-phrenologists of this country are quite as interesting as the battles he fought with the opponents of the science in his native land. In Edinburgh, the birth-place of George Combe, he found a remnant of a phrenological society, which had probably been formed during Dr. Spurzheim's visit to the Scottish capital. This society, and many other similar associations which had existed in several of the large towns and cities, soon became extant; in the course of time the original members died, and there were no others to take their place. Mr. Fowler says that he found the remains of several societies, represented by a few dusty casts and skulls, and a small library. He did not consider it part of his duty to attempt to resuscitate these declining societies; he addressed himself to the general public, to the multitude. His lectures and delineations were everywhere highly appreciated; wherever he lectured he had large audiences, and much encouragement to go ahead and make his home amongst us. His first course of lectures at York was the longest ever known to be given by a private individual at that time. The same might be said of other visits to the principal centres of population, for lectures were not then a popular institution, and were not common outside Mechanics' Institutes. The largest and best halls were always selected; and before he had been many months in England, the intimation of Fowler's lectures on phrenology, physiology, physiognomy, and temperance, aroused lively interest and ensured good audiences.

From 1860 to 1873 Mr. Fowler lectured five nights in the week for ten months in the year without intermission. Eighteen years ago he made London his professional head-quarters and his home. He has lectured from fifty to one hundred times in several London halls, and he has paid frequent visits, extending from one to five weeks, to every city and town in England, Scotland, and Ireland.

Mr. Fowler now rarely lectures out of London. One of his last provincial appearances, twelve or eighteen months ago, was reported by one of the local newspapers. "Mr. Fowler still mounts the platform with remarkable youthfulness and vigour, and delivers his lectures in a clear sonorous tone, in a manner which a man thirty years his junior might envy."

The Fowler Phrenological Institute, which has been recently founded, and which is already giving promise of permanent and far-reaching usefulness, has occupied Mr. Fowler's constant attention lately. He considers that the Institute ought to have the most of his time, and all the help and push he can give it. The Fowler Institute will be again referred to in our next and closing chapter.

(*To be concluded.*)

CRANIO-CEREBRAL TOPOGRAPHY.

A REPLY TO THE CRITICISM OF THE "POPULAR MEDICAL MONTHLY."

As a rule scientists are inclined to speak derogatorily of phrenology, and decline to discuss the subject with phrenologists on the ground that the latter are not acquainted with the rudiments of anatomy. The author of an article on phrenology in the *Popular Medical Monthly* of July must be one of those men, though not a scientist. Referring to my communication to the PHRENOLOGICAL MAGAZINE of last June, he throws ridicule on my assertion that every convolution of the brain can be traced on the skull, by remarking that "the writer is clearly drawing upon his imagination." That author is evidently not acquainted with the researches on "Cranio-Cerebral Topography." But though he may never have read of the investigations to ascertain the relationship between particular brain convolutions and the various skull-areas, he need not have been so extremely unfair to leave out the most important explanatory sentence. He might have quoted a little more fully, particularly the following sentence: "Numerous anatomists have investigated the matter most carefully—for instance, Sir William Turner and Dr. Reid; and the criminal anthropologists of France, Italy, Germany, and Austria claim to be able to detect the deficiencies and excessive developments of particular convolutions from the outline of the skull." In so doing, he would have acted fairly, and his criticism, however antagonistic, would have been honest and deserving of attention.

Since the last editions of such well-known works on anatomy as Quain's, Gray's, etc., have a summary on the researches to which I refer, my critic may some day become acquainted with them, although even then I do not expect

that he will show any more interest in phrenology, of which he seems to possess as much acquaintance as he could possibly obtain by looking at one of the phrenological busts in an optician's shop.

There is a quotation from Prof. George M. Humphry's "Treatise on the Human Skeleton," which, though it is well known, I wish to repeat. Before doing so, let me quote the writer in the *Popular Medical Monthly*. "The surface of the brain is perfectly regular and smooth; the skull is made up of two plates, an inner, or smooth plate, differing in structure from the outer plate. Between these two plates there is a division—an inter-space, which is filled up with bony material, a space differing in width in different individuals. Again, the outer plate frequently differs in conformity from the inner plate, and an indentation or protuberance may have no corresponding elevation or depression inside. Therefore, to have a skull mapped out, as in the phrenological head, is a purely imaginary device, unless, indeed, the emotions or the faculties of the brain have their seat in the bony structure of the skull, and not in the brain."

The author of this paragraph has evidently not carefully examined living heads, or else he would have become aware that the different regions of the skull vary in individuals as much as two inches in measurement, and more sometimes, whereas the pretended obstacle of variable thickness in the bone, amounts to no more than one-eighth or one-half of an inch. I should like my critic to study the following lines, taken from an eminent anatomist, most carefully:—

"The skull is moulded upon the brain, and grows in accordance with it. The size and general shape of the brain may be estimated with tolerable accuracy by the size and general shape of the skull. The opponents of phrenology by denying this do not in the least advance their cause in the estimation of thinking persons, because the statement is of a kind at once to commend itself to common sense as being highly probable. The frontal sinuses and the projecting ridges, the inequalities on the surface of the skull, which have no correspondences in the interior, do not amount to much, and show only that allowance must be made, and that we must not expect in this way to form an accurate estimate; but they do not affect the principle that the skull is moulded upon and fitted to the brain, and that its exterior does, as a general rule, convey pretty accurate information respecting the size and shape of that organ. The arguments against phrenology must be of a deeper kind than this to convince anyone who has carefully con-

sidered the subject." (George M. Humphry, "A Treatise on the Human Skeleton," page 207.)

Professor Benedict says on this question :—

"It has been objected that there are in the skull very many accidental secondary prominences which have no counterpart in the brain. Fairly considered, however, this objection is not very material, inasmuch as it refers only to unimportant and changeable details and comparatively rare abnormalities. No scientific man, even if he does not altogether agree with Gall, disputes the doctrine that the construction of the skull is remarkably proportionate to the whole anthropological organization in brutes and in man; and the whole of craniology, as it is understood by anatomists and anthropologists, would have no meaning if this idea were not the leading one."

The remarks of my critic convey the impression that the two plates of the skull grow independently, and are not all determined by the growth of the brain. No other conclusion could be made by reading the lines which I have quoted. The text-book which the writer has consulted must be very old indeed; any modern work on the anatomy of the brain and skull would enlighten him differently.

B. HOLLANDER.

(To be continued).

CONCERNING THOUGHT AND IDEAS.

PHRENOLOGY has a special interest in Thought, and anything that tends to clear away the great haziness and mist that seems to have settled down upon it, will be of service to man. With many it is quite a foregone conclusion that Thought is engendered in and by the human mind. The few are beginning to see another way of intelligently viewing and handling the important subject, and a few ideas anent the same will probably be acceptable to many.

The idea that Thought is an element filling the universal mind, and capable of being appropriated by living entities in exact proportion to the cultivated capacity realized, is making headway by dint of its own inherent power and merit. This idea sets forth that it is not in the power of the human mind to apprehend or employ anything but the Thought element contained in the universal mind; any more than it is in the power of the human body to apprehend or employ anything save the physical material ready to its hand. The science of

correspondence is declared to be responsible for this conclusion; and if it be once admitted all sorts of new ideas are begotten thereby immediately, and an entirely new, strange, and strong light is thrown upon many a dark and mysterious subject.

The Thought element is understood to be composed of simples, which the human mind selects from to suit its state and capacity, and then sets to work with its selected particles compounding them into Ideas. The human mind under such circumstances has nothing whatever to do with creating Thought, but it can by its independent action in selecting and compounding the simple Thought elements it appropriates, create Ideas. The carpenter does not create the raw materials he works with and fashions into a house, but as the idea of the house was not expressed until he gave it expression he created the house. God causes all the elements of Thought and raw materials of any kind to grow, and He thus creates what did not formerly exist; man takes these provided elements of Thought, and raw materials generally, and by cleverly and otherwise manipulating them, creates Ideas and Things which did not formerly exist.

It matters nothing to Phrenology whether this conception be true or false, for all the human entities are or can be personally concerned in is the cultivation and growth of capacity wherein to receive Thought, and of skill wherewith to compound practical and serviceable ideas. But it matters everything to the human family whether its concepts be true or false, for if its concepts be false, with them it can only run to or jump at false and erratic conclusions.

The Thought sphere has never yet been at all adequately explored, or at all accurately mapped out. When new Ideas cross our path we are very apt to give them the go-by; but it is well to remember that any amount of Truth awaits discovery yet, and that when it does confront us in the form of an unknown stranger, we should be careful to quietly and cautiously entertain it, for thereby we may entertain an angel unawares. All the ramifications of this new concept with reference to Thought and Ideas are amazing; and as all things are to be made new, why should it not be proved true that the beginning of this new creation is to be with matters of this potent nature!

Among the many ramifications of this new concept is this, that Thought is alone responsible for everything made or done in the entire universe. Its advocates contend that the Greek term *Logos* finds a much more happy and exact equivalent in the term *Thought* than in that of *Word*. They affirm in

consequence that when the author of John's Gospel began that remarkable record he wrote of Thought rather than Word, and in doing so emphatically and clearly affirmed that apart from God (or Thought) was not anything made that was made. They further contend that God being spirit and not flesh has no material organs of any description, not even vocal ones; so that when the Scriptures say "He spake and it was done; He commanded and it stood fast," that the very Truth intended by that expression when it is expressed nakedly and literally is "He *thought* and it was done; He *willed* and it stood fast." This is understood to be the exact function of spirit as such; and that it can operate directly on anything and everything material or otherwise, and accomplish anything it requires quite apart from any materialistic instrumentality. On this understanding it is assumed that as soon as man becomes in any true sense Godlike, he will then be in the image of God and spirit; and then as a natural and necessary sequence he will be qualified to do the works of God or spirit.

Another of the ramifications of this concept is that Thought—as the only Factor in the Universe—can accommodate itself exactly to materialistic or spiritualistic minds, so as with the former to fit it neatly that it may only operate Thought indirectly by or through materialistic instrumentality, and with the latter so that it may operate Thought directly and quite apart from any materialistic instrumentality. This latter attainment is said to be the intention of Genesis i. 26: "Let us make man in our image after our likeness (therefore pure spirit) to have dominion over the fish of the sea, the fowl of the air, the cattle, *all the earth*, and every creeping thing that creepeth upon the earth." This has never been realized by man yet, for we see not yet all things put under man. This state of things man must grow to and attain, and then the kingdom of God (or the reign of spirit) will have come; and then "the powers of the coming age" will be realized, and man will be so thoroughly Godlike that he will think and it will be done, and will and it will stand fast. This is a wondrous concept, and quite likely to be when it is remembered that "eye hath not seen, nor ear heard, neither hath it entered the heart of man the things which God hath prepared for those that love Him." Thus also will it be seen that a REST remaineth for the people of God.

THEODORE WRIGHT.

A GREAT man is always willing to be little.—*Emerson*.

SLÖJD.

ON THE POSITION IT SHALL HOLD IN OUR SCHOOLS
AND ITS ESTHETIC VALUE.

ALL children like variety and change, and Slöjd offers both, taking its position between the advanced transition classes and the technical schools, and occupying the place of clay-modelling, geometrical paper-folding, and paper-cutting. And where it is difficult to find the necessary three or four hours for the two weekly lessons, it may be substituted for one of the daily drilling lessons ; for, where properly taught, Slöjd offers excellent physical training for growing boys and girls. An effort has been made in Sweden to introduce Slöjd into the Kindergarten, and I have seen little boys and girls of five or six years of age, working with miniature planes and saws ; but their strength is of course quite inadequate for real work, and the wood has to be prepared especially for them. The objects made by the children are very small and not very useful.

But this is not my objection to introducing Slöjd into the Kindergarten, because, as will have been already gathered, the moral value of Slöjd is to be considered by the educator as of primary importance, and if Kindergarten children could derive the full moral benefits to be gained from Slöjd, this alone might be sufficient excuse for introducing it into classes for little ones. But the charm of novelty is gone, and you cannot, instead of Slöjd, give Froebel's Occupations to big boys and girls !

Therefore, just at that point when the children are wearying for something more permanent and useful, when they have had hand and eye well trained and physical power developed, Slöjd steps in, occupying the last years of the child's elementary education. No child should begin Slöjd before it has completed its eleventh year, and then by steady, gradual work it will finish the series in about three school years. Thus the child, destined to earn its living by manual work, finds itself well prepared for the technical school, which has already nearly taken the place of apprenticeship in so many trades.

The hand has acquired that general dexterity, which is invaluable in every walk of life. But it is not only this general dexterity of power that the child has acquired during these last two or three years of elementary instruction. Many children seem to find it almost impossible to follow theoretical lessons ; words to them do not convey ideas, and the logical connection between diligence and progress, or

industry and success, is to them something they cannot understand. Somewhere between the tenth and eleventh year, children begin to reflect on this subject, and to feel keenly the difference that exists between them and their most gifted companions, and the idea that they are failures at school often has the effect of discouraging them from making any sincere and earnest effort in early life.

The school, therefore, should not limit itself to theoretical instruction, as there will always be some who fail to satisfy its demands, but it should more closely resemble life, where men are expected to be practical.

Further, I would say a few words on the value of Slöjd as a means of training the eye and sense of form. For this is a very important part of an esthetic education. In most schools we have drawing, and children who have been in the Kindergarten have learned modelling. I think we may speak of the Slöjd lesson as being more nearly related to the modelling than to the drawing lesson, because both Slöjd and modelling are means of calling the attention of the children to producing in the concrete, and thus affording opportunities for observing the three directions in space taken by solid forms, *i.e.*, length, breadth and thickness, whereas in elementary drawing the children have only to deal with two directions. Yet, as absolute accuracy in measurement is very difficult for children, it is only gradually introduced; and models that have to be made from diagrams with rules and compasses, are alternated with curved objects, as spoons and pin-trays, which must be executed by the hand alone, guided by the eye.

I would urge the introduction of Slöjd into all schools for boys and girls above the age of ten or eleven. Indeed, we shall soon, I trust, have, both in England and America, plenty of teachers; and I hope, ere long, to see Slöjd introduced into our schools, not as a means of preparing our boys and girls for life, by teaching them the elements of trades, but as a means of making them better, happier, and more useful citizens.

EMILY LORD.

PHRENOLOGY

PROVED, ILLUSTRATED, AND APPLIED.

(Continued.)

SPECIES III.—SEMI-INTELLECTUAL SENTIMENTS.

Improvement seems to be the watchword of our race, and its spirit is manifested in those almost innumerable inventions and contrivances which so greatly augment our comforts, multiply our conveniences,

and give new charms to our existence. These improvements result from a class of faculties which partake of the nature and qualities of both the sentiments and the intellectual faculties, constituting, as it were, a stepping-stone between them.

20.—CONSTRUCTIVENESS.

Mechanical ingenuity and talent—ability to make, build, construct, and manufacture.

Well has Franklin observed, that “man is a tool-making animal ;” and he might have added, “and the only tool-making and tool-using animal, because the only animal which unites constructiveness with causality.” Unquestionably man is calculated for living in houses, wearing apparel, and, by the aid of machinery, effecting objects which are even necessary to his well-being.



GEORGE STEVENSON.—Constructiveness.

Mechanical principles, by the application of which vast additions can be made to the sum total of human happiness, and human improvement, are also found to exist, and, likewise, to pervade the physical world. Now, since man forms a part of this physical world, and is, in part, under the dominion of these laws, there exists an absolute necessity for him to possess some innate and primary faculty, the office of which is to take cognizance of these principles, and, also, to exercise this class of the mental functions. Indeed, without such a faculty, man would not be adapted to that physical state of existence in which he is placed, but would be imperfect, and perish. This faculty is found in construct.

Men are not made skilful mechanics and artizans solely nor even chiefly by instruction ; for, if they were (other conditions being equal) their skill and dexterity would always be in proportion to the amount of instruction received. But such is by no means the case ; for we frequently observe that some who have every advantage of instruction,

make but indifferent workmen, whilst others seem intuitively to understand the art of manufacturing. Proper instruction may, indeed, improve the natural talents even of the latter, and greatly facilitate their operations, yet they possess a natural capability of being taught to make—a docility which often manifests itself very early in life, and of which others are comparatively destitute. Who taught Michael Angelo how to build, or Canova how to use the chisel, or Benjamin West how to paint while yet not nine years old, and entirely ignorant of the art of painting? Nature, mainly. Their powers were innate, or, in other words, they possessed extraordinary construct., aided by other faculties.

Developments of this faculty, and, also, a want of it, exist in combination with almost every conceivable variety of character and talents. Men of feeble intellects often possess it in a remarkable degree, whilst others who have gigantic minds, are sometimes almost entirely destitute of it. The conclusion, therefore, is inevitable, that a talent for making and building, must depend upon a distinct and primary mental power.

VERY LARGE.—One having construct. very large, with very large ideal., imitat., individ., form, size, colour, and compar., will literally possess a passion for the pursuit of the fine arts; be able to perform almost any operation belonging to mechanics or the arts with wonderful and intuitive skill, and with extraordinary facility and success; to make almost any thing within the attainment of human ingenuity; to become an artist or mechanic of the very first order; and will be likely to break away from all hindrances, and to surmount every obstacle, in order to indulge this passion; will be able to impart a peculiar beauty and a richness to all his works, and combine perfect accuracy with taste, and will excel in every undertaking of the kind, even though obliged to use indifferent tools.

LARGE.—One having construct. large, will possess a high degree of natural skill in making, building, contriving, repairing, &c.; be prone to whittle and scribble; be delighted with mechanical operations.

In effecting mechanical operations, other organs largely help construct. For example: one having large construct., with large imitat., will be uncommonly dexterous in making after a pattern, and can readily learn to do with tools what he sees others do; with large form and ideal. added, will give a peculiar finish and neatness to his work, and succeed in making fine and fancy articles, such as combine utility with richness and elegance; but, with ideal. only moderate, will succeed only in making common and useful things: with large firm., self-e., form, size, ideal., caus., and compar., and only moderate imitat., will excel in superintending mechanical operations; in directing others what to do and how to do it, and in judging of the qualities of work, and will be a first-rate foreman, yet will not himself excel as an operative mechanic; can plan and oversee much better than execute; but with large imitat. added, will excel in both; be a natural mechanic or artist of a very high order; be capable of turning his hand readily to almost any branch of mechanical business; and

frequently contrive new methods of accomplishing his work ; with large conscien. added, will never slight his work ; with large weight and individ. added, be highly delighted with the operations of machinery ; able to comprehend it and judge of its adaptation ; and possess an extraordinary talent for drawing, draughting, modelling, planning, and probably for inventing ; be remarkably ingenious, and very successful, in every branch of mechanics which he may undertake : with large concent., will dwell patiently upon any piece of work until it is entirely completed, and rendered as perfect as possible ; and will be able to engage in only one kind of labour at a time ; but, with moderate or small concent., will leave much of his work unfinished ; generally have on hand several pieces of work at a time, and feel a desire frequently to change from one to the other ; be rather "a jack at all trades" than perfect in any, &c. : with large combat. and destruct., and only full conscien., when his work does not please him, will become angry with it, and feel like breaking or tearing it in pieces : with very large self-e., hope, and ideal., will be induced to try many mechanical experiments ; to engage largely in heavy operations, and even speculations ; and be likely to spend much time in endeavouring to invent : with very large ideal., imitat., mirth., form, size, colour, local., and compar., can design and execute ludicrous pictures or drawings, burlesque representations, caricatures, &c. ; copy hand-writings ; draw after a pattern ; recollect for a long time the shape of faces, landscapes, machines, &c., which he has seen, and make their *fac similes*, or draw and make from memory ; and, with large caus. and compar. added to this combination, can readily adapt mechanical principles to the accomplishment of desired mechanical objects ; readily detect the faults in machinery and remedy them ; invent and improve machinery, &c. : with large imitat., individ., form, size, weight, order, and calcu., and full compar. and caus., will make a first-rate engineer, surveyor, &c.

FULL.—One having full construct., with large imitat., will possess a respectable share of mechanical ingenuity ; and, with the addition of large form and size, and full individ., have all the natural talent requisite for becoming an excellent mechanic, especially in those branches which require but little more than making after a pattern ; can learn to use tools with tolerable dexterity, yet will require considerable practice, but with it, will become quite successful ; can repair articles that break, and "fix up" such things as he may have occasion to use in his family and his business ; yet his success will depend as much upon Art as Nature : with imitat. only full, will seem to possess this faculty only in an inferior degree, especially if circumstances do not imperiously urge its exercise, and will be dependent, in some degree, for any mechanical skill or success which he may manifest, upon his other faculties, such as form, size, local., ideal., compar., caus., &c.

MODERATE.—One having moderate construct., with only moderate imitat., may learn, with considerable effort, some of the less difficult "trades," yet will never be eminent for his skill in any ; may, perhaps,

learn to construct those plain articles which are often called for in the family and in business, yet will show but little skill and dexterity in such operations, and prefer to pay a mechanic for executing them; will dislike to use tools, and choose some occupation which is not mechanical: with imitat. and form large, may succeed well in making after a pattern; manifest considerable skill in copying, and easily learn to do what he sees done by others, yet will owe his success mainly to these last-named faculties; and, with large compar. and caus. added, may, perhaps, direct others, and improve their inventions, and even invent, yet will not possess much independent, mechanical talent, &c.

SMALL.—One having small construct., with only moderate imitat., will be able to learn to perform even simple mechanical operations only with great difficulty, and then merely as an automaton; will manifest but little skill or dexterity in the use of tools or the pen; dislike a mechanical occupation more than almost any other; do everything in which the exercise of this faculty is requisite only by main strength, and without contrivance or ingenuity; and be a mere bungler in almost everything of the kind which he undertakes.

VERY SMALL.—One having very small construct., will be apparently destitute of all mechanical ingenuity and inclination.

In the skulls and casts of several North American Indians, in the skull of a New Zealander, and of a Charib Indian, examined by the authors, this organ is small, which harmonizes perfectly with the fact that in every mechanical art and effort these tribes are quite inferior to many races of men.

LOCATION.—Construct. is located just above the middle of a line connecting the top of the ear and the external corner of the eye; or just below ideal., and a little forward of it, in the posterior part of the third frontal convolution, above the sphero-temporal bone. Constructiveness has three divisions. The back part gives Dexterity; the middle portion gives Ingenuity; the front part gives power of Contrivance.

When both organs are large, they form an obtuse angle, ideal. extending in a nearly horizontal direction, and construct. uniting with it in nearly a perpendicular direction. When the intellectual organs are large and long, it spreads itself upon the sides of the head, and thus presents but little prominence. This, together with the temporal muscle, which passes over it, and varies in thickness, causes, except in the case of children, an occasional mistake. It may likewise be added, that many individuals who possess, by nature, no small share of the constructive power, think they have but little, because they have never been so situated as to call it forth, and also because they suppose that construct. applies exclusively to the use of tools as employed by a professed mechanic, yet, when occasion requires, they are found quite skilful in executing repairs, and have a whittling and tinkering propensity.

21.—IDEALITY.

Imagination—fancy—love of the exquisite, the beautiful, the splendid, the tasteful, and the polished—that impassioned ecstasy and rapture of feeling which gives inspiration to poetry and oratory, and a conception of the sublime.

That there exists in the human mind some faculty, the function of which is to inspire man with a love of the beautiful and the exquisite—a fondness for the sublime, the elegant, and the tasteful, will appear evident when we compare man with the lower order of animals, or civilized man with the savage, or the refined inhabitants of a city with the common population of the country. Were it not for the influence of this faculty, these things would be held in no higher estimation by man than by the brute, or by one man than by another. Were it not for its influence, mankind would have no higher relish for the exquisite, the tasteful, the beautiful, and the sublime, than for the insipid, the dull, the homely, and the vulgar. Were it not for this faculty, we should no more highly prize the bold images, the glowing flights of fancy, the daring thoughts, and the impassioned bursts of eloquence which characterize the productions of Homer, of Shakspeare, of Milton, of Byron, of Addison, of Irving, of Chalmers, of Patrick Henry, and of Daniel Webster, than we do the plainer and dryer style of Locke, Dean Swift, William Cobbett, and many other still more homely writers. Without ideality, the splendid productions of a Raphael, a Corregio, a Canova, a Phidias, and a Praxiteles, would find no more favour in our eyes than the rudest paintings, and the roughest carvings, of the most uncivilized nations.

Though essential to the poet, it takes a wider range. It adds to the delight we take in viewing an elegant statue, an exquisite painting, a splendid temple, or any other finished production of Art. It causes, and increases, the rapture experienced in beholding the beautiful landscape, the rugged cliff, the bold promontory, and the lofty mountain.

Ideality gives elevation, and fervour, and polish to the mind. With approbateness large, it often manifests itself in a fondness for splendour in apparel, equipage, houses, and pleasure grounds, and is an important element in gaiety, fashion, and elegance of manners.

VERY LARGE.—One having ideal. very large, will possess a rich fancy, and experience emotions accompanied with enthusiasm; be disgusted with that which is commonplace or imperfect; be excessively fond of poetry and fiction, an enthusiastic admirer of the fine arts, and revel in the regions of fancy.

One having very large ideal., with very large adhes. and compar., and full lang., can make poetry of a high order, which will breathe forth the tenderest feelings of friendship; and will be able to find but few minds of kindred sympathy and pathos with his own; with large perceptive organs, reflective organs, and full moral organs, accompanied with an active and a full-sized brain, will be possessed of a deep fund of thought, will produce the best of sentiments, and yet

manifest the most exquisite feelings, and rise far above his fellow-men, both in genius and virtue ; be devoted to the fine arts, and also to the more substantial branches of learning ; and, with full self-e., firm., and combat., will be qualified to become a splendid speaker ; will make almost any sacrifice in order to listen to a splendid oratorical performance, and will possess the feeling and the power of eloquence and poetry in the highest degree.

LARGE.—One having ideal. large, will possess refinement and exquisiteness of taste and feeling, a lively imagination, and a brilliant fancy ; an admiration of the elegant, the beautiful, the gorgeous, the ornamental, the perfect, and the sublime ; of the fine arts and polite literature ; of poetry if of a high order, and of eloquence ; and will relish everything fanciful and exquisite wherever it is to be found.

One having ideal. large, with colour, form, and size large, will gaze with delight upon a well-proportioned painting, and be able to appreciate its merits ; and, with form and local. large, upon a beautiful landscape, cascade, flower, etc. ; with lang. and compar. large, will employ many metaphors, and other figures of speech ; will express thoughts in a glowing and elevated style ; with hope large, will have high flights of fancy, indulge in the revellings of imagination, yet, if concent. is only moderate, his flights will be vivid, but not long-sustained ; with self-e. and compar. large, will not often allow a low expression to escape his lips, but will be disgusted with vulgarity ; with only a moderate-sized head, and only full caus. and compar., will manifest more of refinement than solidity, of sound than sense, of rhetoric than logic, of sickly delicacy than vigorous intellect, of finely turned periods than important ideas, and overload his style with figurative expressions ; with combat. and destruct. large, throw invective into the form of poetry ; with large individ., event., and lang., may make a good speaker and writer, and a popular lecturer, yet will be indebted for these qualities more to his manner than to his matter, to his style than to his ideas ; may please the fancy, and communicate many facts, yet will not reason closely or clearly ; with amat. and adhes. large, will take a special interest in sentimental poetry, which breathes much of the passion of love and fires the fancy, and in romantic and dramatic composition ; with mirth. large, will relish humorous poetry ; with ven. and conscien. large, devotional and religious poetry ; with the reflective faculties large, will despise light and trashy poetry ; will relish only that which, while it flows in smooth numbers, bears upon its bosom a rich cargo of important ideas, and sound, moral sentiments ; and, if he attempt to compose poetry, will imbue it with much sound, practical sense, and also prefer those authors, both in poetry and prose, who employ an elevated style, but pay far more attention to the arrangement and the argument than to the expression, &c.

FULL.—One having ideal. full, will possess considerable refinement of feeling, and some poetic fancy, yet they will be exercised only in a subordinate degree ; will be fond of poetry and the fine arts, yet not by any means devoted to them.

One having ideal. full, with large perceptive and reasoning faculties, will confine his attention chiefly to matters of fact, and to the investigation of first principles without reference to the splendour or the drapery of style ; express his thoughts in a straightforward, plain, and forcible manner, with less reference to elegance than to the facts and arguments ; prefer those speakers who do the same, and possess more of the eloquence of thought than of diction ; prefer plainness and utility to beauty and ornament ; and seem, at times, to possess less taste and refinement, and delicacy of feeling, than is commendable.

MODERATE.—One having ideal. moderate, will seldom experience the glow of feeling which ideal. imparts, nor manifest a great share of refinement of feeling, nor express himself with elegance and taste ; will regard poetry, the fine arts, literature, painting, sculpture, &c., with less enthusiasm, and prefer plainness to ornament, &c., and, with self-e. moderate, take up with inferior articles.

SMALL.—One having ideal. small, will be coarse and vulgar in his manner of expression ; have but poor ideas of taste, of propriety, and beauty, and little relish for poetry or oratory, or fine writing, and be but a miserable judge of anything of the kind.

VERY SMALL.—One having ideal. very small, will be nearly destitute of the feelings and manifestations described as pertaining to this faculty.

LOCATION.—Ideal. is located upon the sides of the head, about the spot in which the hair begins to appear, upwards and backwards of construct., beneath the temporal ridge and near its union with the parietal bone, and nearly in a line with compar., caus., and mirth, on the second frontal convolution, in the temporal region of the frontal bone, near the vertical frontal fissure. When large, the sides of the head, where the hair makes its appearance, are widened and heightened, but when it is small, they are narrow and depressed.

Ideality has three divisions. The back part gives Expansiveness ; the middle part gives Refinement ; the front part, Sense of Perfection.

(To be continued.)

L O N D O N ,

November, 1891.

SAVED BY A SINGLE HAIR.—The day has already dawned upon us, and is full of bright promise for investigation of character through a variety of mediums. Not only the brain and skull, but our finger balls and hair are mediums for criminal detection and recognition. Truly the modern scientific enquirers are a "great host," instead of the ignominious few of former days.

The fact that the individual characteristics of hair are discernible, has been prominently brought forward of late by the exhibition, opened in October, by the Photographic

Society of Great Britain, at the Old Water-colour Society in Pall-Mall, East. Here we were shown specimens in photomicrography, by the German expert, Dr. P. Jeserich, of the roots and splitting of human hair which have come under his notice in the various criminal trials during which he has been consulted. The human hairs are intended to illustrate a remarkable fact, namely, that the hair from our heads possess a recognisable individuality, just as our features do. It is not very long since Dr. Jeserich was consulted by the police with regard to a murder. The evidence presented to him was a single hair, presumably from the head of the murderer—the police having meanwhile arrested an associate of the murdered man, the colour of whose hair corresponded with the single hair brought to the specialist. Dr. Jeserich examined the hair, and compared it with one from the head of the suspect, and found sufficient dissimilarity to justify the belief that he was not the man. But when the real man was found, the hairs were found to be identical in character.

IDENTIFICATION BY FINGER-TIPS was rather exhaustively treated at the recent Hygienic Congress, by Mr. Francis Galton, F.R.S. The system consists in the examination of the minute ridges that run across the inner curves of the bulbs of the fingers. For some time past Mr. F. Galton has interested himself in taking impressions of thumbs in his laboratory at South Kensington, but now he elaborates his system of identification by taking the impression of all the fingers for careful reference at different periods of life. If correct impressions can be decisively established as a matter of personal identification in the army, navy, reformatories, asylums and prisons, it will add yet another powerful adjunct to particulars already necessary in the discovery and identification of characters. If it can be satisfactorily proved that the markings on the fingertips follow definite patterns that are capable of minutely accurate description; if these marks are continuous and persistent during the life of the individual, and if these can be preserved for comparison and practical purposes, then we are as sure as we are of the fact that the brain is divided into motor centres and each motor centre has its location, that this method of registration can be made of countless value. Why should it not be the work of specially-engaged men to take the bust, the impression of the finger tips, and the lock of hair of every criminal, prisoner, or occupant in our prisons and asylums, not alone for the value of identification, but also to be able to tabulate statistics upon these important subjects.

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AN observation has recently been made upon the brain of

a late distinguished chess-player, particulars of which will be found in another column. If it is possible for the brain to receive such minute impressions as was possible to Dr. Rookwood's brother—at least, so he stated—then we shall watch with interest the examination of other notable people who may be willing to allow their brains to be used for dissecting after death.

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WHEN the brain is more truly valued, operations will become more skilful, and more relief afforded to the insane. In *Harper's Magazine* for October, a very interesting operation was detailed concerning the skull of a child whose sutures ossified too early in life. The skull was trephined on the lateral portions of the skull. Relief had already been experienced, and the child or infant's brain was showing signs of proper development.

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PROFESSOR RUDOLPH VIRCHOW has just celebrated his seventieth birthday, and the whole scientific world of Europe expressed its respect and affection for the famous German scientist. Deputations from most of the universities, and the medical, ethnological, anthropological, and other learned corporations sent congratulations to the "Scientific Grandfather," as he once called himself.

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SIR ARCHIBALD GEIKIE, LL.D., F.R.S.E., the President-elect of the Edinburgh Meeting of 1892, was born in that city in 1835. He is the eminent geologist.

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DURING the past month the lives of two prominent Members of Parliament have been suddenly cut short. The Rev. Stephen Gladstone has made such an appropriate allusion to the life of Mr. Charles Stewart Parnell (we think it suitable to give it here), who had passed away from the battle-field of this world—of which it was, till lately, hoped that when the evening came, its sun would set without a cloud. The champion of a cause once forlorn—the cause, as he deemed it, of the emancipation of his poor and afflicted country, he for a long time, almost single-handed, against enormous odds, had succeeded in bringing it to the front by the forces of ardent patriotism, of rare moderation and prudence, guided by extraordinary skill and invincible perseverance.

Till lately it seemed his name would go down to history as one of the greatest and most successful his country had ever produced, and, though he was himself apparently of a reserved nature, that he would occupy an unrivalled place in the hearts of the Irish people throughout the world. With his moral

fall, his power to lead a moral and religious people was gone. He had for ever lost the mighty prize for which he had so long striven and endured—the prize of leading on the people he loved, and who loved him, to the attainment of those right liberties for which they had so passionately longed. The Phrenological character of Parnell was published in our issue of May, 1886.

W. H. Smith, Esq., leader of the House of Commons, gave up his life for the sake of the sense of public duty, distinguished alike for perfect integrity of heart and life, for simple devotion to his duty, and for rare candour. The message which the Queen sent with a wreath, expresses much in a few words. “A mark of regard and gratitude for devoted services to his sovereign and country, from Victoria R.I.”

Hygienic and Home Department.

THE STORY OF A TREE.

The very dearest of old ladies told me this: One day, while she was walking in the woods, she saw two or three acorns lying on the ground, and then she made up her mind. She took the acorns home, put them in a tumbler of water, so as to see when their roots grew, and when they began to sprout she chose the best and planted it in a pot. It was not very long before a tiny oak tree appeared, nor was it very much longer before this little tree outgrew its root.

This dear old lady lived in a large city, and not liking to take the tree there she wondered what she could possibly do. All of a sudden she thought of renting a piece of land. So she begged her sister to let her have a yard of garden. Perhaps she put down one of her largest handkerchiefs to measure by. I have heard of children doing that. At any rate she took the yard of land and transplanted the tree. Now every year she pays £1 to her sister for the rent of the land, and every year the sister sends this £1 to some hospital to help make a merry Christmas for the dear little children shut away there.

And every year the dear old lady goes back and sits with rejoicing under her own oak tree, this tree that now has grown so big it casts its shade everywhere. Even birds build in its branches. And every year, too, the children in the hospitals are just so much the happier. All of this is all because of an old lady who thought of this tree. And I tell you all of it, oh, for so many reasons, to let you know another of the many ways all over the world that people have for

making others happy. And most of all I tell you because I hope some of you may get an idea or a tree of your own.

This story has a practical bearing, as we are daily called to plant trees of one kind or another ; when of a mental kind, it is well to examine our phrenological soil.

SAVE THE BABIES.—Great is the fatality among the babies during the summer season, and I fear it is far from being the survival of the fittest. It is often the case that the ones who are fitted to give the most of life, or do the most in life for the best interest of many, are the quickest to fall victims to the false habits of life, and worse, to the false habits or customs of drug medication. It is those with large mental temperament, and relatively small vital temperament, who are the first to succumb to the influences which are against life, whatever they may be. The larger the brain, and especially the top and front brain, and the finer the tissue, other things being equal, the easier the baby is killed, and the harder it is for it to resist the influences against life. August is the fatal time, and the little one's mother knows so little about how hard it is for the baby to live when it is so hot. She knows so little how much room and air it needs to keep down an undue amount of animal heat when the natural temperature of the air is sufficient to keep it warm. It is often crowded into bed between father and mother, who in their superior strength and size of lungs are consuming all the air. The babe should by all means have a bed of its own away from any one, and in a well-ventilated room of its own. The child that is worth the having is worth the care taken of it, and, oh, the matter of feeding the baby, that is too long for this paper ; but I will sum it up by saying, use common sense in its feeding, as you do with your pigs, calves, and chickens. Learn what is best for it, and what quantity it can take on its stomach without inconvenience, and then give it that at regular intervals, not giving oftener than three times in twenty-four hours, after the baby is six months old. What is babyhood for, but to grow ? Then, let it spend most of its time alone, growing. Do not at once begin to draw out its mind, or brain. Let that literally alone. Let it sleep all it will, day and night. No baby with brains can entertain all the family and friends and receive and entertain a dozen callers a day. Most babies, after they are six months to a year old, are expected to spend six or eight hours a day during all kinds of weather entertaining company, and this, with their bad feeding, poor opportunity for sleep, and ill ventilation, is too much for many of them, and they die, and God gets the credit for taking the baby to Himself, and the doctor gets the fee just the same. Give the babies a chance by placing them in proper relations to food, air, light, water, and by reducing the number of hours for them to see company (and company means everyone) to not more than two during the hot season.

A FACE that cannot smile is like a bud that cannot blossom, and dries up on the stalk.—*Beecher*.

Notes and News of the Month.

MR. L. N. FOWLER lectured at the Fowler Institute on Wednesday, September 30th, on "Memory, and how to improve it;" on Wednesday, October 7th, on "The Races;" and on Wednesday, the 21st, on "The Proofs of Phrenology."

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MISS J. A. FOWLER spoke at Cleethorpes on October 1st. On the 6th, at her Matinee on "Child Culture," John Lobb, Esq., M.L.S.B., presided, and said he hoped to be able to arrange for the lecture to be delivered before a select number of school board teachers, as the practical hints suggested would be of great service to them. He spoke of the great regard in which he held the late Mrs. Fowler, and of the safe advice which he often received from her father. He was glad to be with them that afternoon, and hoped that the parents present would realize the immense importance of scientific measurements of their children.

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ON the 8th Miss Fowler lectured at Kettering.

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ON the 13th, at Imperial Buildings, a second Matinee was held, when the subject was on "Art in Dress." Mrs. Gray, of Greenwich (wife of Rev. Campbell Gray), presided. She had heard Miss Fowler speak upon Phrenology, and Temperance, and if she were as successful with the subject of Dress, as she had formerly been with the other subjects, she was quite sure it would not be in vain that they had met that afternoon. Miss Fowler had on view a large selection of dresses and underclothing, including a tasteful costume made of soft grey material, from Mrs. Hancock's new design. Miss Leech, Miss Wilson, and Nurse Webster, of the Health and Artistic Dress Union (of which Miss Fowler is an Hon. Member), lent some useful and ornamental articles of attire: a terra cotta robe, and a brown princess dress, plainly but artistically made for a young lady; several divided skirts of different materials, knickerbockers, and the most recent design in hygienic stays. Miss Fowler had a new gymnastic costume of cream camel's-hair cloth, trimmed with one of Liberty's shades of green silk for yolk, collar, sleeves, and sash. At the close of the lecture the ladies were asked to examine the dresses, etc., and to ask any questions. America and France were both well represented by ladies present; Miss Gwyn, Secretary of the Healthy and Artistic Dress Union, represented that Association, with Miss Leech and Miss Wilson, of 135, Regent Street, Dépôt for Hygienic Clothing. Miss Fowler's own costume was specially made for the lecture by a member of the Institute, who was present in another becoming and artistic dress. For comfort and ease Miss Fowler advised them all to imitate the style of dress she had on, which was made of Liberty's material. Tea in the library was not over until six o'clock. On the 15th Miss Fowler lectured at Southgate Road.

ON Tuesday, the 20th, the lecture was on "The Brain," illustrated. Mrs. O. Chant gracefully presided; and on Tuesday, the 27th, the all-important food question, or "What shall we eat and drink, according to Temperament," was fully discussed. Mrs. Laura Richards, of Sandy Hook, Hyde Park, presided in her charming and original way.

THE Examination for Diplomas and Certificates will be held in January, 1892. All intending candidates for this examination must please send in their names to the Secretary on or before the 31st of December.

THE December number will be of exceptional interest. Beside the usual matter, there will be added the portraits and character sketches of the leading Phrenologists in Australia, India, and England.

THE number will be double in size, and further contain a story by Rev. W. J. Dawson, Editor of *Young Man*; an article by W. T. Stead, Esq., on "How I first became acquainted with Phrenology;" and also one by L. N. Fowler on "Phrenology up to date," &c., &c.

Fowler Institute.

MEMBERS' NOTES.

"What is strength without a double share of wisdom?"—MILTON.

THE debate upon "Which is the more desirable for practical everyday life—strength of mind or strength of body?" attracted a number of members to the monthly meeting held on October 12th, when the chair was taken by Mr. Coleman.

Mr. Smith opened the debate by remarking, "It is apparent that strength of mind cannot exist without strength of body. The first thing in a child's education should be cultivation of the body, by exercising all the muscles harmoniously, as did the Roman soldiers. The Grecian philosophers were not wanting, either, in physical strength. Socrates, who served three times in the army, is said to have been capable of much greater exertion than most of his comrades."

Mr. Coleman was of the opinion "that those in whom real strength of mind existed, also possessed strength of body, or there would be insufficient support, and so weaken mental operations. The Presidents of the United States may be taken as examples; many have exhibited exceptional power, both of mind and body. Among the secrets of success in life, harmony of temperament, as evidenced in Gladstone, Lord Beaconsfield, Sir John Franklin, and others, stands pre-eminent."

Mr. Samuel said he was "unable to agree that a powerful body was a necessity to strength of mind. Cardinal Manning may be mentioned as being weak physically, but he still exerts much influence by the retention of a healthy and vigorous mind."

Mr. Ramsey thought that "a good constitution must accompany a strong mind."

Miss Maxwell said, "The question is not happily expressed. What

is strength of body and strength of mind? It is impossible to possess the latter without a good share of the former; neither should be cultivated singly, but each in concert with the other." "Soul and body can never be divided."

Mr. Hall, in the course of his remarks, stated, "It is not necessary to have a big frame to occupy a high position in life. Father Oberlin had only a fair constitution. The question of what direction the mind takes should be studied: if intellectual, the body is more likely to become exhausted than if restrained by the moral brain. To be successful in life, the body should be well capable of performing its functions, and the intellectual and coronal regions of the brain should be sufficiently active to enjoy the pleasures of life."

Mr. Fowler explained that "in cities like this there are many temptations to overwork; we must therefore regulate ourselves to our strength, which can be greatly increased by judicious and continual training. Many people neglect the laws of life; they do not breathe to the full extent, and consequently only half live. It is not always the strongest body or mind which produces the greatest effect, but rather the continual use of concentrated strength, like drops of water, that ultimately wear away the hardest rock."

Mr. Marshall made some practical remarks to the effect that "the question should rather be how may we develop all our powers, which should be looked upon as an important duty."

Mr. Baldwin said, "we should think more of the medium through which the mind acts, as a proper development of body is necessary for a right manifestation of mind. If the brain power be in excess of the strength manufactured by the body, the thoughts must be influenced. What we want is an equal condition of mind and body."

Miss J. A. Fowler expressed it as her opinion that "we cannot have strength of mind unless we first have strength of body."

A vote was then taken, when it was found that a slight majority were in favour of strength of mind.

Mr. Smith has promised a paper for the next monthly meeting, to be held upon November 9th, on "Turner" the artist.

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When the S. S. Umbria sailed from Liverpool upon October 3rd, there was included among her list of passengers our dear friend and secretary, Miss A. M. Fowler, who has gone to take up phrenological work in New York. The blank thus formed in our Institute can be better appreciated than described. Her kindly and smiling face has been sadly missed at the meetings, over which her genial influence seemed to radiate. We seldom correctly estimate the value of those jewels often before us, but remove them for a time, and upon reappearance their true lustre is more plainly visible. Miss Fowler's reappearance in our midst will be joyfully welcomed by one and all, but while absent, members will, I feel sure, unanimously join with those who have expressed a desire to convey through the MAGAZINE their best wishes for her health and happiness, at the same time entertain hopes of a speedy and safe return to England, home, and Institute.

That the organ of locality is of great importance to the blindfold chess player all will admit, although few perhaps would be inclined to accept the statement made by Mr. Charles Tomlinson, F.R.S., in an article upon "Blindfold play and a post-mortem," published in the August number of *The British Chess Magazine*, from which the following is an extract:—Mr. Rookwood "could play twelve blindfold games with ease, but when the number was fourteen, he confessed that the two extra games were all but failures. He died about a year ago. His brother, who is a skilful anatomist and physiologist, was anxious to examine the brain of this great blindfold player, in the hope of discovering some peculiarity of structure that would account in one way or other for his marvellous gift. . . . The results of Dr. Rookwood's examination of his brother's brain, are detailed in an elaborate memoir, which, as soon as the numerous illustrative drawings are completed, is to be submitted first to the Royal Society, and the purely anatomical details to the College of Surgeons. The author has been so good as to communicate to me the following results which are alone interesting to chess players, namely, that the constant exercise of one particular organ not only increases it in capacity, but also produces a molecular change in the direction of the line of study adopted. In the case before us, a microscopic examination of the organ of locality, revealed the astonishing fact, that the molecules had arranged themselves into forms somewhat resembling chess boards, with certain marks on the squares, supposed to represent the final position of the pieces in the twelve games that had been played blindfold. Twelve positions were thus probably indicated by the aid of the highest power the microscope could supply; the thirteenth and fourteenth boards, or what might represent them, were blurred and indistinct, thus accounting for the fact that these two extra games always embarrassed the blindfold player. The general result, however, of this most interesting enquiry leads to the conclusion that the chess-playing organ thus highly excited, so far undergoes molecular changes as to spare the memory by enabling the player as it were to see the various positions in his own brain, just as if he had the material wooden boards and men before him." The time is approaching when even the medical profession will have to accept phrenology. G. B. COLEMAN.

Correspondence.

To the Editor of the PHRENOLOGICAL MAGAZINE.

DEAR EDITOR,—I was much gratified by your account of the combination of the faculties in active life. This is one of the most important and difficult departments of practical phrenology, and yet few young phrenologists attain to the full power of it in the estimate of character. The latter is rarely formed from single developments. You have thoughtfully illustrated your paper on "Benevolence" by the portrait of one who has had much experience from the "large"

development, and can say something anent the combination with it in relation to 8, 10, 2, 32, 16, 12, etc. ; and if it would be of service you may command the writer.—Yours truly,
E. T. CRAIG.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

CROWN STREET PRIMITIVE METHODIST CHAPEL, LEICESTER.—On behalf of the Band of Hope, a public tea and entertainment were held on Saturday. Professor Timson delivered an interesting address on phrenology, entitled "Love, Courtship, and Matrimony," illustrated by skulls, busts, and diagrams, and delineations of persons chosen from the audience. Mr. Timson's present address is 201, Humberstone Road, Leicester.

MR. E. CROTHALL, the well-known phrenologist and medical herbalist, of 499, Harrow Road, London, W., has been remarkably successful, and has grown very popular since he opened his now well patronised establishment. He has received thousands of testimonials from all parts of the country and metropolis, including one from Baron C. von Mecklenberg, cousin to Her Majesty the Queen, who says, "I can recommend him ; his statements were very correct." Mr. Crothall has recently acquired a shop next door, which he has converted into a comfortable consulting room.—*The Newsman*.

SCHOLES MUTUAL IMPROVEMENT CLASS.—The first of a series of lectures on "Phrenology," was given by Mr. D. Allott, M.F.I., on the 8th instant. There was a good attendance, over which Mr. J. Byfleet presided. Mr. Allott, in his opening remarks, referred to the opposition, criticism, and condemnation which Phrenology has had to encounter from sceptical and ignorant-minded men. He then referred to the utility of the science, the way in which it may be applied to practical and every-day life, and the proceedings, which were very interesting, were brought to a conclusion by a vote of thanks to Mr. Allott, on the motion of the President, seconded by J. W. Robertshaw.

Book Notices.

"Hypnotism," by Albert Moll (of Berlin). London : Walter Scott One lays down the book with the feeling that it is written by a man thoroughly conversant with his subject, whose aim is to present a plain, unvarnished account of hypnotism, its uses, abuses, and possibilities. The history of hypnotism is traced from its earliest development

amongst the Oriental peoples down to the present day. Its medical and legal aspects are discussed at considerable length in a lucid and interesting manner. Indeed, the chapters bearing on these phases of the question are amongst the most instructive in the book. Those who are haunted by the fear that they may at some time be hypnotized *nolens volens*, will be reassured by the statement that "very few people can be hypnotized against their will." It seems clear—to the author at any rate—that the practical value of hypnotism to psychology is very great, and he is supported in this view by Beaunis, who goes so far as to say that "hypnotism is to psychologists what vivisection is to physiologists." To those who wish to study hypnotism, this book may be confidently recommended. In addition to its own intrinsic merits, it has an excellent index, and also contains a list of books bearing on the subject, recommended by the author.

"How to improve the Memory," by G. H. J. Dutton. London: L. N. Fowler. It is really pleasant to take up a book or paper on the memory, and find that it does not refer to some occult method of improving the memory, which involves the payment of a larger or less sum of money and a solemn vow of secrecy. In the above book there is not the slightest vestige of mystery; but clear, plain, practical enunciations and rules are laid down, which can be easily "understanded." That memory is not a distinct faculty, but rather an attribute of many faculties, is clearly shewn, and by stating the causes of a bad memory, he shews how we may cultivate a good one. He also shews that memory, like all the other powers of the mind or body, improves with the using. He also indicates various methods in which it can be exercised. The perceptive qualities, which in general life have so much to do with memory, are briefly touched upon, and how each one may be specially developed is plainly pointed out. The way in which memory is aided by causality and comparison, is noted, and a few hints are given to those who wish to improve those faculties. To sum up, anyone who reads the above pamphlet, and puts the directions given into practice, will find, whatever kind of memory he has to start with, it will improve: fair will become good; good, better; better, excellent; and the excellent, super-excellent. The writer only deals with conscious memory, viz., that over which we individually have control, but as far as he goes his premises are correct, and his conclusions, if put to the crucial test of practice, will be found to stand.

"Heads, and what they tell us." Phrenological recollections by W. Pugin Thornton. Illustrated by Ellen Welby, and published by the well-known firm of Sampson, Low, Marston and Company. This booklet has just been issued in a popular style, and it would be surprising if it did not sell well, not for its scientific pretensions, for it has none, but because it will catch the popular eye. Its salient points are certainly to be found in its readable type, which is large and clear, while the matter is entertaining, though at times open to question. The cuts seem to have been carefully done; but unfortunately they do not in every case represent what they are supposed to. For instance, on page 16 a cut represents a head that is lacking

in veneration while the organ of conscientiousness is described. The illustration for large language would puzzle the novice to see any difference between large and small language. Again, on page 49 the forehead taken from a drawing of the late Mr. Cullen Bryant, of New York, is a very poor representation of that remarkable man. The mention of well-known public characters makes the book of live interest. Two of the truest things in the book are on page 19, "Artists, of all people, should have an acquaintance with phrenology;" and on page 66 it is stated that "Phrenology does not tend to materialism."

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

A. B. S.—This gentleman is characterised for much general intuitive talent, whether much cultivated or not. He has a mind of his own, thinks for himself, is comparatively original, and gives off his own ideas. He is not gifted in speech, cannot make much of a display in talking, but is very good in argument. His reasoning brain is large and on a par with his education; he is able to explain himself clearly and forcibly. He is intuitive in his perceptions, quick to discern character and motives, and he forms his opinions generally on the spur of the moment. He discerns character quite correctly, has excellent powers to compare, describe, criticise and show the differences. He has an aspiring mind. He could not serve behind the counter very well; he wishes to act and speak for himself, and make himself known; he will differ with men in the same sphere of life, in having more public spirit, more sympathy and interest in the welfare of mankind than ordinary men do. He is quite firm, determined, and persevering. He is not wanting in ambition and general independence of mind. He is social amongst his friends, but does not go far out of his way simply to make friends, when there is no particular object to be obtained. He is adapted to married life, and is naturally warm hearted and social. He is liable to try his hand at too many things. He wants to excel in more than one calling or profession. He has a desire for order and method, and would take pains to do his job well. He is decidedly cautious, watchful, circumspect, and conscientious. He will succeed in planning and laying out work for men, and be in public life as much as possible.

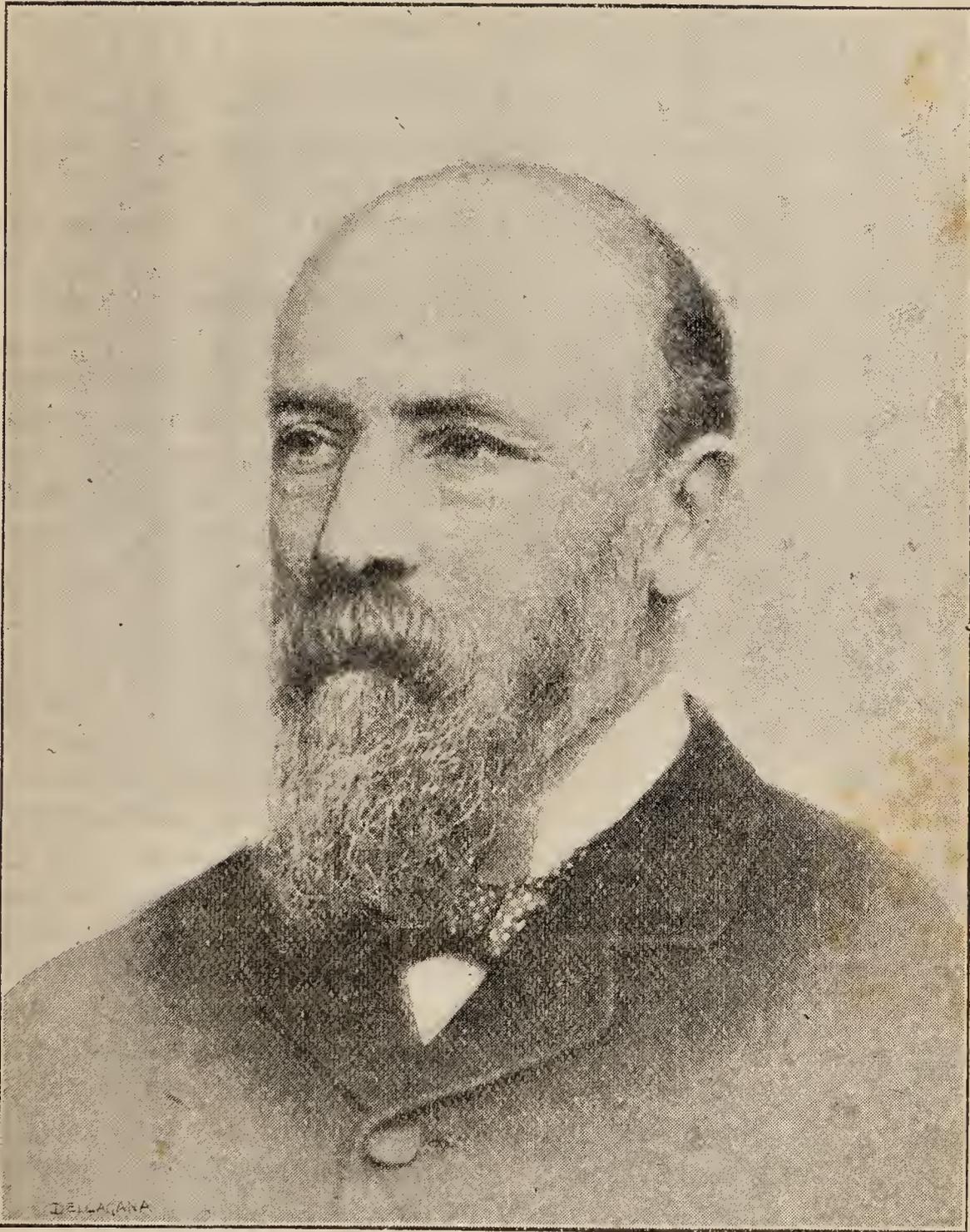
J. T. B.—This young man belongs to the social type of society. He delights to exchange thoughts and feelings with others. He is open-minded, large-souled, and has a philanthropic spirit. He is longing to get out into society, and have a hand in what is going on. He is not specially imaginative in the particular sense, but he has a great power to expand thoughts and feelings in a moral direction;

and if he were to devote himself to preaching, and making speeches of reform, etc., he would display more gifts than he is aware he possesses. He has more than ordinary power to create a sensation by putting forth his ideas in a free and copious manner. He has a spiritual nature, and will show gifts in that direction, giving him great versatility of talent. He is full of sympathy, has a strong feeling of respect, and is decidedly moral, if not religiously inclined. He has a good eye for proportions, also a good memory of faces and forms. He could work by the eye, but he has not so much power to arrange and discover as he has the power to illustrate and compare. He possesses an intuitive mind; gets at the character of other people readily. He had better study and devote himself to a professional life. He will never take to work as a business, for his mind is elsewhere. He will need to improve his health, and avoid all unnecessary outgoes of strength.

PARENT.—This young man has a favourable balance of brain and body. He is capable of taking a high degree of education, and would become very popular as a public man. If he should study law, he should not stop short of being a judge. He is equal to the position of a scientific man, or a philosopher. He has extra ability as a speaker; will not be at a loss for something to say. His head is high, which favours an elevated tone of mind, and ability to sustain himself in some stimulating position. He is particularly qualified for a speaker, especially as a lawyer or a barrister. He possesses more than ordinary density. He is not particularly ambitious, or fond of show, but he does not intend to be outdone. He has many of the qualities peculiar to "Beecher." He has not so much friendship, warmth of feeling, and social magnetism, as he has intellectual power. He is long-lived, and if he lives temperately can be fresh in his work many years hence.—She has a predominance of the motive temperament, is comparatively slow, strong, sound, sure, and safe; give her time to wake up, and she will do more than ten out of eleven persons. She is not to be put down, and will sustain herself in any position that she takes. She is prepared to go through nearly all degrees of hardship. She will do to go as a missionary, and be a physician, and would gain considerable reputation in that line, for she has first-class practical judgment. She soon learns her lesson, and is systematic in her mode of doing work. She is not particularly original, but very intuitive and correct in her judgment. More destructiveness would be an advantage to her, so as to give her more force. She has much stability of will, and holds her mind tenaciously to her plans. She is good at devising ways and means, and not wanting in general constructive power. She has much sympathy for others, and would delight to do good, but she must not be crossed; and she is prepared to receive considerable praise, and she needs it more than some do as a stimulus to action. She will bear a thorough acquaintance, and the more people know of her the better they will like her. If those two persons are devotedly attached to each other, and their minds go together without trying to get in love, they will be decidedly suitable to each other. She can improve herself by going ahead, putting forth more effort, and mixing up in society.

THE
Phrenological Magazine.

DECEMBER, 1891.



MR. WILLIAM BROWN, OF WELLINGBORO'.
VICE-PRESIDENT OF FOWLER INSTITUTE.

THIS gentleman has a favourable organization and temperament ; there appears to be no special antagonism to produce eccentricity, or any great extremes of character. His temperaments are favourably blended, with a predominance of the mental and just enough of the

vital and the motive to give strength to the constitution, and long life. He is so favourably balanced that he knows what he is about. He has as much will power and moral sense as is necessary to guide him in ways of truth and harmony of life. He can scarcely be considered practically defective in any special point in his character. Being a business man, and engaged in the practical affairs of life, his perceptive intellect has become active and quite available. If left to himself, however, he would devote himself to intellectual pursuits and philosophical subjects, or else would become exclusively interested in the welfare of mankind—like a missionary, a preacher, or a teacher—among those who needed his services. It is no great sacrifice to him to go considerably out of his way to do good to someone who cannot do it for himself. His mind is singularly balanced between the highly intellectual faculties, the moral brain as a whole, and the social and domestic feelings. He is always more happy in making others happy than he is in centralizing pleasure and gratification on himself. He has fair perceptive power and practical talent, and is interested in science and its results in benefitting others; but he has more of a reflective mind, disposing him to be interested in philosophy, in the investigation of fundamental principles, and in becoming acquainted with the laws of Nature, as universally applied. He has a rare power to govern both himself and others. He never trifles, although he may be jolly and good humoured. He has a mirthful, sprightly, lively, entertaining mind, and knows how to make himself agreeable and acceptable. Imitation being well developed allows him to be easy in his manners, which, joined with his mirthfulness and ideality, gives scope to his mind and versatility of manner. He has more than average taste as applied to works of Art, and is disposed to make everything about as perfect as it can be. He is mainly interested in the development of new truths; he is not afraid of radical ideas or philosophies, all he wants to know is whether they are true or not. He has a hopeful, sanguine disposition, and his motto is "Go forward." His moral brain as a class exerts a modifying influence on his whole mind. He is constitutionally industrious, and may give away many things, but wastes nothing. He is more particular about not having things wasted than many are who need the crumbs they throw away. He can keep his own counsels very well. He looks far enough ahead not to drive into the gutter or on to the rocks. He makes everything smooth in his path beforehand if possible. He is full

of energy and resolution ; he does not shrink from hard work, nor does he take the light end of the job. Such an organization would succeed almost anywhere, if moral principle is valued. Probably his best gift is in superintending, overseeing, having the management ; but if he had chosen the sphere of a preacher he would have been decidedly successful in that direction.

L. N. FOWLER.

PHRENOLOGY UP TO DATE.

BY L. N. FOWLER.

PHRENOLOGY is a word full of meaning ; a theme full of interest ; a subject inexhaustible.

To know the names of the organs, and their locality, definition, and proportionate size, influence, and combined action, is to know the alphabet of the science only. Phrenology explains mind. It tells us more about mind—its parts and powers—than any other science. It unfolds human nature more correctly than any system that has preceded it. The teachings of the science are more personal and available than any other system, and are in harmony with our own consciousness and wants.

Phrenology has had to fight for every step it has thus far taken, and although its progress is slow, still it is making its influence felt. All educational and representative men ought to be on the side of this science, and take advanced steps, and bring their educated minds to bear in its favour, and make it more practical and useful. Professional men have so much at stake that they cannot afford to advocate anything that is new and unpopular ; but one of these days, when the subject becomes demonstrated through their own method, and considered to be a science, there will be many who will throw off the mask, and make an open profession of their former beliefs, for there are many who believe in phrenology who do not care to take the consequences of saying so.

One of the great evils that truth, reform, and progression have to contend with, is a want of moral courage. We are idolaters—men and women worshippers ; we cannot bear criticism, but must follow the fashion with all its inconveniences, and keep silent about unpopular truths, and echo the opinion of our leaders. All pioneers require moral courage in all departments of work. A phrenologist can speak with more assurance than most persons, for he can speak from observation, experience, and knowledge, and no

faith is required ; especially if he keeps within the bounds of his positive facts.

In talking about phrenology, we talk about a working power that we do not see, have not seen, and never will see ; and the great mass of civilized men (leaving out barbarians and savages), are governed mostly by physical consciousness. They can only see with their physical eyes and judge of the qualities of physical things ; of diseases of the body ; of burns, bruises, and signs of starvation. There are many who can more successfully doctor the body than the mind, and yet wise men say that all ailments begin in and proceed from the mind. Physicians would be much more successful if they cured the mind first, for the body is comparatively healthy when the mind is in a healthy condition. Jesus said to one of His patients, "Thy sins are forgiven thee ; go, and sin no more." Doctors now-a-days have nothing to do with sins, only results of sins. There never ought to have been two kinds of physicians—one for the soul, and the other for the body. When persons have written to me for advice about their health, I have frequently to tell them their ailment is mental ; that the cure must begin with the mind first, and the body will soon be all right. We make too great a distinction between the body and the mind ; they are nearer one another than we suppose. The fact is, the organization is composed of the three parts—body, soul, and spirit. Some have more of one, and some another. Those who have more of the body have the most consciousness and pleasure in that direction ; and so with the soul and the spirit.

Many find it more easy to believe in physiology than they do in phrenology, because their physical consciousness and perceptions are greater than their spiritual. To accept all the principles of phrenology, a person requires both a mental and physical consciousness, for he has to deal with both. Some can judge more correctly of the size of the organs, while others are gifted in describing the different faculties. There are different kinds of phrenologists the same as there are different kinds of doctors, teachers, preachers, or husbands and wives. Some admit the general principles of phrenology only, while others admit of the details as well. Some can see only the large side of the subject, while others can see the small as well as the large. Some can understand phrenology as a science, but are poor judges of character, and cannot even read character from the expressions of the face ; while others are experts in reading character from developments of the brain and skull. Persons with uneven heads, and distinct developments of brain, generally attract the most

attention, make the most noise, and get the credit for being the most intelligent, for they act on the spur of the moment, and strike while the iron is hot ; while the person who has an even, well-balanced organization, with no extremes of development, will show none, and never put himself forward.

There are many who have no sympathy with phrenology because they cannot perceive the detailed conditions that affect the character, as the phrenologist can. Physicians, like lawyers, have to take everything into account. Phrenologists are more like physicians than doctors. There are special doctors who are successful in curing certain diseases, and who understand certain functions better than others. So there are certain phrenologists who can describe certain faculties better than others. Very few are so well balanced as to be able to do one thing as well as another. Depravity runs in certain channels. Many are guilty of a certain class of crimes only. The expert and quick-minded, pick pockets and steal watches. The daring and strong, steal horses, rob houses and break into banks. That which would be a temptation to one would not be to another. Besetting sins differ, as well as special virtues. Love fastens itself upon various objects according to the temperament of the one who possesses it. Two persons may be devotedly attached to each other that no one else would ever think of loving. The more we look into this peculiar mental organization of ours, the more we are convinced that it represents an endless variety of character ; and as there are no two days and nights alike, so there are no days and nights when we think and feel exactly alike, and so it must go on as long as mind exists.

What we most want and need is clearness of mental vision. At present our physical eyes have an invisible veil over them, so that we can see only material things. The probability is that we shall become more and more clear-sighted and clear-headed. We now read the general outline of character by the general make-up of the individual ; but this is only a beginning of what will be, when men will be able to read each other's thoughts and actions as well as their history. We look what we are, if we had the cultivated eyes to see what is to be seen. The wilful murderer has a murderer's look. A person acquainted with grief will show it in the face, and so will a person acquainted with joy. The animal, intellectual, and spiritual, as well as the social, have their definite expressions and natural language. What we live on, and our sources of supply for mental and physical food, have much to do with our expressions and tones of mind, for there is a difference in the quality and grade of all

kinds of food, whether for the body or mind. The earth feeds the body. The air feeds the mind. The Divine breath feeds the soul. As a general rule we feed better than we digest, and we are not sufficiently particular on what we feed. Both mind and body become corrupt, depraved, and dyspeptic through the effects of the food we live on, and the way we eat it. How to feed the body and mind is a very important lesson to learn.

Phrenology and physiology teach the necessity of exercise and rest in order to secure growth and strength. They teach the necessity of a regular, uniform life, and proclaim loudly against all extremes, irregularities, and violations of Nature's laws. They teach economy, not prodigality, as applied to the use of all our natural gifts; also of cleanliness and free circulation. Physiology and phrenology teach us that the most perfect health, the greatest degree of happiness, the most consistent life, and the highest degree of usefulness, are secured by harmony of organization, the right direction of power, and favourable quality of organization.

Phrenology is true or not true. It is fundamental, and has its foundation in nature or not. If true in this nineteenth century, it was true when brain and mind first acted together. If true, it is so because our Creator established the relation between the brain and mind, which makes it a fixed fact: If it is true as a whole, it is true in detail. If one faculty or function requires an organ to work through, all do. If certain nerves are adapted for certain use, all are. If the nerves of the five senses are set apart for a special and separate use, then all nerves are. If one faculty and nerve have their special and relative locality, all have. When a nerve and faculty are established in a certain relative place, they will always be found in the same relative place. Nature is established by law and order on chemical and mathematical principles. Nothing in nature is left to chance or accident.

Phrenology and physiology teach us that the requirements and capacities of man are equal; that all the functions of our nature are dual; that each function has an independent action and sustaining power of its own; also that in a healthy organization there is an independent reservoir of sustaining power, adapted to each and every function of the body.

If phrenology is true, it is true in nature, and cannot alter any more than can any other principle of nature. Mind cannot be seen, weighed, or measured, yet it has an existence, and must have a medium through which it can manifest itself. It is mind that does the work of life.

Phrenology and physiology make known to us that man is

organically made as he was designed to be, in the order of nature ; and that if he would live according to the legitimate use of his powers, he would be acceptable to his Creator. Phrenology makes us acquainted with various powers of the mind, and teaches that the brain is the seat of all mental operations.

Modern phrenology has done much in the last twenty years ; it is encouraging that it is making headway in the so-called scientific quarters. It is no longer a speculation that mind is a substance independent of matter, but it is proved to be, and accepted as a fact, that there exists such a co-relationship between the nerve centres and the manifestation of thought, that separate psychological functions really do require physiological organs, and that centres of ideation can be demonstrated. It seems to me, that those who are inclined to doubt the localization of the phrenological faculties, can hardly fail to believe in their establishment, when proof is not wanting that the psychological functions depend on separate physiological organs. Hence, scientists are carving away their own prejudices, and establishing a system which corresponds to the one demonstrated by Gall in 1796.

It was not until 1873 that Alex. Ecker published his work on "The cerebral convolutions of man," when he recognised the possibility of cerebral topography. He said, "If, however, as we think is undoubtedly true, definite portions of the cerebral cortex subserve definite intellectual processes, there is a possibility that we may some day attain a complete organology of the brain surface ; a surface of the localization of the cerebral functions. Such a science that is a knowledge of the psychical organs of the brain, in all their relations, is certainly one of the most important problems for the anatomist and physiologist of the new century, the solution of which will work no small transformation in psychology." He goes on to deprecate Gall's method of observation from the skull, and regretted his departure from his first careful method of investigating the brain solely ; though he admits, "speaking in general terms, that it is perfectly correct that the form of the skull depends on that of the brain." The fact is, Gall did more than was considered possible for one or even two men to accomplish in a life-time : namely, to discover an almost complete cranio-cerebral topography of the centres of ideation. But since 1870, Ferrier and other well-known scientists have broken down the thin partition that stood between the old system and the new, and they have rendered valuable assistance in establishing the gustatory centre, where alimentativeness is located in the lowest temporal convolution,

and which excites the muscles of the lips, cheeks, and tongue ; the centre for the articulation of speech in the left third frontal convolution, and although Gall in his researches had discovered the location of language years before Broca's observations became known, still it was not until 1861 that this faculty was fully recognised by learned men. Ferrier observes that inability to speak is not due to paralysis of the muscles of articulation, for these are set in motion, and employed for purposes of mastication and deglutition, by the asphasic individual. It is only where the centres of articulation are destroyed on both sides that complete paralysis of the articulatory apparatus occurs as well as aphasia. Nor are these the only centres. Darwin, Sir Charles Bell, and others, have observed the movement of the zygomatic muscle, and have recorded their observations regarding the facial expression of joy, which corresponds to the phrenological faculty of hope, which, when excited, has the tendency to draw the mouth backwards and upwards ; the cheeks also become elevated, while the muscles around the eye become contracted. In the angular gyrus we get the centre for fright, or fear, which is effected by and through the platysma muscles, while the mouth retracts. This corresponds to the phrenological localization of cautiousness, which, when large or active, gives timidity and fear. The centre for the rising of the shoulders—with the extension of the arms and the flexion of the knee—corresponds with the faculty of veneration, as is mentioned by Ferrier in his recent lectures, on Cerebral Localization, and to which attention has already been called, in the pages of the PHRENOLOGICAL MAGAZINE.

The centre for the concentration of attention, situated in parieto-occipital fissure and angular gyrus, corresponds, according to Ferrier's observations, to the organ of continuity. It may seem a curious fact to many critics that this part of the brain has considerable influence over the whole brain, and impressions made through the eyes are carried to the back part of the brain where the sight centre is traced ; and sight is a powerful medium, and a necessity, for the concentration of attention. All books in the present day are illustrated, and hence aid the memory to recall things accurately.

Dr. Ferrier has also stimulated the lower part of the temporal lobe, which he says causes an animal thus stimulated to bound or spring forward, and lash his tail ; and he has also observed that murderers are very broad in this region. This is where Gall found destructiveness and combativeness to be situated, and it corresponds with Ferrier's observations. The centre for the movement of the hand, head, and eyes has

been electrified by a special current, and this is the location which Ferrier, H. Spencer, and others have located as the particular part that is engaged in the taking in of ideas, and the creation of new impressions, called the centre of wonder, or spirituality. Thus, as I said before, physiologists are building for themselves a platform which will substantiate the old phrenological doctrines.

Scientists, like Ferrier, Galton, Max Müller, Darwin, Humphrey, and C. Brown, among others, cannot continue their researches without recognising perceptives, centres, and centres of ideation. Ferrier, in his "Functions of the Brain," expresses the following belief that—"There are centres for special forms of sensation and ideation, and centres for special motor activities and acquisitions, in response to and in association with the activity of sensory centres; and these, in their respective cohesions, actions, and inter-actions, form the substrata of mental operations in all their aspects, and all their range. . . . There may be highly-developed sensory centres and defective sensory apparatus, and highly-developed motor centres and defective executive apparatus—conditions which must materially influence mental development. But other things being equal, if such a postulate can be reasonably made, there are grounds for believing that a high development of certain regions will be found associated with special faculties, of which the regions in question are the essential basis." This and many other similar quotations from the same work, and also from the same author's "Cerebral Localization," are most interesting and conclusive from a phrenological point of view.

Mr. Francis Galton, in his exhaustive works on "Enquiries into Human Faculty," and "Hereditary Genius," has shown in his examination of criminal heads, that he recognises a "murderer's type" of head, and the general results of his inquiry support the introspective views of those who hold "that man is little more than a conscious machine, the larger part of whose actions are predicable." If predicable, then how useful is the insight into this powerful machine—man; and if the "comparison of the size of heads gives us a rough guide to mental capability," as Galton indicates, then this machine must be composed of wonderful variations, as no two skulls are exactly alike.

Again, Prof. Alex. Bain, in his study of character, says, "Phrenology has done good service, by showing us with more emphasis than had ever been done before, that human beings are widely different in their mental tastes and aptitudes." And again, Herbert Spencer says in his "Principles of

psychology," "Whoever calmly considers the subject, cannot long resist the conviction that different parts of the cerebrum must, in some way or other, subserve different kinds of mental action."

And recently, Max Müller said: "The study of man in every part of the world has ceased to be a subject for curiosity only; it has been raised to the dignity, and also to the responsibility, of a real science; and it is now guided by principles as strict and as rigorous as any other science." This is a great deal to admit, but this is not all that he said. He continued: "The most favourite classification of man has always been that according to the skulls. The skull, as the shell of the brain, has by many students been supposed to betray something of the spiritual essence of man; and who could doubt that the general features of the skull, if taken in large averages, do correspond to the general features of human character." These quotations, given as the honest convictions of earnest thinkers, would almost force us away from Prof. Bastian's theory regarding phrenology, even if we were anti-phrenologists, and were afraid that the centres of ideation were not sufficiently demonstrated. With the testimony of such scientific men, that the comparison of the configuration of heads is a help in deciphering psychical power, we can rest assured that the more a man studies his organization by the aid of Gall's system of mental science, the more he will be able to account for his being as he is, and can, to a large degree, modify his character, and the above-named scientists, philosophers, and physiologists, are searching for the same knowledge as that sought for by the venerable investigator, Gall. Only as there are many roads, they are choosing their own methods of research.

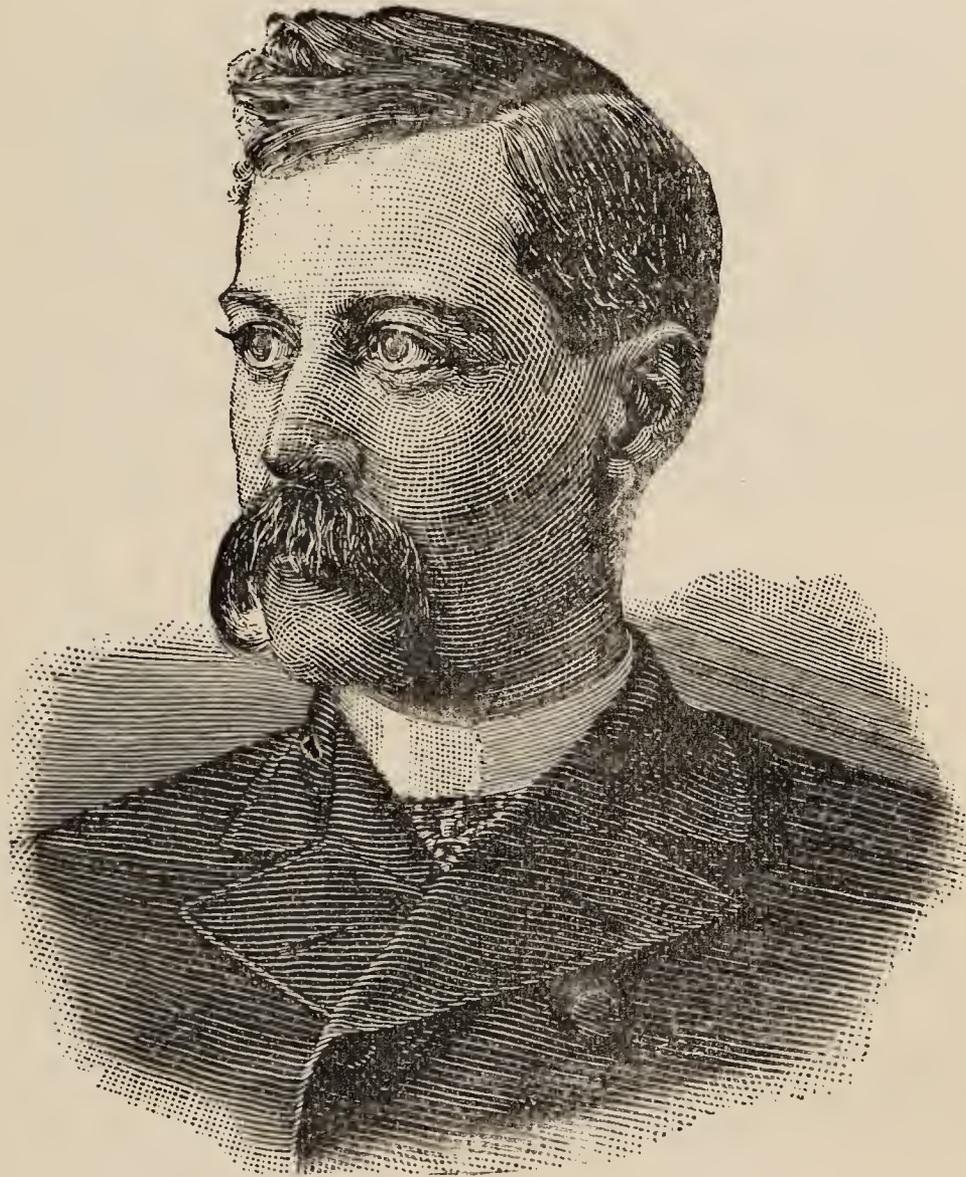
The object of man's existence is to develop and perfect himself, and reflect the image of his Creator. Man's value depends upon his moral nature. He can increase his value by improving his spiritual nature, for it is man's moral and spiritual powers that make him immortal, accountable, and responsible. Man can reason upon moral truths without feeling their force, but conscientiousness makes us feel the force of truth. If a man lives only for this world, as though there were no other, then he will be poorly prepared for the next life; but if he lives for both, then he will have the treasures of both.

L. N. FOWLER.

Pleasure is the mere accident of our being, and work is natural and most holy necessity.

DR. E. C. BEALL (CINCINNATI, U.S.A.)

THIS is a finely organized mind, well proportioned throughout, and finely balanced. He is not subject to extremes unless circumstances make it necessary. He is prepared to take a



DR E. C. BEALL.

many-sided view of a subject ; he has both his eyes about him. He has the make-up and the developments of an orator, and has good powers of language, naturally methodical, systematic, and makes but few mistakes. His intellectual faculties are well balanced, with rather more of a tendency to reason and philosophise on a subject than to be merely practical and scientific. His head is high, and he also possesses a full base to the brain,—the two combined will give physical ability, as well as mental and moral strength. He has a good amount of force and courage, can keep his own counsels, and, if

necessary, would be a shrewd man to manage other men. He is decidedly firm, persevering, manly, independent, and ambitious. He has more of the spirit of independence than affability and display. His moral brain is favourably indicated. He will be able to go through severe trials of strength, energy, and courage without breaking down; and give him half the chance and he will work himself to the top, for he is untiring in his efforts, and loves to work, and does not mind opposition. Such an organization should succeed both in business, acquiring knowledge, and in using it to the best advantage, as well as to exhibit a good share of general power of body and mind. He is exceedingly ardent, earnest, and throws a great deal of life and spirit into all he does. He should devote himself to the sphere of a speaker, lecturer, lawyer, politician, or preacher. He has great intuitive powers which, if directed to the discerning of character and motives, could render him decidedly skilled in that department; for he is not only intense in his thoughts and feelings, but in his observations.

“THE most manifest sign of wisdom is continued cheerfulness.”

—*Montaigne.*

Those only can find true friends who have in themselves the will and capacity to be such.

A BOY WITH A BUSINESS BRAIN.—What possibilities there are for the small boy, especially the boy who is growing up, at the present day. A well-known city official owns a boy whose eye for business is something out of the ordinary run, as demonstrated by the following: The lad had evinced a burning desire to go into business for himself, and at length his father agreed to start the boy in the business of selling newspapers on terms of equal partnership, all the profits to be equally divided between the two partners. On the evening of the first day of the new partnership, the city official called for an account of the day's sales, as this was part of the contract. “I made eighteen cents to-day,” said the little fellow, “and here's your money,” at the same time giving his father eight cents. When the latter expressed his surprise at receiving less than his share, the boy explained by saying that he had divided the day's profits into two parts, one being placed in one pocket of his coat, and the other share finding a resting-place in a trousers pocket. “Well,” said the boy, “I lost a cent, but it was your cent.” On the following day business was bad, and the little business man disposed of only one paper. When called upon for a division of the profits, our embryo man of business explained that he had sold but one paper, but “it was my paper, and of course I get the profit and you don't.” What a future for this boy!

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a harmonious development of the body.

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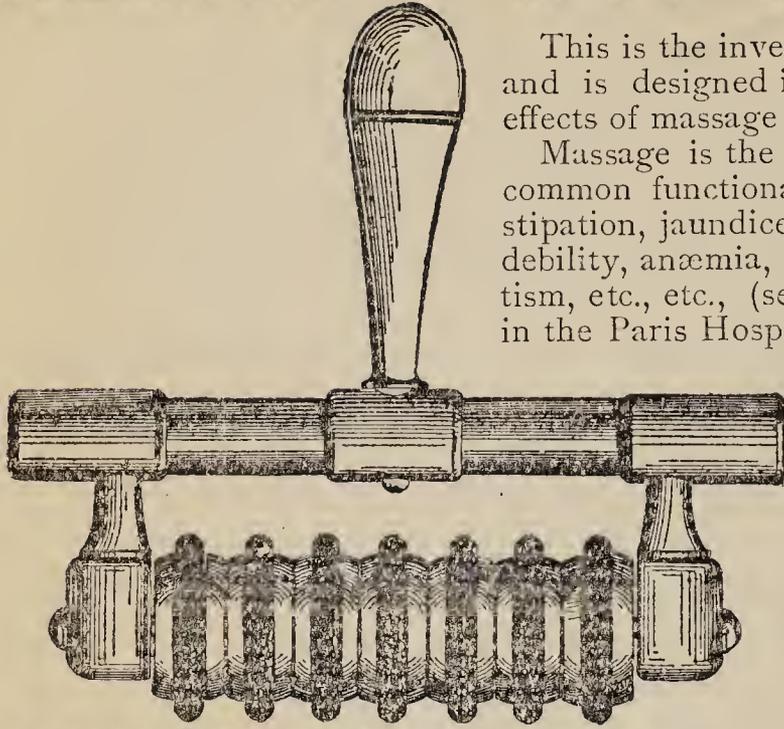
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ORATORY AND ORATORS.

BY G. H. J. DUTTON.

THE human voice, whether used in speech or song, will always have an irresistible charm for mankind. It has been said that the day for real orators is passed; that no public speaker of the present day is anything like so effective as were Cicero, Demosthenes, and their contemporaries. This is, however, a great mistake. To quote an old saying, "There are as good fish in the sea as ever were caught." But first, it may be well to ask—What constitutes an orator? Ogilvie's definition is: "A speaker; a public speaker; an eloquent public speaker." This is very good, as far as it goes, but an orator is something more than that.

There are various kinds of orators. Some have pathos, others passion; some a vivid imagination; others a blending of two or more of these powers. The best kind of orators are those who have a good physique, together with the three powers referred to, viz., pathos, passion, and imagination.

A GOOD PHYSIQUE.

The ancients recognized four temperaments—the Sanguine, the Lymphatic, the Bilious, and the Nervous. Modern physiologists and phrenologists, including the Fowler brothers, recognise three, viz., the Vital, or nutritive system; the Motive, or mechanical system; the Mental, or nervous system. This classification is now generally adopted. It is, however, important, in considering the vital temperament, to bear in mind the proportion of the sanguine or lymphatic elements. In speaking of the qualifications of an orator I shall endeavour to recognise this distinction.

The vital-mental or sanguine-mental temperament is the best for an orator. Persons who have this predominant, possess a great deal of magnetism or electricity. They will have a good circulation of the blood, a well-developed chest. The mental processes will be characterized by quickness, facility, and versatility; by ardour, impulsiveness, and enthusiasm.

There are many able speakers who possess the motive-mental temperament. These will have more capacity for sustained effort, and more solidity of character. Mr. Gladstone is a good example of this class.

PATHOS.

What a wonderful gift is this. Anyone can rave and storm, but few people comparatively can move an audience by the narration of a pathetic incident. There may be an "emotional

temperament," as suggested by Mr. Nicholas Morgan, but much depends upon the predominance and combination of certain mental faculties. A speaker with small social faculties will not be very eloquent upon such topics as "Home, sweet home," "A mother's love," "Friendship," and "Love between the sexes." Neither will one with very large selfish propensities, and small benevolence, plead very earnestly for the deserving poor. One with small veneration and spirituality will experience no thrill in attempting to portray the advantages of prayer and faith; and no speaker with small ideality and sublimity will give a vivid description of magnificent scenery.

A speaker or elocutionist who has the mental and physical characteristics which confer pathos, should select such topics as will harmonize with that sort of organization. He will then be more likely to command success.

PASSION

Is emotion of another kind. Pathos, in its effect, is gentle as the running stream, while passion may be compared to the mountain torrent or rolling thunder. Persons who speak with force and energy have the vital (sanguine) motive temperament. The mental faculties are mainly Combative-ness, Destructiveness, and Firmness. These are often accompanied by a wide head and thick neck. The late Charles Bradlaugh was an orator of this class, though the motive-mental temperament was predominant.

Men with this kind of organization flourish under opposition. Difficulty to them is a condition of success. They cannot be half-hearted in anything they undertake. They will appeal to the passions of the people, and sway the multitude by the violence of their emotions and the fierceness of their anger. Life to them is more a battle than a voyage. They are in their element when in the front rank, where the bullets are flying the thickest. If preachers, they will have no sympathy with such a sentiment as—

" Sit and sing yourself away
To everlasting bliss."

Their song will be—

" Oft in danger, oft in woe,
Onward Christian, onward go,
Fight the fight, maintain the strife,
Strengthened with the bread of life."

A speaker who has this sort of organization needs good intellectual powers, or he will be likely to be dogmatic and intolerant, especially if self-esteem be also large.

IMAGINATION.

The faculties which predominate in orators of this class are ideality and sublimity. They will revel in the ideal and imaginary. They will also be greatly interested in natural scenery. If their comparison is large they will draw analogies from this source, and magnify and embellish that which they are describing. With the mental temperament, a fine quality of organism, and large moral faculties, they will have noble and lofty conceptions, and aspire after a high state of excellence. The Rev. C. Berry, of Wolverhampton, has this kind of organization.

When combined with the other temperaments, there will be energy, and determination of character, with great oratorical ability. Dr. Joseph Parker, of the City Temple, is a good representative of this class.

The late J. B. Gough had a fair imagination, but his chief characteristics were pathos and passion. He could literally make his audience cry one minute and laugh the next. There have been few greater natural orators than Mr. Gough.

Among those who possessed the three powers—pathos, passion, and imagination—may be mentioned Rev. Henry Ward Beecher and Rev. John Guttridge. Perhaps one of the best living illustrations is Principal Fairbairn, of Mansfield College, Oxford. All these have come under my own observation.

One very useful faculty to the orator is wit or mirthfulness. Sheridan, the great Irish orator, was much annoyed by a fellow-member of the House of Commons, who would frequently, and inappropriately, cry out "Hear, hear!" Wishing to silence the brawling member, Sheridan took occasion in debate to describe a political contemporary who wished to play the rogue, but had sense enough to play the fool. "Where," exclaimed he, with great emphasis, "where shall we find a more knavish fool or foolish knave than he?" "Hear, hear!" shouted the troublesome member. Sheridan turned round, and, thanking him for the prompt information, sat down amid the roar of the House.

All young men who desire to become orators should endeavour to be as natural as possible. The monotonous and artificial voice that is sometimes heard from the pulpit and platform is highly objectionable.

Said a preacher one day to a celebrated actor, "How is it that you, who represent what is purely imaginary, are much more effective than we who declare what is real and true?" The actor replied, "Because we act what is imaginary as

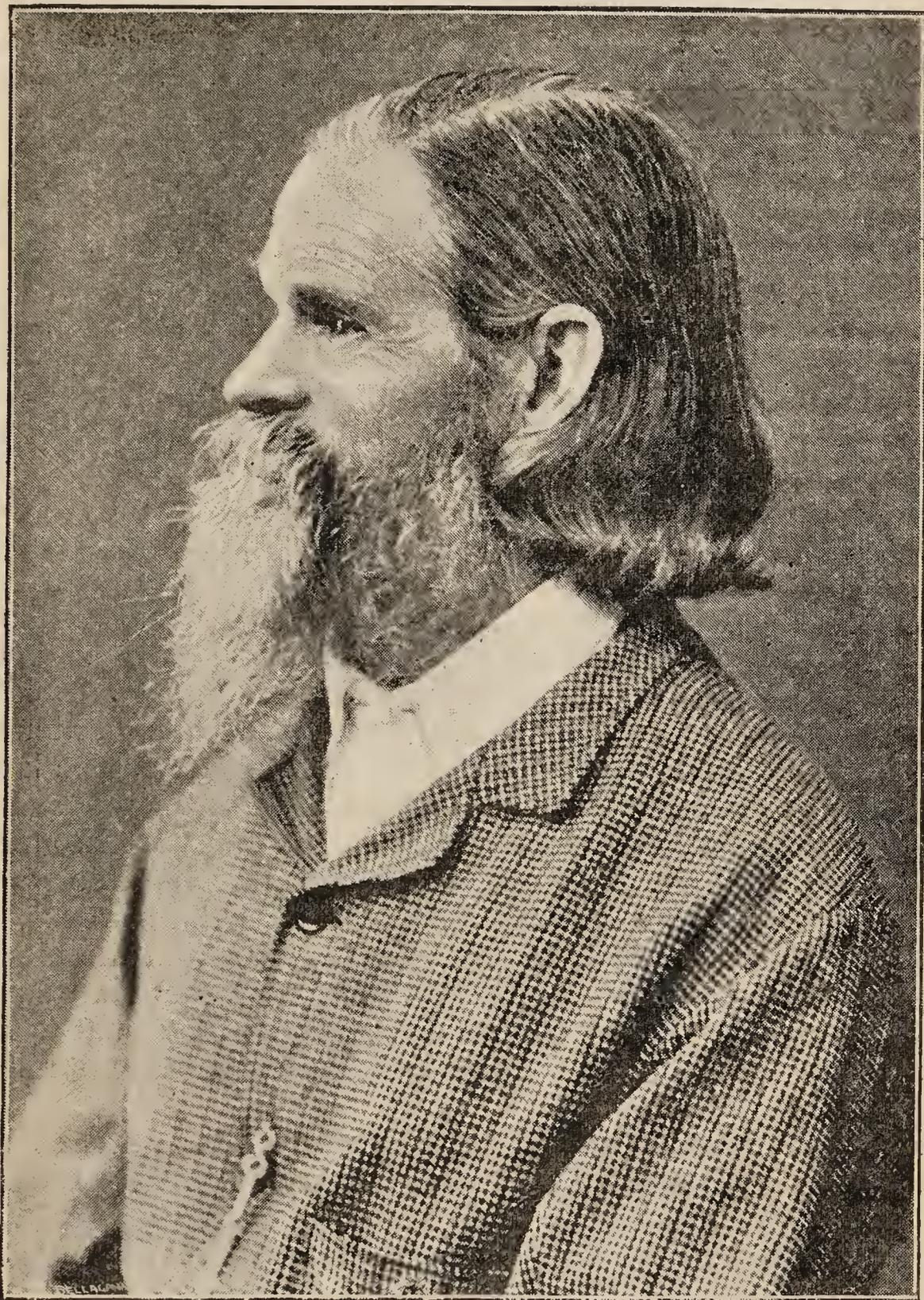
though it were real, while you speak of what is true as though it were imaginary."

The success of a speaker is partly dependent upon the size and interest of his audience. There should be magnetism on both sides.

A PHRENOLOGICAL SKETCH OF MR. THEODORE WRIGHT (BRISBANE).

THIS gentleman has a strongly marked brain, with a very distinct character, yet not one that can be readily called radical. He thinks for himself, has his own views on most questions, and is satisfied with them. His head indicates very strong moral and social qualities; and he is much interested in other people. He is always ready to lend a helping hand where he can do good to others. He can easily sacrifice selfishness if necessary for the good of mankind. He is a lover of country, and attached to place; he would prefer one permanent home, although he may enjoy travelling for the sake of gaining knowledge. He is specially interested in the family circle, decidedly fond of children and animals. He would look more carefully after the comfort of his horse or dog than some would after their children. He is liable to be absent-minded; he becomes interested in a subject, and continues his interest in that subject for a long time. He is prepared to finish what he begins, for his mind dwells upon a subject as long as there is anything to be unfolded. There is danger of his being too *prolix*, but he is all the more thorough. He has self-reliance and confidence in himself; he is also ambitious, and does not hide his light under a bushel, nor keep all his good thoughts to himself; he prefers to share with others than to enjoy the whole of a thing alone. He may be slow in deciding what course to pursue, but he is very firm, tenacious, and persevering in carrying out his opinions, and in finishing his task that he has taken upon himself. He has respect for the powers that be, and in some things manifests considerable conservative ambition. He is very strong in his sympathies; he is one among the few who are willing to share with other people, and make personal sacrifices if necessary for their general good. He has a missionary spirit. His intellectual powers are all active, and some are large. He is a very correct observer, gathers much information by seeing; he has good powers to describe, compare, analyse, and examine subjects closely. He is

intuitive in his perception of character, and is naturally a great reader of human nature. He is more posted up with reference to hidden truths, and is thus more surrounded with mystery than many, for he has not only an intuitive mind,



MR. THEODORE WRIGHT.

but a spiritual perception of truth. He is generally happy, and exerts a hopeful influence over others. He is not a copious talker, yet he is so emotional and full of ideas that he can scarcely keep from talking when others are willing to listen. He takes great pleasure in penetrating into subjects,

and he keeps posted up with reference to what is going on in the world. He is a kind of forerunner preparing the way for reforms.

AN AUTOBIOGRAPHICAL ACCOUNT OF MR. WRIGHT.

IT was in the year 1849 I left the shores of England, as a little sturdy hopeful of fourteen, to try my fortune in Australia. It was in November, 1864, as the outcome of a phrenological examination given me by Professor A. S. Hamilton, that I first took anything like special notice of Phrenology. Even then at first it was more curiosity than anything besides that impelled me to look into it. A science that was capable of diagnosing character as mine had been, made such a deep impression on me that I put my whole soul into it, followed the careful instructions furnished in the various works by the best writers of the day, and before I knew what I was about or was working towards, strangers began to seek my assistance as a delineator of character.

For years prior to this I had been located at Ballarat, Victoria, working first of all for more than a decade as a gold miner, and afterwards, from a pure love of Nature, took up with horticulture, and ornamental or landscape gardening. Having been well known for years as an expert in the latter capacity, it was only because of more than ordinary pressure being brought to bear upon me that I ever consented to make the delineation of character by means of phrenology my profession. Having quietly qualified myself, however, by continuous patient study of books and heads, and the modellings from clay and moulding in plaster heads that were suited for my purpose, it was somewhere about 1867 that I first undertook to render phrenological assistance to a stranger professionally.

Everything contributed to urge me on in the career I had cautiously and almost unintentionally adopted. A phrenologist by repute, and a powerful mesmerist, calling himself Dr. Carr, made a triumphant onslaught upon the ignorance and means of the Ballarat folk; and his success, notwithstanding his marked disqualification for helping in phrenology, provoked me to make a start in Ballarat, and I then had a most successful run for about seven months, and won in that time a good reputation for careful diagnosis and accuracy in my professional work. Shortly before quitting my old home—Ballarat—a middle-aged man sought my help. I took his

measure, and administered to him a strong and necessary caution to restrain his tendencies to over-study, lest he should upset his mental balance. He questioned me on this point particularly, asking me what would be likely to interest him most, and so urge him beyond the bounds of moderation. I responded by saying that something exciting and sensational in connection with religion would. He then said, "I see that you thoroughly understand my case, for I have only been three weeks released from the Yarra Bend Lunatic Asylum, and the cause of my going there was reading the Rev. Baxter's work, "Napoleon, the Monarch of the World." This was all that could have been desired, and more than I had anticipated.

Since then I have had a successful run in phrenology over most of the Australian colonies, diversifying my labours at times with preaching, journalistic work, agricultural and horticultural work, both practical and journalistic, and also a measure of the artistic ; and while in Melbourne, in 1868, I was offered partnership in phrenology by one of the best delineators of character I had had the pleasure to meet in these colonies—Prof. A. S. Hamilton, already mentioned. Here in Brisbane I am known as a qualified journalist, more particularly in matters of practical agriculture and horticulture, and for years was contentedly devoted to the same, always doing work at intervals in the advocacy and practice of phrenology. More recently the turn of events has caused me to again throw myself heartily into professional work, and what with lecturing on every fitting opportunity, public and private delineations of character, and my well-known reputation in matters generally, I am doing as much as the very hard times now being experienced in the colonies everywhere will permit. Many a person I have examined has by the same been made a hearty convert to the science.

"FOR this reason we have two ears and one tongue, that we should hear much and speak little."—*Zeno*.

"WE often distress ourselves greatly in the apprehension of misfortunes which never happen at all. We should do our best and await calmly the result."—*Lubbock*.

"THOROUGHNESS, thoroughness, thoroughness. That is what all the workers in this country now need, and that is what will be especially demanded of the rising generation. Slipshoddiness and success begin with the same letter, but they are as far apart as the poles."

CRANIO-CEREBRAL TOPOGRAPHY.

A REPLY TO THE CRITICISM OF THE "POPULAR
MEDICAL MONTHLY."

(Continued.)

"EXPERIMENTAL" brain-physiology and Cranio-Cerebral topography are not included in the requirements of the Medical Examining Boards; and, as most students only learn to "pass," and not in order to "know," no attention is paid to these subjects, and much ignorance is shown with regard to them.

Now, let us see what has been done in Cranio-Cerebral Topography. The relation of the principal fissures and convolutions of the cerebrum to the outer surface of the scalp has been the subject of much recent investigation, and many systems have been devised by which one may localize these parts from an examination of the external surface of the head.

These plans can only be regarded as being approximately correct for several reasons: in the first place, because the relations of the convolutions and sulci to the surface are found to be very variable in different individuals; secondly, because the surface area of the scalp is greater than the surface area of the brain, so that lines drawn on the one cannot correspond exactly to sulci or convolutions on the other; and thirdly, because the sulci and convolutions in two individuals are never precisely alike. Nevertheless, the principal fissures and convolutions can be mapped out with sufficient accuracy for all practical purposes, so that any particular convolution can be generally exposed by removing with the trephine a certain portion of the skull's area.

The earliest of the serious attempts to demonstrate the relation of the brain convolutions to the cranium was that of Broca, and his researches have been followed by those of Bischoff, Turner, Féré, Pozzi, Giacomini, Ecker, Hefftler, Hare, R. W. Reid, Horsley, and Cunningham. The experiments of these observers are classified by Messrs. Anderson and Makins into three principal groups. In the first, led by Broca, the cranial sutures were exposed, punctures were drilled at certain points in their course, and pegs or pins of wood or metal were introduced into the brain through the apertures; the more important relations of the convolutions to their bony case were thus laid down in a manner that involved no material source of fallacy beyond the variability of position of the sutures themselves in their relation to the cranium as a whole. In the second group various parts of

the brain were exposed by removal of its investments, the organ having in some cases been prepared for the experiment either by injection of its vessels or by freezing. Thus Turner, having removed portions of the frontal, parietal, occipital, temporal, and sphenoid bones, left a number of regions bounded either by sutures or by arbitrary lines, and each containing certain convolutions or portions of convolutions. Hefftlar prepared a series of casts of different segments of the head, then of the corresponding portions of the bony cranium, and of the brain. Lastly, Cunningham, having prepared the brain by a special process in such a manner that when exposed "*in situ*" it would remain absolutely unaltered for at least twenty-four hours, removed portions of the bone on one side, leaving narrow bars of the cranial wall in the lines of the sutures and temporal ridge. Moulds were taken, and from these were prepared the valuable series of models which he exhibited at various scientific societies. The third group includes the various endeavours to localize the principal brain fissures, by means of certain lines and measurements marked upon the shaven scalp. In these researches, it was of course necessary that certain recognisable starting points for the lines or measurements in question should be defined upon the surface of the cranium, and all parts of the skull that could be made available for the purpose have been utilised in one or other of the three chief systems.

The various bony prominences, or landmarks, on the outside of the scalp, which can be easily felt, and which serve as indications of the parts beneath, are as follows :—

(1) The supra orbital arches, which may be felt throughout their entire extent, covered by the eyebrows. They form the upper boundary of the circumference or base of the orbit, and separate the face from the forehead. They protect the eye in the direction from which blows are most likely to descend. They vary in prominence in different individuals. They are more marked in the male than in the female, and in some races of mankind than others. In the more debased races, as the forehead recedes backwards, the supra-orbital arch becomes more prominent, and approaches more to the characters of the monkey tribe, in whom the supra-orbital arches are very largely developed. These arches terminate internally on either side of the root of the nose, in

(2) The internal angular process, which, however, is scarcely to be felt. Externally they terminate in

(3) The external angular process, which is more strongly marked than the internal, and is plainly to be felt.

(4) The zygomatic arch is plainly to be felt throughout its entire length, being situated almost immediately under the skin. It is formed by the malar bone, and the zygomatic process of the temporal bone. Behind the ear is

(5) The mastoid portion of the temporal bone, plainly to be felt, and terminating below in a nipple-shaped process. It is rudimentary in infancy, but gradually develops in childhood, and is more marked in the negro than in the European.

(6) The external occipital protuberance is always plainly to be felt just at the level where the skin of the neck joins that of the head.

Running outwards on either side from the external occipital protuberance is an arched ridge of bone, which can be more or less plainly perceived. This is

(7) The superior curved line of the occipital bone, and gives attachment to some of the muscles which keep the head erect on the spine ; accordingly, we find it more developed in the negro tribes, in whom the jaws are much more massive, and therefore require stronger muscles to prevent their extra weight carrying their head forward. In bald persons, the lines of junction of the bones, especially the junction of the occipital and parietal at the lambdoid suture, may be defined as a slight depression, caused by the thickening of the borders of the bones in this situation.

In the line of the greatest transverse diameter of the head, on either side of the middle line, are generally to be found

(8) The parietal eminences ; though sometimes these eminences are not situated at the point of the greatest transverse diameter, which is at some other prominent part of the parietal region. They denote the point where ossification of the bone began. They are much more prominent and well-marked in early life, in consequence of the sharper curve of the bone at this period, so that it describes the segment of a smaller circle. Later in life, as the bone grows, the curve spreads out and forms the segment of a larger circle, so that the eminence becomes less distinguishable. The eminence is more apparent in the negro's skull than in that of the European. This is due to the greater flattening of the temporal fossa in the former skull to accommodate the larger temporal muscle which exists in these races. The parietal eminence is particularly exposed to injury from blows or falls on the head, but fracture is to a certain extent prevented by the shape of the bone, which forms an arch, so that the force of the blow is diffused over the bone in every direction. At the side of the head may be felt

(9) The temporal ridge. Mr. Victor Horsley has recently shown that this ridge can be made out on the living body.

(10) The frontal eminences vary a good deal in different individuals, being considerably more prominent in some than in others; and they are often not symmetrical on the two sides of the body, the one being much more pronounced than the other. This is often especially noticeable in the skull of the young child or infant, and becomes less marked as age advances. The prominence of the frontal eminences depends more upon the general shape of the whole bone than upon the rise of the protuberances themselves. As the skull is more highly developed in consequence of increased intellectual capacity, so the frontal bone becomes more upright, and the frontal eminences stand out in bolder relief. Thus they may be considered as affording, to a certain extent, an indication of the development of the hemispheres of the brain beneath, and of the mental powers of the individual. They are not so much exposed to injury as the parietal eminences. In falls forward, the upper extremities are involuntarily thrown out, and break the force of the fall, and thus shield the frontal bone from injury.

Below the frontal eminences on the forehead are

(11) The superciliary ridges, which denote the position of the frontal sinuses, and vary according to the size of the sinuses in different individuals, being, as a rule, small in the female, absent in children, and sometimes unusually prominent in the male, when the frontal sinuses are largely developed.

These are the various distinguishable landmarks in the head, to which the fissures and convolutions of the brain bear the following relationship :

(1) Drawing a line through the frontal eminences from above the orbit to the coronal suture, we cut off a portion of skull corresponding to the first frontal convolution.

(2) Bounded by this line and the temporal ridge, running almost parallel with it up to the coronal suture, we have the second frontal convolution.

(3) Bounded by the temporal ridge and the squamous suture up to the coronal suture, we have the direction of the third frontal convolution.

These three areas Dr. Ferrier regards as the motor substrata of the higher intellectual functions.

(4) Between the squamous, the squamoso-sphenoid suture, and the orbit is the ali-sphenoid area.

(5) Behind it, bounded by the same sutures, we have the squamoso-temporal area.

(6) Drawing a line from the squamous suture vertically

upwards through the parietal eminences to the sagittal suture or middle line of the skull, we subdivide the parietal region into an antero-parietal and a post-parietal area. Through the middle of both runs the temporal ridge, thus making four areas. The first, the superior antero-parietal area, is bounded by the sagittal suture, that line which we have drawn through the parietal eminence, the temporal ridge and the coronal suture.

(7) Below is the inferior antero-parietal area, bounded by the temporal ridge, the imaginary line, the squamous and coronal sutures.

(8) The superior postero-parietal area is bounded by the imaginary line, the temporal ridge, the lambdoid suture, and the middle line.

(9) Bounded by the imaginary line, the temporal ridge, and the squamous suture, we have the inferior postero-parietal area.

(10) Lastly, below the lambdoid suture, that is to say, corresponding to the occipital bone, we have the occipital convolutions.

We should now be able to trace the remaining convolutions and the various fissures. Suffice it at present to have shown that the relations between the brain and skull have been carefully investigated, and though some of the details may be still under dispute, the writer in the *Popular Medical Monthly* was wrong in supposing that I was "drawing upon my imagination."

BERNARD HOLLANDER.

HE who in questions of right, virtue, or duty sets himself above all ridicule is truly great, and shall laugh in the end with truer mirth than ever he was laughed at.—*Lavater*.

"UNCLE JOHN," said little Emily, "do you know that a baby that was fed on Elephant's milk gained twenty pounds in a week?" "Nonsense!" exclaimed Uncle John; and then asked: "Whose baby was it?" "It was the elephant's baby," replied little Emily.—*New Moon*.

FATHER (looking over paper)—"More bad news! A hitherto unknown frog-pond has been discovered in Central Africa." Mother—"What is that to us?" Father—"It means that every one of our eight children will have to have a new and revised edition of High-price's Geography."

WORK within the lines of your strength. Do not imagine that you are nothing because you are not everything. Abide in the station appointed of God; and though it be not the highest hill which first catches the morning light, yet God will not leave you without visitation, and succour, and comfort.

MR. R. B. D. WELLS.

HAS a most powerful motive temperament, with sufficient mental and vital to give a predominant desire for action. He is in his element when he has as much as he can possibly do. Few persons are more industrious, and try to use their time to a better advantage than he. He is greatly indebted to his industrious and active spirit for his success in life. He is remarkable for his energy, force, will, and self-reliance, and



MR. R. B. D. WELLS.

seeks no aid of anyone if it is possible for him to do the thing himself. He dislikes to be under obligations for anything. He has a very practical intellect, is very quick of observation, gathers information easily, and seizes every available chance to accomplish his ends. His practical judgment is good; he has the power to systematise and arrange his plans, and does not allow anything to go half done. His comparison is very actively developed, giving him great power of association, and making him very quick to take a hint. He is remarkable for his intuitions, readily perceives character and motives, and

knows how to make the most of them. He has quite a dominating degree of constructiveness, giving him versatility of talent, enabling him to adapt himself to a great variety of circumstances. He is good at making up estimates, of turning what property and forces he has to good account. He probably will not be content until he has accomplished what his high ambitions desire to do, and until he has succeeded in doing the most business in his line. His features are quite marked, and tell a story of their own. In a business way his memory is good, but may not be so good in scholastic things; but having order large he is systematic, and does things up promptly, so as to require less memory than most men. Perseverance and self-reliance, joined to his force of character, are the most prominent powers; then his intuition and perceptive powers, and ability to manage and systematise, are the next.

REMINISCENCES OF L. N. FOWLER.

(BY DANIEL LAMONT.)

VII.—TOURING IN THE EAST: MRS. LYDIA FOLGER FOWLER: VISIT TO AMERICA: THE "PHRENOLOGICAL MAGAZINE": THE FOWLER INSTITUTE: CONCLUSION.

With the exception of a trip to Rome, a run over to Paris, a tour through Greece, Turkey, Egypt, and Palestine, and a visit to America, Mr. Fowler has been constantly before the British public since his arrival in this country in 1860. His times of rest and play were not so frequent as they should have been, for during his lecture tours he was invariably kept hard at work from early morning until ten o'clock at night. But infrequent as his holiday excursions were, when they did come round, they were to him times of rare enjoyment. He was fond of travelling, and whether he was holiday-making at home, or scampering about in foreign lands, new scenes and new faces were to him an endless source of pure and unalloyed delight.

On the 16th of January, 1871, accompanied by Mrs. Fowler, he started on a tour through Egypt and the Holy Land. This holiday tour extended to 103 days. During their journeyings they travelled 3,510 miles by rail, 5,150 miles by steamboat, and 600 miles on horseback, making a grand total of 9,260. The travellers found this one of the most memorable periods

of their happy wedded lives. It afforded them many opportunities of seeing new types of character, and of observing the various characteristics of other nationalities. They visited Pompey's Pillar, and the Needles; they went round and all about the Pyramids; and here one of the tourists may be allowed to interpose with the remark that the Sphinx possessed the largest head he ever examined. With a merry twinkle in his eyes, Mr. Fowler tells us that, while it is a large head that measures twenty-four inches, the Sphinx measures one thousand, two hundred and twenty-four inches. They voyaged up the Nile 600 miles, stopping here and there to explore the more important towns, temples, ruins, and tombs by the way. They returned from their ramblings in the East rested and invigorated, and they brought home with them many odd and interesting relics and mementoes of their tour, and a thousand new facts and fresh thoughts for the entertainment and edification of their friends and patrons. Mr. Fowler made these hundred days in the East the subject of one of his most instructive lectures. Mrs. Fowler also found in her notes by the way inspiring matter for an eloquent lecture on "Woman: Her place and power."

We have stated that Mr. Fowler was blessed with parents whom it was his joy to love, and a life-long delight to honour. It may as truly be said that he was "thrice blessed" in his beloved wife. Mrs. Lydia Folger Fowler was born in the Island of Nantucket, Mass. The family were known by the designation, "the knowing Folders," and this term was peculiarly applicable to little Lydia. At a very early age she showed surprising eagerness, and a charming aptness in getting to know things, and gave promise of a bright and useful career. She was related—on the paternal side—to the mother of Benjamin Franklin. Her well formed, finely-poised head, and the benignant expression of the speaking features, recalls the striking personality of that great man; and she possessed, in no small degree, several of the mental characteristics which that distinguished man inherited through his mother. Walter Folger—Mrs. Fowler's uncle—was one of the most famous astronomers of his time.

Lydia Folger was a quick, easy learner—an ardent scholar. She made rapid progress in her studies, "but not satisfied with an education which would have made her pre-eminent amongst her sex, she decided on taking up the study of medicine." She attended the Medical College of Rochester, New York; succeeded in taking her degree, and was one of the first of her sex, in America, to graduate as a Doctor of Medicine. She had the honour of being "the first female

professor of obstetrics in a medical school in America ; but giving up teaching for a more active sphere, she for several years carried on an extensive medical practice in New York City." Actively engaged as she was with her professional duties, she still found time to do a good deal of literary work ; "one of the first fruits of her pen being a treatise on Astronomy for the use of children—in this, curiously showing the mathematical bent peculiar to the Folgers, from whom Benjamin Franklin inherited it."

Mrs. Fowler was, indeed, an inestimable type of womanhood. None could be more devoted, exclusive, pure, or constant in attachment, than she was. The Christian religion was her joy, her inspiration, and the guiding principle of her earnest, her efficient life. "Of music, poetry, and art, she was passionately fond, and would almost go into raptures when in the enjoyment of these. She was decidedly of a mirthful type, being lively, cheerful, and entertaining." Her lectures on the laws of life and health, physical culture, moral duty and obligation, addressed more particularly to her own sex, were the glowing utterances of a noble mind. By pen and voice, by precept and example, in public and in the sanctity of her own home, she impressed upon one and all "the beauty and happiness of obeying the Divine laws of life." The charm of her manner, the purity of her motives, the persuasive eloquence with which she enforced her views, drew round her troops of friends, and secured for her the esteem and affection of all who came within her reach. She travelled with her husband all over the United Kingdom, and by her public lectures, drawing-room conferences with ladies, and private consultations, she wrought untold good amongst her own sex—a work that could only have been done by an educated, earnest, noble woman.

Mrs. Fowler was a devoted and ceaseless worker in the cause of temperance. This department of moral reform called forth her rare womanly sympathy, and stirred her to the highest literary efforts which she achieved. As Hon. Secretary of the British Women's Temperance Society, she exercised a wide-spread influence. One of her last public appearances was to lecture on temperance jointly with her husband, in the Congregational Church, Leicester Square, in November, 1878. The last production of her pen was a temperance tale ; just as she put the finishing touches to this story, she was laid aside by an illness which brought to a close her beautiful, bountiful career. The silver chord was unloosed on the 26th of January, 1879. Her name will be long treasured as a speaking memory by thousands on both sides of the Atlantic ; her radiant life

still sheds a golden glory adown the intervening years. "The Pet of the Household," an invaluable guide to parents concerning the physical training and mental culture of their children; "Woman and Her Destiny," a book specially addressed to women; "Heart Melodies," a volume of poems; "Nora: the Lost and Redeemed," a tenderly-told, pathetic, temperance story; and several other smaller volumes, are the literary legacy of Mrs. Lydia Folger Fowler.

A few years after Mrs. Fowler's death, Mr. Fowler resolved to visit America. He longed to see his friends once more, and to have a last look round his own, his native land; and when he said good-bye to us, he was not quite sure, but he might be advised to spend the remainder of his years in the land of his nativity. Yielding to earnest requests, which showered in upon him from many quarters, he delivered several courses of lectures. His "welcome home" was so hearty, and his lectures were so highly appreciated, that things began to look as if our American cousins had made up their minds to retain his services, quite regardless of the wishes of his friends in the old country. The PHRENOLOGICAL MAGAZINE for February, 1884, however, contained the pleasing information that Mr. Fowler was on his way back to England. The ties binding him and drawing him back to old England were too strong to be resisted; and so he bade his sister, Mrs. Charlotte Fowler Wells, his brother Orson, his numerous friends and admirers, "farewell," and returned to the land of his adoption.

This number of the PHRENOLOGICAL MAGAZINE completes the twelfth year of publication. Mr. Fowler sent out the first number in January, 1880, in the hope that the new monthly was wanted, and that it would be gladly welcomed. Year by year it has become more widely known, and very highly valued by those who peruse its interesting pages. An increasing circulation, a more frequent reference by the Press to its varied contents, and a keener interest in the topics discussed by those who regularly subscribe to it, are encouraging tokens that the gallant little journal will command a still wider circle of readers and students. It is the only publication in Great Britain devoted to the consideration of the science of phrenology.

The dozen bulky volumes of the PHRENOLOGICAL MAGAZINE are a valuable treasury of information on phrenology, physiology, physiognomy, psychology, education, and temperance. The genius and labours of Gall, Spurzheim, and Combe are discussed in its pages; the phrenological battles of the long ago are re-told; recent controversies and conflicts are fully dealt with; and the progress of phrenology, month

by month, and year by year, is carefully recorded. Amongst the more notable contents of the volumes now in the hands of the public may be noted,—the monthly portraits of prominent public characters, accompanied by an exhaustive delineation by Mr. Fowler ; the bright, racy, logical articles, bearing the now familiar, and always welcome initials, J. A. F. ; the scientific papers contributed by Mr. Bernard Hollander ; and the poems and essays from the pen of Mr. A. T. Story.

Another educational agency, of perhaps quite as much importance as the PHRENOLOGICAL MAGAZINE, is the recently founded “Fowler Institute.” The aim of the founder of the Institute is to provide a thorough course of training in phrenology, physiology, and kindred subjects. All who are desirous of studying human nature, phrenologically and physiologically, whether they are preachers, doctors, lawyers, teachers, merchants, mechanics, or artizans, will find in the “Fowler Institute” a combination of aids and guides in that direction, such as cannot be got elsewhere.

There is the Phrenological Museum, containing between 300 and 400 skulls, busts, casts, and portraits. There is the Library, stocked with over 500 volumes, some of which are exceedingly choice and rare books, all treating on some particular phase of mental science. There is the Lecture Room and Class-rooms, the walls of which are hung from time to time with engravings and plates, and portraits bearing on the subject brought before the class.

Diplomas and certificates, according to proficiency, are granted ; and every care is exercised to make the examinations a crucial test, and to assure that the title of Fellow, or the certificate, will be judiciously and worthily bestowed. At the request of a number of persons who reside out of London, and are unable to attend the Institute, a course of instructions by letter has been arranged. This scheme will enable students living in the provinces, to share the benefits of the Fowler Institute with their more highly privileged brethren in London. This auxiliary department is under the personal supervision of Mr. Fowler, and Miss Jessie A. Fowler. The measure of success which has attended the Fowler Institute since it was founded, less than two years ago, has been deeply gratifying, and there is every reason to believe that it will speedily be acknowledged as one of the most useful and successful educational institutions in the vast world of London.

This chapter concludes these rambling reminiscences. The writer lays down his pen with reluctance, and ends his task with regret. Much has been left out, and there are many interesting events and important matters relating to Mr. Fowler's

life and work, which find no place in the foregoing pages. The reader will please note, that the aim of the writer has not been to attempt a biography, but to give an outline sketch of Mr. Fowler's life and labours. No attempt has been made—except what has been said incidentally and indirectly—to define, expound, or defend phrenology; that were a task best performed by the professor himself. The writer will be satisfied if this hurried, imperfect sketch serves as an introduction to phrenology, and to Lorenzo Niles Fowler, its greatest living exponent.

HYDROPATHY IN LONDON.

THERE is a very general notion that hydropathy, to be effective, should be practised in hilly or mountainous districts. This idea arose, no doubt, from the fact that the first "Cure" (that of Vincent Priessnitz) was established at Gräfenberg, high up among the Silesian mountains; and that the founder's disciples have, for the most part, settled themselves on the heights. This was perhaps a mistake, and has done much to strengthen the notion that only in such places is the water-cure effective.

One man, however, had the courage to perceive the fallacy of this view, and to demonstrate the fact beyond the shadow of doubt. Knowing that all, like Mahomet, could not go to the mountain, he determined to bring the mountain, or the effects of the mountain, to Mahomet. In other words, to drop metaphor, there was one disciple of Priessnitz, who was so convinced of the curative power of water, apart from mountain breezes, that he resolved to put it to the test in London itself. Thus it was that about the same time that Father Kneipp began curing his parishioners in the lowland village of Bavaria, Mr. Richard Metcalfe opened his establishment at Priessnitz House, Paddington Green, where ever since he has been proving beyond question the possibility of hydropathy being successfully applied in towns, and at the same time disseminating the principles of the water-cure by every means in his power.

Many years ago, in conjunction with Mrs. Bayly (authoress of "Ragged Homes and How to Mend Them"), Samuel Gurney, and others, Mr. Metcalfe established a free dispensary for the poor in Kensington, with a Turkish bath and other hydropathic appliances in the basement, treating successfully over thirty cases of typhoid fever at the time that disease was

rife in the Kensington Potteries—a district noted for its piggeries, there being about 1,200 human inhabitants and as many pigs perhaps there. A better test of the efficiency of the water-cure in towns we would think could hardly be.

The *Christian Age* recently, in speaking of Mr. Metcalfe's work, said:—"Mr. Metcalfe is admitted to be the most efficient practitioner of the day, for, being situated in London, he has had an amount of experience in critical cases that rarely falls to the lot of one man, and in almost every form of disease, from common cold to a case of leprosy, and, it might be added, to a case of hydrophobia." The *Christian Age* adds:—"Grateful for the benefits we ourselves have received from Mr. Metcalfe's treatment and care, we strongly commend his establishments to those of our readers who may feel the need of health recuperation, or who may be suffering from any of those ailments in which skilful hydropathic treatment has proved an invaluable remedy."

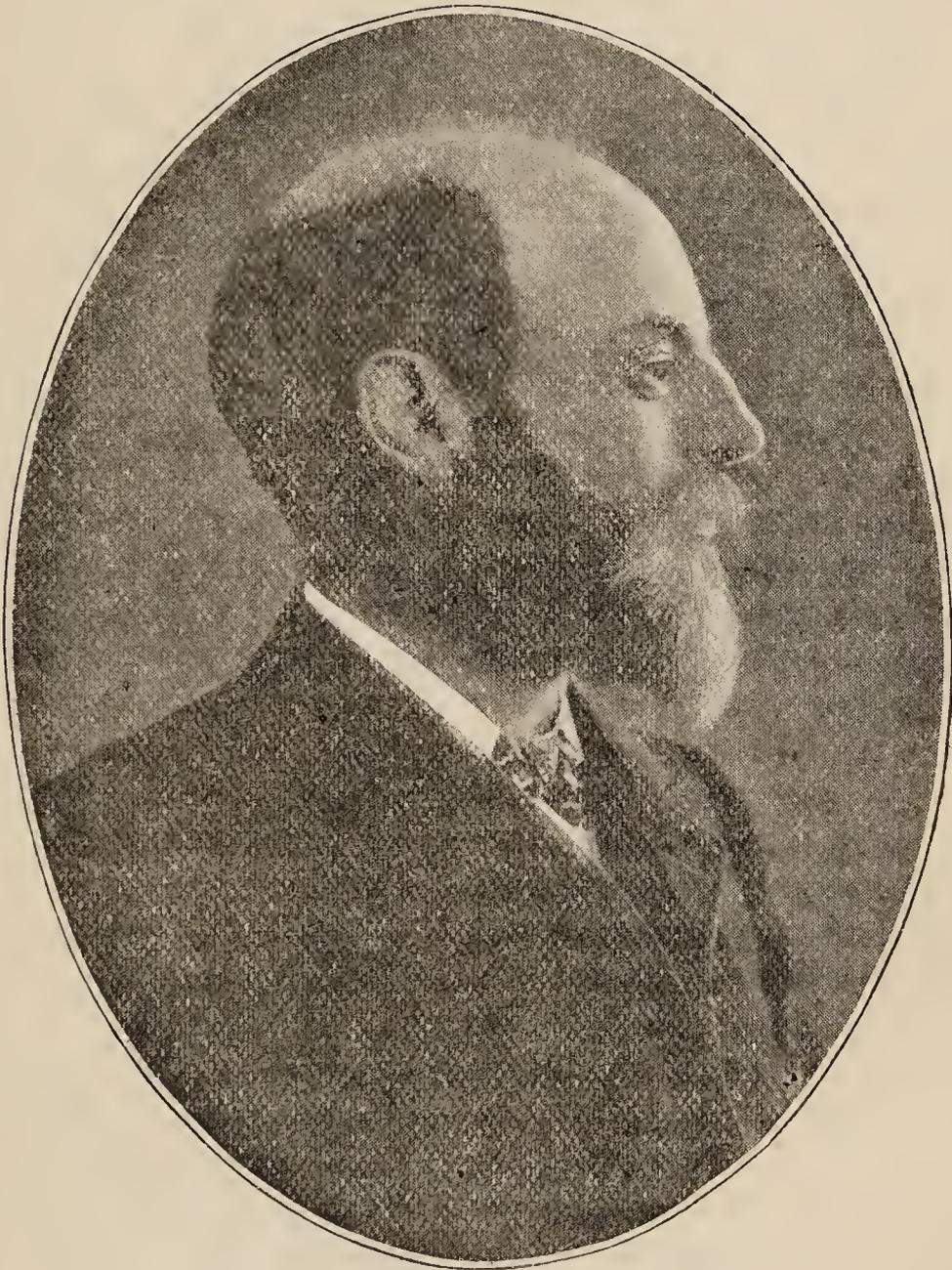
Some time ago, Mr. Metcalfe's services were secured by a Company under the name of Metcalfe's Hydropathic Establishment (Limited), which opened a "cure" at Wellington Square, Hastings. This establishment is specially designed for delicate people visiting this fashionable health resort in the autumn and winter months.

Mr. Metcalfe is a perfect enthusiast for hydropathy, and he never feels that he has done enough to make its blessings known. This he has done by a number of books and pamphlets, all of which show the thoroughness of the man, and the deep practicality of his nature. One of his chief works is entitled "Sanitas Sanitatum et Omnia Sanitas," which practically sums up all that is to be said on the subject of the sanitary aspect of the bath. As a treasury of information on the subject, it is worth its weight in gold. Mr. Metcalfe wrote another book—a monument of erudition and research—and it was in the printer's hands for publication when a fire occurred on his premises, and the MS. was consumed—the labour of three long years destroyed in five minutes. This was a work on Hydrophobia and its treatment, by the sweating process. How much the world has lost by the burning of this MS., the world will never know till the author takes the matter in hand again, and re-writes his work. At the moment that these lines are being penned, the second edition of his "Turkish Bath, in Diseases of the Heart, Obesity, and Atrophy," comes to hand—a little work which all who are troubled with any of these complaints should not be without.

"LIFE is not to live merely, but to live well."—*Lubbock*.

PHRENOLOGICAL SKETCH OF MR. W. CROSS
(LONDON).

THIS gentleman is characterized for having an earnest, intense, and active state of mind. His first thoughts are his best. He is specially spontaneous, off-hand, and quite witty: this comes from a very high state of nervous temperament,



MR. W. CROSS.

joined to a strong constitution and healthy organization. He is quick of observation, has a very intuitive state of mind, is free and easy in conversation, and has an eye to order and method. His sympathies are wide awake, and he is able to express himself so as to attract attention at first. His character, as a whole, is very positive, but much modified through veneration and benevolence. He is quite ambitious

though not particularly proud. He is decidedly social in the company of his choice, but not much inclined to mix up in promiscuous society unless he can be saying or doing something by way of entertaining or instructing. His social brain is fully developed, and he enjoys company while he is in it, but he is rather particular who his choice friends are. His special gifts are connected with his conversational talent; he is a close observer, has ready wit, and capacity to tell what he knows. He has expanse of feeling, and great power to exert a healthy moral influence over others. He can be sarcastic, but not specially severe and cruel, unless it is in reply to others who are so. It is comparatively easy for him to live a temperate life, and to spend his energies in doing good rather than to live at the expense of others. He is full of the hopeful element; he is decidedly emotional, and has a strong consciousness of the material and spiritual sides of man's nature. He is in his element when debating, and succeeds much better when he has an opponent in front of him. His organization as a whole is shown to the best advantage when he is living for others as well as for himself, for he cannot enjoy himself alone half as well as when he is exchanging thoughts and feelings with others. He readily gets into sympathy with the cause he is advocating, and throws his whole soul into it, as though salvation depended upon his efforts.

“WE live in deeds, not years; in thoughts, not breaths;
 In feelings, not in figures on a dial.
 We should count time by heart-throbs. He most lives
 Who thinks most, feels the noblest, acts the best.”—*Bailey*.

CURED BY COLOURS.—A well-known literary character told me a remarkable story. He was speaking of the colour cure for melancholia, which he asserted was practical and in many cases an absolute cure. “I know a case of an eminent statesman in Washington,” said he, “who was affected with melancholia. At times he would find himself sitting for hours gazing in space—dreaming, so to speak. His family became very much annoyed, and did everything to cheer him up, but without avail. He seemed to grow worse every day. Finally his wife hung rose-coloured shades in his library, and then she sewed a piece of rose-coloured velvet around the under rim of his hat. His friends joked him considerably about it around the halls of congress, but they knew not what it was intended for. He paid but little attention to their fun, for he had felt the effect of the rose colour upon his mind. It was barely two weeks before he was entirely cured, and there is not now a happier-dispositioned man in this country.”

CHRISTMAS WITH A PORTRAIT.

I have a very old portrait hanging in my drawing-room, which critical friends tell me is very much out of place among modern drawing-room furniture, but which I cannot bring myself to hang in any other place, because there is a tale associated with it which makes it very sacred to me. The portrait itself is a very fine crayon sketch of a beautiful female face, and the artist's date upon it is 1675. It is framed in a quaint black frame, curiously carved, which you may be sure I have taken every care to preserve. I bought my picture one day in a broker's tumble-down shop, and carried it home with rejoicing. When I came to examine it, I found that it had probably never been disturbed since the remote day when it came fresh from the artist's hands, for, in taking the back out, there fell at my feet the very rough odds and ends of paper which the artist had used to point his crayons on two hundred years ago. On the back of the frame was a faded label, and this was its testimony:—

“My mother's picture, done in creons, was drawn seven years after she was married, in ye year 1675. It being now 1748, it is 73 years since it was drawn.” The handwriting was very tremulous, evidently an old man's feeble penmanship. There was one other record—viz., that the writer's grandfather died in “ye year 1671,” and “ye last brother to my mother died about 1684.” At what time the beautiful face, whose grace the artist had depicted with such imperishable skill, was closed down with the coffin-lid the old man did not say. His memory evidently held, as its brightest picture, his mother's face as it was in its full beauty of life; and the sadder vision it cared not to see or commemorate.

I often used to speculate about the probable life-history perpetuated in this old picture. Sometimes when I watched the picture in the firelight it almost seemed to live. The face was a full, happy face, matronly, yet dimpled and peach-shaded like a fair young girl's. The eyes only spoke of sorrow. They were very large, and of a limpid hazel. The hair was dressed after the manner of the day, in a great crown of curls that ringed the face and lost themselves in the background of the picture, throwing the whole face up into life-like vividness. But especially did the eyes haunt the fancy. They seemed yearning to speak. I often used to say how I wished the picture's lips could open for an instant and reveal the history of the past. Was the grandfather, who died in 1671, once a stern Puritan soldier, or a brave and handsome youth, fighting for

“The King, for the cause,
For the Church, for the Laws,
For Charles, King of England, and Rupert of the Rhine?”

The last brother who died, about the date of whose death there seemed to be uncertainty (about 1684, and 1684 was written twice), who was he? Did no one know when or how he died? Did he die friendless, alone, forsaken? One thing at least seemed clear—the old man who wrote that pathetic label, “My mother’s picture,” loved his mother, and he might well treasure the bright remembrance of such a beautiful and tender face.

At last the time came when the picture became, what it is to me, almost a sacred possession. It is a sad story, too sad some folks will say for Christmas-time, but I promise you the bells shall ring before my little tale is told if you will but listen.

Three years ago, as everybody will remember, we had a genuine old-fashioned English winter. All who had good homes, and healthy blood, and no one lying sick, enjoyed it, and very much perhaps on account of its novelty. But it was a very sad time to me. Just before Christmas my dear little lad fell sick with a fever, and as Christmas came nearer his life seemed to be ebbing away. He was my only child, and it broke my heart to see him suffer. What made the scene even more distressing than such scenes usually are, was that in his delirium his dear little lips kept babbling about Christmas, and he laughed to think how near it was, and how happy he would be when it really came. I went out of the room very often when I heard the fevered lips talking about Christmas, as you may well imagine, and wept and prayed. My poor wife never left his bedside; she heard all his pretty, tangled, incoherent speeches, and I used to wonder that her heart was not really broken. At last Christmas-eve came, and the doctors said that in an hour or two, at most, the tide would turn one way or other; it would run out, and lose itself in the deep sea of death, or would slowly flow back towards the sunny shores of life. I was worn out with watching and sorrow, and I left the room, and went down to the drawing-room, expecting the worst. A cheerful fire was burning, and the room was full of the red, leaping light. Outside great banks of snow were piled up, the wind was rising, and the air was full of driving flakes, and troubled with the coming storm. I sat down wearily enough, and my eyes turned, as they often used, to the beautiful face in the recess, “My mother’s portrait done in creons.” My own trouble began to create a new history for her life, and I wondered if those

deep eyes had ever looked upon a little child as he lay dying. I suppose the heat of the fire drew me off to sleep, but the face followed me into dreamland. The wheels of thought went on running in the same track, after the controlling finger of consciousness had left them. And then I dreamed a dream, or saw a vision, which I know very well may be accounted for by very natural causes, but which, not the less, I have always thought might, perchance, have been of God, and permitted for my comfort.

I dreamed that I was standing on a wide plain, upon which the snow lay thick, and over which the fierce winds swept. There were no hedges, and very few landmarks of any sort. There was a faint track, trampled by the feet of some passing horsemen, and this I followed. It led me at last to a great gabled house, standing on the crest of a hill, and looking very vast and ghostly, with its every pinnacle and bit of tracery touched off by the clinging snow, and gleaming in the wan light of the fading day. In dreams one does pretty much as he likes, and so I entered without any challenge, and stood in a great stone-flagged hall, out of which rose broad oak stairs, and round which ran a panelled gallery. There was a deep silence in the house; it seemed deserted. I walked very quickly up the great staircase, and went round two sides of the square gallery before I found any sign of life. Then I saw a faint light streaming out of a half-shut door, and I approached it. I pushed the door open, and there I saw a deep old bed, in which lay a little child, and beside which knelt a woman. A Bible lay open at her side, and I could see she had been reading the beautiful story of how Christ raised the dead daughter of Jairus. The moment she stirred and looked up, I knew I had found the living face I had so often thought about. There was the same lustrous hazel eyes, the same peach-shaded cheek, the same mass of auburn curls; but the face was confused with sorrow, and tinged with the deep pallor of long watching, and the eyes were red with weeping. She did not seem to see me, and began to talk as though she were alone.

“He is my only son,” she said. “And Thou did’st once give back the only son to his mother; and what thou did’st for the widow of Nain, why can’st not Thou do now? I do not believe Thou wilt punish us because we loved the old cause, as Mistress Rachel says. Why should’st Thou punish the little ones, because their fathers loved the king? No! no! God loves the little ones, for He took them in His arms and blessed them. Jesus did not know anything about the widow of Nain, and yet He healed her son without

asking any questions. He saw she was in sorrow, and He helped her. Am I not in sorrow? And they are all gone; and only this little one left to me; and the world would be too lonely, too hard to bear without him."

"Mistress Mary," said another voice, "it is wrong to weep. The doctor said the child must die; and the world is very evil, so that it will be well for him he goes out of it unstained. You offend God when you weep."

I had not seen any other person in the room till I heard this voice. I saw then this poor comfort came from a very old, soured nurse, who stood within the shadow of the curtains.

"I will not believe it," cried the mother. "I am quite sure God is not offended because I love my child. You forget to-morrow is Christmas-day, and that Jesus Christ was once a little babe in Bethlehem, and His mother loved Him. I want my boy to live, and be a man who shall fight his own way, and do right, and love me when I am old; and go up to God at last, able to say he has feared Him all his days. And God will hear my prayer, and he will live," she cried.

"Look at him now!"

The mother rose and drew back the heavy curtains. There lay a beautiful child, his little hands clasped, and the light of some happy dream lying on his wasted face. The mother kissed his lips, and listened to his breathing.

"He is already better," she said. "See you, he sleeps well; he dreams of Christmas; God will let him live."

And as if to confirm the words of the mother, the little sleeper stirred, and began to talk in his sleep, and two or three times was heard in his babbling, broken dream-speech the word "Christmas."

"It is a sign," said the mother, "God has heard my prayer. I asked God for him as a Christmas gift, when my house was very lonely, and my husband sad, because we had no children. I ask him back now, and God has heard me, and let his lips speak out my sign. God gave him to me once when I prayed, and He will not deny me now. O, how could I bear it, when his father comes home to-night, if the first words of Christmas greeting I should meet him with upon the porch were that his boy was dead!"

While the mother spoke these words a wonderful and holy light shone on her face, and even the nurse looked awed. A deep hush fell upon the chamber, and I saw the mother had bowed her head again, and was lost in prayer. Once I heard her saying some such words as these:—

"Thou hast two of my little ones in heaven to keep Christ-

mas with Thee ; let my firstborn live to make gladness in the lonely house for me upon the day of joy."

Then, while the mother prayed, I heard the faint sound of distant bells throbbing through the windless air, across the great waste of snow ; and presently the sound of the quick feet of a galloping horse was audible in the sick chamber. The rider was the child's father, and in another instant his foot was on the stair. The mother rose, and met him outside the door. I do not know what was said. I heard only the buzz of hurried whispers, and then both entered the room. He was a tall, grave man, with very dark eyes, and looked pale and troubled. The nurse withdrew, and the father and mother stood over the sick boy, and watched him closely.

"If he recovers consciousness he will live," said the father. "It is on the stroke of Christmas ; God grant, for the sake of His dear Son, my son may live."

As the father ceased to speak I heard again the distant bells, and suddenly the sound of the minstrels broke the stillness, and the music of instruments and voices floated up through the clear air. The men were singing a jocund chorus, in which I could distinguish the words of George Wither, uttered in a man's deep bass :—

Without the door let sorrow lie ;
And if for cold it hap to die,
We'll bury it in a Christmas pie
And evermore be merry.

The music of the minstrels seemed to rouse the child. He turned upon his pillow, then opened his eyes, and fixed them on his father and mother. I could almost hear their hearts beat, as they bent down down to see if the child would know them. The child turned in the direction of the music and listened, then looked up to his mother, and a new light filled his eyes.

"Mother ! Father ! Is this Christmas ? Has it really come ?" said the child. For answer both father and mother stooped, and put their arms around him, and their tears fell fast upon the child's wondering face. "Yes, my darling, it is Christmas," said the mother. "Thank God, he is saved," said the father.

As these words were spoken, suddenly the whole room began to fade away ; the song of the minstrels waxed faint and fainter, and died off in broken wandering snatches ; and I began to be conscious of red fire-light playing on a woman's portrait, and filling with its cosy splendour a familiar room. I was awake, and some one was standing at my elbow. It was my wife. Her careworn face looked very happy, happier

than I had seen it for many days, and I could see that she was weeping.

“Come directly,” she said. “The turn for the better has come, and Willy is broad awake, and asking if this is Christmas.” I ran up stairs in much less time than it takes me to write the words, and found the blessed news true. And the scene that I had witnessed in my vision was repeated in my boy’s sick chamber, for we both held him in our arms, and wept, and praised God together:

Now you know the reason why I keep the old portrait in my drawing-room, and do not mean to let any modern water-colours usurp its place. It hung there two years ago, when I dreamed my dream about it; and whenever the Christmas-tide comes round, I reserve the choicest holly for its ancient frame; and I think of the gabled house, the sick child, and the beautiful mother of my dream; and humbly thank God.

W. J. DAWSON.

PHRENOLOGICAL SKETCH OF MR. J. B. KESWICK (SCARBORO’)

HAS a predominance of the motive-mental temperament. He has scarcely enough of the vital to give a whole rounded-out physiology. His mind is very active; his thoughts and feelings are very intense. He is earnest in all he says and does. He appears to have a predominance of the intellectual faculties. He is not specially copious in conversation, or wordy in expressing himself. He appears to have more thought than utterance. He has a favourably-developed intellect, is orderly, and systematic. He has more than an average degree of refinement and susceptibility of mind. He has favourable powers of imitation, and is able to present his ideas correctly. He is mirthful, and takes pleasant views of things. He is naturally systematic, and disposed to be thorough in his investigation of a subject. He has a great desire to travel, to see and test things for himself. He is punctual in his engagements, and makes the most of his time. He is quite inclined to investigate new subjects, and has a thirst for general knowledge. His talents are both of the practical and scientific nature, as well as having strong inclinations to metaphysics. He is youthful in his disposition, presents his thoughts in a pleasant way, and has a favourable degree of blandness of mind. He is intuitive in his perceptions of character and motives. He

sees through a person at once, and is disposed to come directly upon his subject in talking. He has no time to lose, or words to spare. He has good descriptive powers. His sympathies are easily awakened, and he talks feelingly. He is generally more cautious than hopeful. He does not speculate much, or run any great risks. He is none too active, but has a favourable degree of spiritual consciousness: hence he is manly, and capable of enlarging on a subject.



MR. J. B. KESWICK.

He is respectful, and comparatively reserved. He knows his place, but is not so radical as to give offence. He criticises rather closely. He has a fair amount of self-confidence, and manliness of feeling, but he is more ambitious and anxious to please, than he is proud, haughty, or dictatorial. He is rather slow in making up his mind on any new thing, but generally he is safe in his judgment. His social brain is amply developed; he is quite companionable and friendly

with kindred spirits. He has application of mind. He is inclined to finish things before he leaves them, and to be thorough in his investigations. He is exceedingly earnest, direct, and positive. He is rather given to argument and debate, and is not afraid of opposition. He has comparatively an even brain, and does not often contradict himself. As a whole he is quite in earnest, decidedly penetrating, rather positive, and disposed to take the lead.

PHRENOLOGICAL SKETCH OF MRS. J. B. KESWICK
(SCARBORO').



MRS. KESWICK.

THIS lady has a wide-awake, enthusiastic cast of mind ; is thoroughly alive to what is going on around her. She throws her whole soul into what she does, and she seldom fails to understand others through her magnetic influ-

ence. She delights to work for, and communicate her knowledge to others; she has, in fact, a missionary spirit, and nothing makes her feel so much like living as to know there are chances to do good. Her intellectual powers are of the available type. She does not care to know much about knowledge she cannot use; hence, she gives her attention to those subjects that are useful and available. She has good powers of observation, is much interested in all kinds of performances, is particularly interested in experiments, and is anxious to become acquainted with every new thought or principle that is being developed. She has a special talent to compare, analyze, to see the bearing of a subject, and to apply principles. She is quite intuitive; her first thoughts are generally her best. She can begin and go right on with her subject, for she has command of her knowledge, and is free and copious in her language. She readily gets in sympathy with persons in whose society she is placed, and she appears to be about as much interested in other persons as she is in herself. She wishes to consummate everything as soon as possible; cannot be quiet as long as there are obstacles to overcome, or professional duties to perform. She is one of the aspiring kind that is looking forward into the future, and she is labouring more with reference to what is to be, than to the happiness that she can get out of what she is now doing. She has aspirations, inspirations, and frequently the best things she says are spoken without premeditation. She has sufficient ambition to be a spur to her, not so much to get glory as to get credit for doing what she does do in a successful manner. She is a magnet, and is continually drawing people around her. She is naturally hopeful, and exerts a cheerful influence over others. Her poetical feelings, and her vivid imagination, may sometimes carry her too far. She has a bright future before her, and will accomplish her ends with less fruitless labour than the majority of individuals. She has a public spirit, and ought to live and labour for the public.

I WOULD have my children able at each moment from morning to evening to read on my face and to divine upon my lips that my heart is devoted to them; that their happiness and joys are my happiness and my joys.—*Pestalozzi*.

“JOHNNY, here you are at breakfast with your face unwashed!” said his mother. “I know it, mamma. I saw the little things that live in water through papa’s microscope last evening, and I’m not going to have them crawlin’ over my face with their funny little legs!”

MY EXPERIENCE OF PHRENOLOGY.

BY W. T. STEAD.

LONG ago—so long ago I do not remember how long ago it was—I remember being taken to a Phrenological lecture in my father's chapel, to see the man who felt your bumps. He was a Mesmerist as well as a Phrenologist, and the way in which he played with the heads of his victims when they were mesmerised, and apparently rousing different phases of the mind by the mere touch of his fingers, made an indelible impression upon my mind. How much of it was genuine, and how much of it was merely faked up, I was not in a position to decide; all that I know is, that the exhibition made me feel that there was something in it, what, I could not exactly say, and in that mode of mind I have remained to the present day. Added to this ancient impression produced upon the mind of an imaginative child, there is a strong disposition to believe in anything that is scouted as heretical by the regular faculty. Phrenology is not orthodox according to the doctors, accordingly it may possibly be true. Such may not be a very logical proposition, but it is one which I fear is not without considerable influence in my mind. The intolerance of the new school of inquisitors; the bigotry of pseudo-scientists, who dare not for very shame read their medicine books of fifty years ago, and prescribe, without fear of indictment for manslaughter, the boluses which they made our ancestors swallow. This, however, is by the way, but it is better in stating a personal experience to be quite frank, and I do not wish to conceal the fact, that on these two grounds I may be prejudiced unduly in favour of the science of bumps. My personal experience of phrenology is limited to the examination of my head by Miss Fowler at the Phrenological Institute some eight or nine years ago, and a subsequent examination to which I submitted in the course of the present year. Of the latter I need say nothing. Any person who knew who I was could draw up a pretty fair delineation of my character, whether or not he was guided by phrenological developments. It was different, however, with the first delineation, to which I will therefore confine my attention in responding to your request for my experience of phrenology. It is ten years ago, as nearly as I can remember, when one night after dinner, an editorial friend of mine began to make disparaging remarks upon my cranium. I was his guest at the time in the North of England, and his criticisms, although severe, were perfectly good-humoured. He began

somewhat in this wise : "I wonder that an editor like you does not manage to have a better head upon your shoulders than that miserable kind of thing which you have got." "What do you mean," I said. He answered gravely, "I never knew anyone do as much work as you do with so insignificant a head-piece. It is downright hypocrisy to go about the world with a skull which gives no kind of trace to the casual observer, of the capacity which all your work shows you to possess. How a man with such a head can write such articles is a mystery of our profession." "Fiddlesticks and nonsense," said I, "I am not going to have my head run down in this fashion. It is as good a head as yours any way." "No," said he, "it is a little head ; it is a badly-shaped head ; there is nothing to show that there is anything inside it ; and altogether it is a discreditable head for any well-regulated citizen to have upon his shoulders." He was so persistent about it, and so serious withal, that I challenged him to a competitive examination of our heads the next time we were both together within range of a phrenologist ; and I, for my part, expressed perfect readiness to abide by the verdict. About a year later, when the Irish Land Bill was in the throes between the House of Lords and the House of Commons, my journalistic friend called on me at Northumberland Street. I had not been twelve months in London, and was entirely unknown as a person. The general public knew nothing about me until I stood in the dock at the Old Bailey in 1885, in the trial which made my name familiar to newspaper readers throughout the world. Mr. Morley was away in the North of Scotland finishing his Cobden, and I was in charge of the *Pall Mall Gazette*. When my friend appeared I reminded him of his promise, and we walked down to Ludgate Circus in search of Prof. Fowler, who was to adjudicate upon the respective merits of our skulls. When we got to the Phrenological Institute the professor was out ; but Miss Fowler volunteered to act in his stead. We took chairs opposite each other, and explained the nature of our visit.

We said nothing as to our name, profession, calling, or anything else beyond the fact that my friend had abused my head and stuck to it, and that I had repelled his accusations, and that we had adjourned the case to her decision. It was agreed that she had to arrange my head first, and whenever she discovered that I had an exceptionally good or bad development, she had to cross over to him and see whether he was equally blessed or cursed. For the next hour we three, Miss Fowler, my friend, and myself, laughed

more heartily and continuously than we have done in the same space of time before or since. My friend was a Scotchman with a big head, and he beat me all to pieces when we came to measurement. The tape showed him to be two inches more round the head than I was. But I had my innings when it came to the analysis in detail of our phrenological developments. After about an hour of close, comparative analysis, the verdict and effect was that my friend had a bigger head, but that I had a better one—better in the sense of being quicker; otherwise we were very evenly matched. It is obvious that such a comparison between the heads of total strangers, who were, however, well known to each other, and capable of testing the accuracy of each statement, whether about one or the other, was about as severe a test as could be devised by the wit of man; and I remember to this day the wonderfully accurate fashion in which Miss Fowler hit off our respective characteristics, with a nicety which could not have been excelled if she had grown up with us from our childhood.

Another thing which struck me very much was the rapidity with which she seized the general idea of my character from an almost momentary touch. She hardly laid her hand upon my hair before she began to tell me the salient outlines of my character. Afterwards, when the comparison became closer, she felt the head more closely; and it was extraordinary, and if there be no truth in phrenology, little short of miraculous, that a young lady who had never met me before, and did not know me from Adam, should have been as acute in her delineation of my character.

I remember Canon Liddon was very much struck when I told him of some of her definitions. He was especially struck by her remark that I approached the whole problem of religion from the side of sympathy with human beings, and not at all from the side of veneration or adoration of the Supreme Being. I have the good or ill fortune to have a hole in the middle of my head where the bump of veneration ought to exist. Whether it is that the veneration is not there, or that the bumps on either side are abnormally large, the fact of it is that anyone passing his hand over the top of my head, feels, that there is quite a hole where most people have a bump. In describing my character, Miss Fowler said that it cost me no effort to maintain my conviction even against the highest authority in the land. "True," broke in my friend impatiently, "he would as soon contradict a bishop as look at him." "The odd thing of it is," said I to him, "that this very morning at

Downing Street I had contradicted Mr. Gladstone. Mr. Gladstone said that he had given way to the House of Lords on two points; I said, 'I beg your pardon, Mr. Gladstone, you have given way on three.'"

Another remark which was very subtle, but extremely just, was that in which Miss Fowler spoke of my instinct for order. Most persons who know me would swear that I have no order at all, and was entirely devoid of that excellent faculty. But this would have been a superficial judgment, caused entirely by the practical and painful experience with the chaos of papers with which I am overwhelmed. I have always felt that the judgment of my friends was very unjust, but I never understood how it was until Miss Fowler solved the mystery by asserting, much to my satisfaction, that I had the bump of order highly developed, and that I could plan out things, and arrange for everything to be in perfect order at the beginning, but that my interests were so varied, and the amount of work that I was constantly undertaking so multifarious that I would never be able to carry out my orderly plans; and hence, notwithstanding my bump of order, I would always be more or less disorderly. I never fully appreciated the justness of that remark until I was in gaol. When you are in gaol you have plenty of time, and when you have plenty of time it is a delight to be orderly. If I had plenty of time to-day, I am quite sure that I would be as orderly as anybody; but when fresh work is continually coming, which must be done in order to catch the post, or to get to press in time, order has to take a back seat. The faculty is there, I maintain, in spite of all the derision of my friends.

I hope, however, the reader will not imagine that I was prepossessed in favour of phrenology because of the extent to which it administered to my fond belief in my invisible faculty of order. Miss Fowler said many things that were more true than pleasant. Speaking broadly, she left on my mind the impression that I had a head which was capable of any amount of villainy, if it had not been controlled by a huge bump of conscientiousness, which had to supplement all my deficiencies of veneration, and I do not know how many other good qualities that are found necessary for the good behaviour of most people. Conscientiousness made benevolence almost the sole rule of conduct, was her verdict upon me. I confess to a feeling of awe at the thought of what kind of creature I should have been if, in addition to having a hole where a bump should be for veneration, I had also had as great a hole in the place of conscientiousness. Respect for

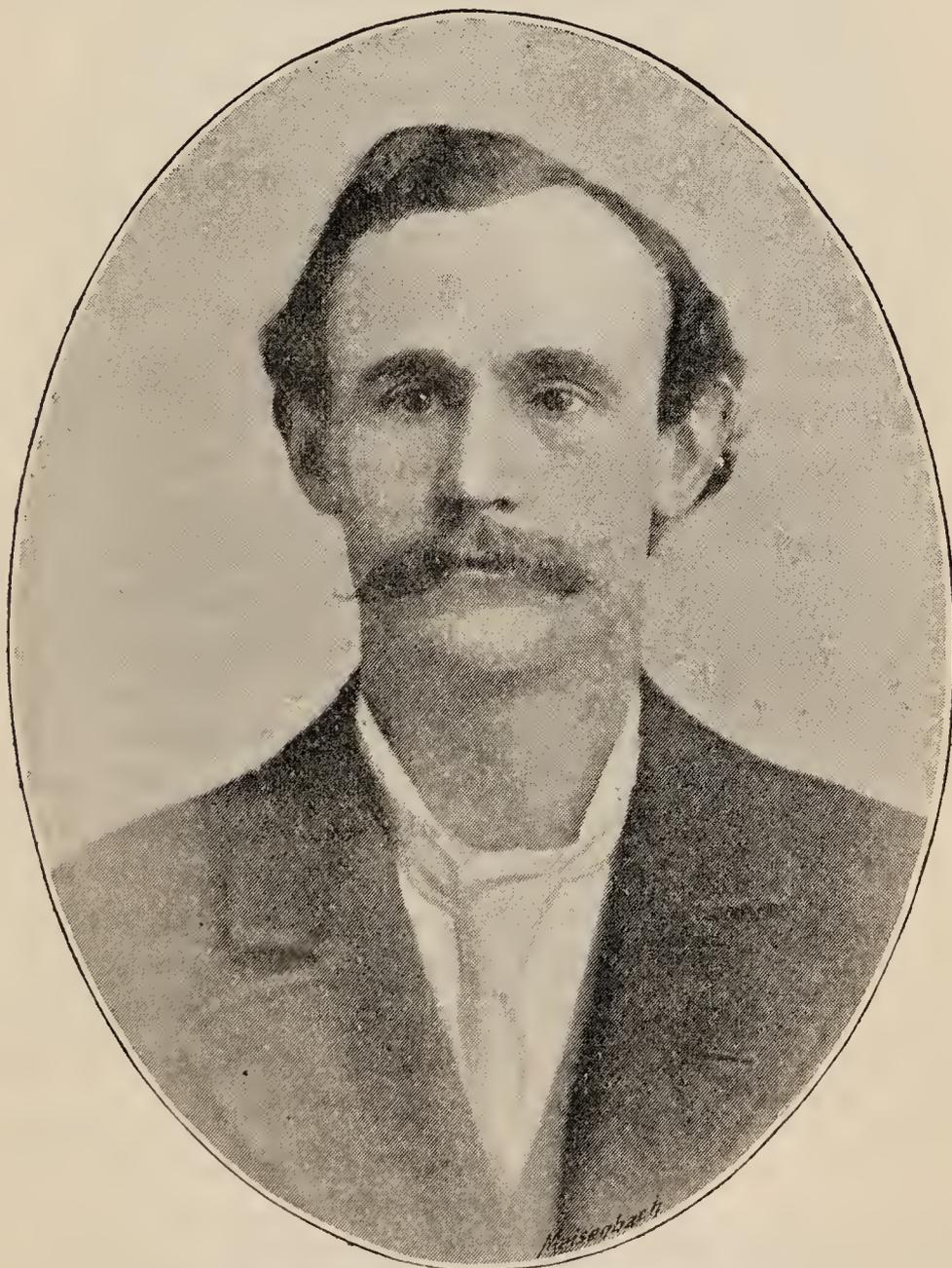
authority of any kind, except my own idea of right and wrong, Miss Fowler declared I did not possess.

My next experience of phrenology was five years later. When I was in gaol I received a pamphlet which Prof. Coates, of Glasgow, published, which was devoted to a phrenological delineation of my character. Prof. Coates had never touched my head ; he had seen my photograph, and had sat behind me in a public meeting which I addressed in the City Hall in Glasgow. Although he did not touch my bumps, he had the advantage of a tolerably full length study of my character as displayed in my writings and speeches during that critical time. His delineation was, however, very good, and so far as I can judge remarkably accurate.

From that time down to this present year I had not troubled myself with phrenology, but this year, in deference to the wishes of my wife, I had the phrenological chart taken of my children, half-a-dozen in number, by Miss Fowler. How far the phrenologist was able to forecast the characters of half-a-dozen boys and girls, varying in age from seventeen to two, time alone will show. But so far as the parents can judge the charts were very accurate. That is all that I have to say as to my personal experience. It only remains for me to add the deductions which I draw from them. Broadly speaking, they tend to confirm my first impression that there is a good deal in phrenology, quite enough to make it well worth while for teachers and parents to submit the heads of their children to phrenological examination. I do not go so far as to assert that every child on entering a public school should be subjected to a phrenological examination, but I do think that in any case when a teacher is puzzled, it would be well worth while for him to ask the advice of a phrenological expert. In many cases phrenology might give a clue as to latent faculties which could be developed, or to indicate absence of capacity, which it was vain to try and cultivate. Certainly many and many a child might have been spared the waste of many dreary hours spent in practising music, if the advice of a competent phrenologist had been taken in time. If the greatest problem in life is to find the line along which you can develop most easily—the greatest capacity with the least resistance—then assuredly the aid of phrenology should not be ignored. Of the moral aspect of phrenology, I need say nothing more than this, that like most of the modern sciences, it tends towards charity. The law of heredity, and the fact that we are all more or less the creatures of circumstance, should tend to make us more merciful in our censure and less extravagant in

our praise of our fellow-creatures. A child who is born like myself—with a hole where the bump of veneration ought to have grown—will find it very difficult to even assume a surface deference to authority, which to another, who has veneration large, comes as natural as breathing. So we might go on all round the cranium, but I have already filled up your space, and will conclude with expressing the pleasure which I have always had in meeting Miss Fowler, and discussing with her the weighty problems which underlie the science of bumps.

PHRENOLOGICAL SKETCH OF MR. J. THOMPSON
(SCARBOROUGH).



MR. J. THOMPSON.

THIS gentleman has a predominance of the mental temperament; he is all work; has a restless, uneasy spirit; liable to

overdo every time he begins a task. He always has something on hand—he does more than he gets pay for ; he should charge more for what he does unless he can give his services for nothing, and he should give people to understand that they get more than their money's worth. He has a predominance of brain power, and almost forgets that he has a body that needs to be looked after. It is well that he is constitutionally healthy, or at least free from disease. There is fair harmony between his head and face, and if there is any antagonism, it is more the result of predominance of brain over bodily power. He can use up vitality faster than he generates it, and it needs favourable surroundings to enable him to take life a little easier. He appears to have a full degree of good humour and pleasantry, so that he is not so liable to chafe and worry about circumstances as many are. His head is well proportioned ; the base of the brain is sufficiently large to give him all the force and energy that he needs, but his executive power is connected greatly with his will and ambition. He has rather strong imagination, and more than ordinary scope of mind. It is comparatively easy for him to enlarge and magnify a subject. He is more copious in thought than he is wordy. He is obliged to talk fast in order to keep up with his own mind. As a speaker, he is liable to be rather extravagant in his style ; he has ingenuity to contrive ways and means to explain himself, hence, is generally interesting. He is fond of art, beauty, and a high type of education. He is versatile in his manner—can adapt himself to circumstances ; is youthful in disposition, and generally pliable. His reasoning brain is larger than his perceptive faculties, but having an active brain, he does not show special deficiency of the practical talents, but his fort is in reasoning more than in dealing with facts. He has a favourable moral brain ; readily becomes sympathetic with others ; and takes great interest in the cause that occupies his mind. He is exceedingly ardent and earnest. He is naturally industrious, and fond of making money, but he is anxious to be doing, and benefiting others, whether he makes money or no. He is decidedly of a spiritual emotional turn of mind, and he loses sight of mere material things while he becomes all absorbed in subjects immaterial.

“TALKERS are no-good doers.”—*Shakespeare.*

“OUR duty is to make ourselves useful.”—*Lubbock.*

“HE is truly great that hath great love.”—*Thomas à Kempis.*

“PEOPLE who have little to do are great talkers.”—*Montesquien.*

“TIME travels in divers paces with divers persons.”—*Shakespeare.*

PHRENOLOGICAL SKETCH OF MRS. THOMPSON.

This lady has a favourable balance of organization both of body and mind ; she is self-competent, knows how to regulate herself, and has a regulating influence over others. She does not antagonize and disturb, but makes friends and keeps them. She is characterized for earnestness, sincerity, practical talent, intuition of mind, availability of power, and can deliver herself



MRS. THOMPSON.

with comparative ease before an audience. She goes right to the point, says what she has to say in a straightforward manner, and is easily understood. She is full of magnetic influence ; she draws people to her rather than repels them. She derives several qualities of her mind from the father's side of the house, and is in her element when she is doing business in a public way ; she is as much at home in the presence of gentlemen as of ladies, and secures the confidence of both.

She is alive to all that is going on around her, and has a distinct consciousness of things that are being done at the time. She is systematic in her mode of thinking and in expressing herself; she can carry a vast amount of business in her mind without confusion. Her head is broad enough at the base to give energy and industry, but not so broad as to disturb her amiable disposition. In times of danger she is cool and self-possessed. She is very steady in carrying out her purposes and plans, and she manages to command respect. She does not try to be witty, but says a great many pleasant things when she does not try. Her social brain (from her facial expression to the general form of her head), acts harmoniously with her moral brain. She exerts a more quiet, uniform influence than an exciting one; hence she does all the more good.

A STRIKE.

Once upon an evening dreary,
 As I pondered, sad and weary,
 O'er the basket with the mending from the wash the day before;
 As I thought of countless stitches
 To be placed in little breeches,
 Rose my heart rebellious in me, as it oft had done before,
 At the fate that did condemn me, when my daily task was o'er,
 To that basket evermore.

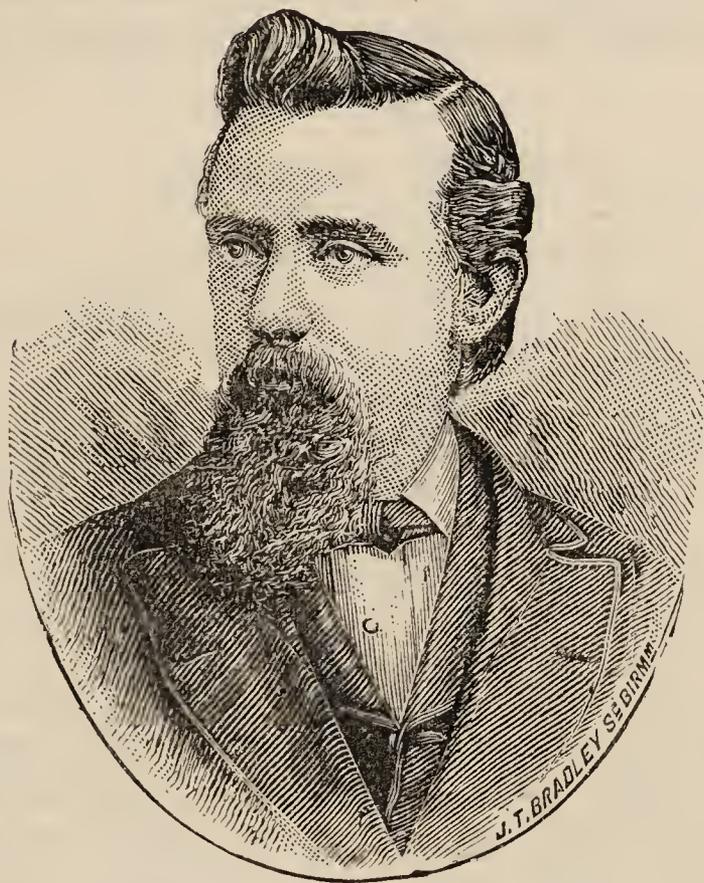
John, with not a sign or motion,
 Sat and read the *Yankee Notion*,
 With no thought of the commotion
 Which within me rankled sore,
 "He," thought I, "when day is ended
 Has no stockings to be mended,
 Has no babies to be tended,
 He can sit and read and snore;
 He can sit and read and rest him:
 Must I work thus evermore?"
 And my heart rebellious answered,
 "Nevermore; no, nevermore."

For though I am but a woman,
 Every nerve within is human,
 Aching, throbbing, overworked,
 Mind and body sick and sore.
 I will strike. When day is ended,
 Though the stockings are not mended,
 Though my course can't be defended,
 Safe behind the closet door

Goes the basket with the mending, and I'll haunted be no more.
 In the daylight shall be crowded all the work that I will do,
 When the evening lamps are lighted, I will read the papers, too.

PHRENOLOGICAL SKETCH OF MR. MARK MOORES
(MORCOMBE).

THIS gentleman has an ample amount of vital stock, animal life, capacity to enjoy and make the most of life as he goes along. He is not unmindful of the happiness of others, but strives to make everything agreeable and pleasant to them as well as to himself. He has not any hard, rough corners. He is comparatively smooth, and well rounded off. His vital temperament is so strongly represented as to enable



MR. MARK MOORES.

him to enjoy himself every minute of his life; when all things are suitable, he enjoys mere physical existence to the full extent, and thus, being a social man, he enjoys the exchange of thought and feeling with others, and is not at all wanting in the capacity to make himself agreeable and entertaining. His presence, without his saying anything, is almost as helpful as a doctor with his saddle bags full of medicine, for he is full of vitality, which is so plentifully sown as to be a powerful stimulus to those who need the same. His magnetism would be all that was necessary to cure and heal a debilitated person. He could do a very thriving business by going about among the sick, nervously weak, and worn, by putting his

hands on their heads, for he is full of magnetism, and can spare not a little to those who have not enough. His head is round and fully developed, which is in harmony with his body. He enjoys his food to the utmost; and whether he eats much or little it acts favourably on his system. He has a large development of vitality; it would be quite difficult for him to die in comparative youth. Circumstances being favourable, he would be contented to live until he was nearer one hundred than eighty years of age. It is going to be a job for him to leave this world, for his great amount of vital stock and animal life will carry him through all the failures that belong to humanity. His brain stands low in the head, which gives a hold on life beyond the ordinary, and indicates practical talent, force, energy, courage, and close observation.

Fowler Institute.

MEMBERS' NOTES.

"Blest be the art that can immortalize,—the art that baffles time's tyrannic claim to quench it."—COWPER.

At the November monthly meeting held on Monday, the 9th, Mr. Smith read his paper upon "Turner," and Mr. Piercy occupied the chair.

The lecturer first described the condition of art in England at the time of Turner's birth, and how artists were used to pander to the perverted public taste rather than copying Nature. Turner's talent for Art first showed itself at the early age of five; and when he was eleven he was handed over to Tom Malton to be taught the profession of a perspective artist, who soon came to the conclusion that his pupil was "impenetrably dull." At fourteen Turner went to the Royal Academy to study, and in the following year distinguished himself by a drawing of Lambeth Palace. The life of this genius was then traced through his unfortunate courtship, his travels in England, Scotland, France, Switzerland, and Italy. By aid of a photograph his phrenological character was given, the predominating features of which were,—great perceptive power, with large comparison, firmness, and combativeness; immense imagination and secretiveness, accompanied with a vital temperament, which afterwards developed a large share of the mental, all of which harmonize as far as is known of a life so enshrouded in mystery.

A vote of thanks for the very excellent and interesting paper was tendered Mr. Smith, who responded, after ably replying to the questions put to him.

* *

The monthly meeting for December will be held on Monday, the 14th, when Mr. Samuel will read a paper upon "Vortex motion the origin of Mind."

Miss E. C. has forwarded us an account of an interesting surgical operation at the German Hospital, which has been recently reported. The patient, a lad of eighteen, was struck on the head with a horn-handled stick, which cut through his hat, penetrated the scalp, and fractured and depressed the skull. A portion of the "skull, to the size of a sixpenny piece, was pressing on the brain. A hole was cut for this to be removed; but when the aperture was prepared it was found that the under portion of the broken piece of bone broadened out to the size of a shilling. It was therefore necessary to enlarge the aperture. This was then accomplished, and it was found that the bone was embedded in the brain, a portion of which was destroyed." The surgeon considered the case hopeless, but the lad had a powerful constitution, besides being a teetotaller, which, doubtless, materially assisted in his ultimate recovery. "One result of the injury to the brain was that the whole of the lad's right side was for a time partly paralysed."

* * *

Mr. D. E. S. has supplied us with the following:—Comparing our criminal population with the non-criminal, in reference to insanity, suicide, and phthisis, we learn from the Reports for last year, of the Prison Commissioners and the Commissioners in Lunacy, that insanity occurred during the year at the rate of $5\frac{1}{2}$ to 10,000 of the population, while among our prison inmates, the rate was 218 to 10,000. Criminals, therefore, are about 40 times more liable to insanity than the ordinary individual. During last year suicide occurred at the rate of one to every 13,371 persons; among the insane population, one to every 6,199; but among the prisoners, one to every 1,400. Of all deaths which took place in England and Wales last year, one in every 239 was due to suicide; whereas, during the last ten years, one in every ten of all who died in our prisons was a suicide. According to the Registrar-General's Report, phthisis is the cause of one death in 27.77 of all deaths occurring during last year; but the figures of the Prison Commissioners demonstrate that this disease is responsible for one in every 5.15 of those dying in our prisons, despite the fact that large numbers were "released on medical grounds" during the year, fully 20 per cent. of whom were suffering from tubercular disease.

The physical condition of the ordinary criminal must indeed be a pitiable one, especially when we learn from the Report of the Medical Inspector of Prisons:—"Of all the prisoners received at Pentonville with sentences of hard labour, about one-half are unfit for such labour, and are exempted from it on medical grounds."

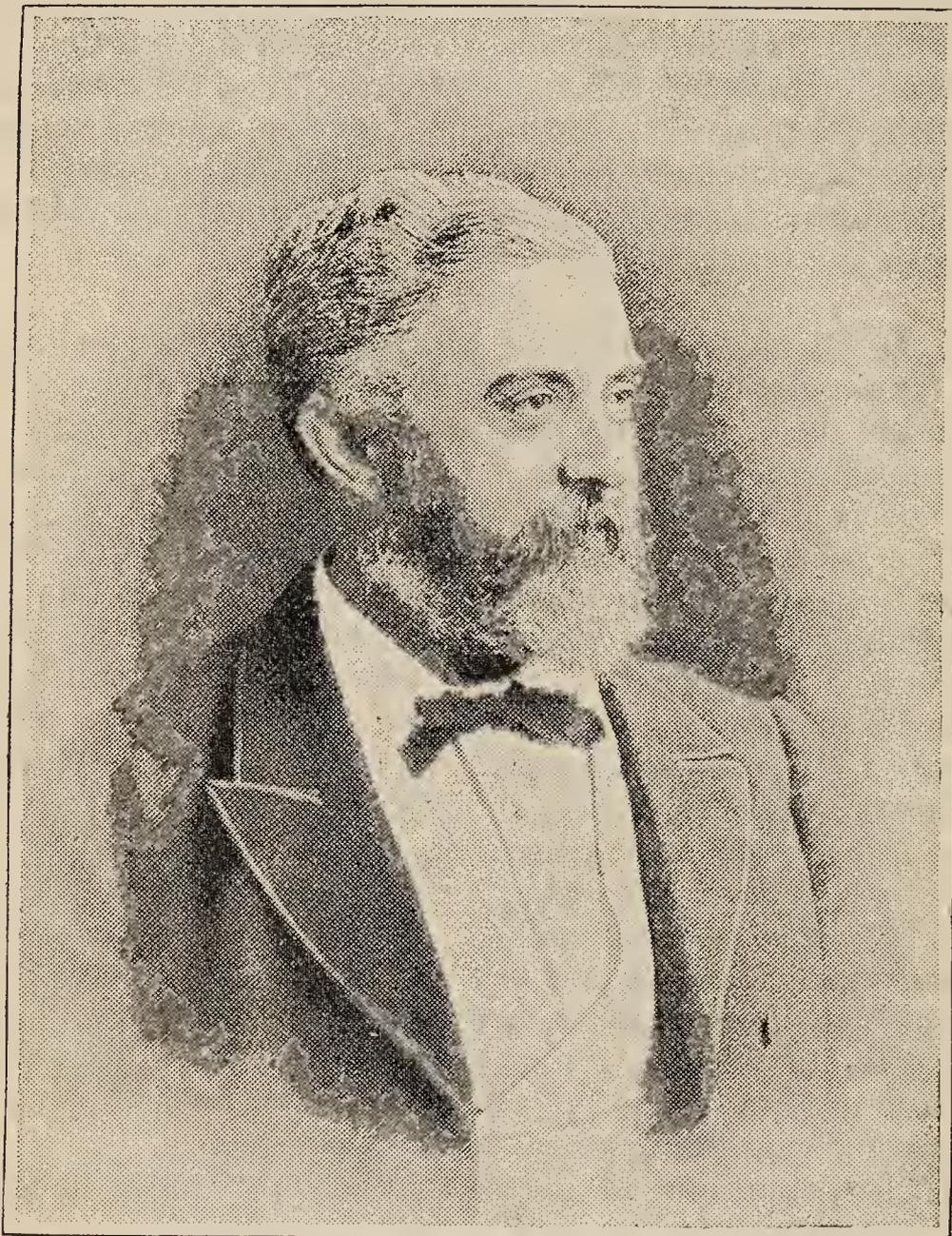
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Those members who may be desirous of leaving their mark in the world, now have an excellent opportunity of doing so. Arrangements have been made at the Institute for taking the impressions of the finger tips, after the plan suggested by Mr. Francis Galton. At the close of the lecture on the 4th ult., quite a number of "marks" were taken.

G. B. COLEMAN.

PHRENOLOGICAL SKETCH OF MR. J. COATES
(GLASGOW).

THIS gentleman is in love with himself; his consciousness of his own individuality is very great. He desires to be a leader; and if others doubt his assertions, he doubts their judgment. He is very positive in his will; independent in his spirit; and wishes everything he says to go



MR. COATES.

as authority. He has good command of his powers; has a penetrating mind; is very particular how everything is done, but finds it very difficult to get any one to do as he wishes. As a speaker, he would have a free delivery, delight to hear himself talk, always have plenty to say, and express himself in such a way as to be understood. If he were a lawyer, and had taken his stand to make a speech, and found that he had left his papers at home—four miles away—he could continue

to speak, without hesitancy, until his messenger returned with them. He is a gifted man, and is never more in his element than when he is on the platform speaking, and others listening. He is demonstrative in speech and action. He is witty, very apt in comparisons and illustrations, and makes the most out of his case or circumstances. He has a sensitive mind, very intuitive perceptions, and arrives at a point very quickly. He feels and acts like a master, and must be characterized for carrying his dignity with him all the time. He does not let himself down, but wishes to exert a monopolizing influence for the time being. He has many anecdotes to relate, and he is frequently the hero in the story. He is youthful, rather plausible, and suits himself to the occasion, if he does not have to lower his dignity. Where he is a favourite he is a great one, for if persons take to him—with all his peculiarities—they value him more than as though he had not so distinct an individuality. He will have special friends, and perhaps positive enemies, for he is not an ordinary man; he takes strong ground, and speaks his mind without much restraint.

PHRENOLOGICAL SKETCH OF MRS. COATES.

THIS lady has a well-balanced organization. She never trifles; does not often change her opinions. She is satisfied to think for herself; she is very persevering, and decidedly ambitious in an intellectual way. Her sympathies are active, and her feelings of devotion and worship are not called out under ordinary circumstances. She is decidedly watchful, rather conservative, and very mindful of character and reputation. She has a great sense of propriety, style, and taste. She has an available intellect, and a truly scientific or literary turn of mind. She has a superior memory of all that she sees and does, and is well qualified to entertain company, and possesses a great fund of knowledge. It would be difficult for others to tell her the news, for she would have found it out before they did. She has a superior gift as a doctor or reader of character, or could succeed in a business or profession that required distinct knowledge. She is well posted in subjects that she never studied, for somehow she finds out almost everything. She has a superior memory; she is naturally neat and orderly; has a place for everything; and has no time, money, or strength to waste, but knows how to make the best use of all available power to carry out her projects. Ambition, will-power, observation, practical

talent, intuitive perception, forethought, and sympathy are her strongest qualities of mind. She is about as pious on Saturday as on Sunday, for her religion is more a matter of principle than of ceremony.

Hygienic and Home Department.

“ART IN DRESS.”

MISS JESSIE A. FOWLER, in her lecture on “Art in Dress,” at the Fowler Institute, Ludgate Circus, on the 13th October, treated her subject not only from the artistic, but also from the hygienic point of view ; and, considering its importance, we hope to have an early opportunity of hearing her discourse on the same subject in larger premises to the general public. A more interested or attentive audience than was present upon this occasion, she could neither expect nor desire. A glance at any of the large drapery establishments just now will show the enormous strides made by the propagandists of hygienic clothing. The day has happily gone by for ever when its promoters were regarded as a set of faddists, who were either to be laughed or sneered out of their peculiar notions.

As Miss Fowler stood upon the dais fronting her audience, she presented in dress and aspect the warmest advocacy of her cause, in her healthy and bright appearance, and in the extremely becoming and elegant dress she wore. As our readers may feel a little curious, I give a slight description. It was a Princess gown of soft chestnut-coloured Indian cashmere, with a full front, gauged at the neck, of yellowish cream, sprigged all over with small floral sprays of chestnut colour ; the collar and cuffs were turned over with a pale tint, and the flowing lines of this most artistic gown set off the graceful figure of its wearer to the best advantage. One end of the lecture-room was filled with a number of beautiful specimens of underwear, including corsets, combinations, knickerbockers, and the now famous divided skirt, also some beautifully-made frocks made on Princess principles, as by this means it is found more easy to distribute the weight of the clothing over the figure. All of these samples of artistic and hygienic clothing went far to prove that the stigma of dowdiness and unbecomingness no longer attaches to this highest form of dress.

The weather, boisterous and wet during the course of the lecture, gave extra point to Miss Fowler's remarks on the

value of all-wool underclothing in a climate so variable and uncertain in its moods as ours, especially in the winters and springs which we endure yearly. It is by no means the feminine devotee to the Moloch of Fashion who bars the way to the general adoption of this perfect manner of clothing our bodies, male sneerers are almost as great sinners in this respect; but let Miss Fowler and her devoted band of helpers get a fair opportunity of convincing the sterner sex of the enormous gain to themselves, from the improved health and appearance of their wives and little ones, to bring conviction to the most obstinate male opponent. No doubt the evils of tight-lacing have in a measure endured so long from the too evident preference shown by men for waists out of all proportion to the hips and shoulders. Let them deny this if they can. As long as women of all ages accept blindly the dictates of Fashion, that the style of their dresses is of more importance than either its beauty or fitness to their individuality, so long will women remain thoroughly ill-dressed. Far from approving the mannishness affected in her attire by the modern girl of the period, the lecturer deprecated extremely the nonsensical fashion of imitating men, with broad shirt-fronts without a waistcoat, thus exposing the most vital organs of the chest and diaphragm to all the changes of a proverbially treacherous climate. If such an imitation is desirable for women at all, then don the shirt, but do not forget a warm vest beneath it, and a warmer waistcoat above it; and if, in addition, the sensible boots worn by men, with their thick soles, wide heels, and roomy toes, no very feasible objection could be raised. Only let ladies engaged in professional or public work remember that such a get-up is calculated to justify the prejudices still entertained by many men that a public life of any sort, however useful and honourable, unsexes women, and gives them a distaste for the pretty feminine raiment in which all women are seen at their best. Of the hardening system upon the tender bodies of babies and little children, I think at this time of day there can be but one opinion, which is now generally shown by mothers in more uniformly distributing the clothing all over the little bodies, so that an equal temperature is maintained, and the child's health and temper both benefitted. Any ladies desiring to see most of the garments on view for the purpose of the lecture, can do so either by calling at H. Wilson and Co.'s Depôt for Hygienic Clothing, 135, Regent-street, or writing for prospectus, as it would be impossible to give detailed descriptions in the limits of this article. Might we venture to suggest just one little improvement, in the event of a more public lecture, that the gruesome

adjuncts of a real skeleton and human bones might be dispensed with, and painted diagrams used instead? We feel sure that they would be found equally efficacious, and not so trying to the nerves of an audience composed chiefly of ladies, young and old. (As the writer of the above is an anatomical medallist, there can be no suspicion of sentimental mawkishness in this suggestion.) Miss Fowler received valuable assistance in the supply of specimens of beautifully made underclothing and dresses, for the purposes of her lecture, from Miss Wilson, Miss Leech, Miss Russell, and Nurse Webster; and personally we wish the movement all the success it so well merits, and hope that Miss Fowler and the other members of the Healthy and Artistic Dress Union have lighted a torch in England which will not easily be put out. —*The Lady*.

ALCOHOLIC HEREDITY.—Professor Krofft Ebing gives this genesis of alcoholic heredity: “In the first generation, depravity and tendency to alcoholic excess; in the second, insanity, drink mania, and paralysis; in the third, hypochondria and tendency to murder; and in the fourth, imbecility and extinction of family.” If the family does not become extinct there comes to its surviving members a loathing of drink, the evil heredity thus exhausting itself with the fourth generation.

THE CARE OF THE FEET.—There are various reasons why people suffer from the different ailments of the feet. We know very well that the shoe of fashion is not the best one for comfort. People are prone to wear shoes that are too tight for them; and yet very loose ones are quite uncomfortable. A shoe should fit as tight as a stocking. But it should be tight around the ankle, across the instep, and around the arch of the foot and heel. It should, however, have a loose upper and a large sole. Bunions, corns, corrugated nails, and other troubles of the feet can generally be avoided by a few common-sense cautions. Do all that is necessary to keep the feet warm, in the way of good fitting shoes, woollen stockings, and exercise. Feet that perspire should be washed every night, and the stockings changed daily. Most feet can be kept healthy and soft by soaking them in hot water before retiring, and using ammonia and soap freely; then they should be rubbed briskly with a rough towel, and a little glycerine spread over them.

VOCAL MUSIC AND CONSUMPTION.—A suggestive paper was read lately before an American medical society by Dr. Busey. He stated as a well-known fact that those nations which were given to the cultivation of vocal music were strong, vigorous races, with broad, expansive chests. If an hour was daily devoted in our public schools to the development of vocal music there would not be the sad

spectacle of the drooping, withered, hollow-chested, round-shouldered children. There was too great a tendency to sacrifice physical health upon the altar of learning. Vocal music was a gymnastic exercise of the lungs by the development of the lung-tissue itself. The lungs in improved breeds of cattle, which naturally took little exercise and were domiciled much of the time, were considerably reduced in size when compared with those of animals running at liberty; and so it was with the human race, which led inactive lives from civilization. Phthisis generally began at the apices of the lungs, because these parts were more inactive, and because the bronchial tubes were so arranged that they carried the inspired air with greater facility to the bases than to the apices. During inactivity a person would ordinarily breathe about 480 cubic inches of air in a minute. If he walked at the rate of six miles an hour he would breathe 3,260 cubic inches. In singing this increased more than in walking, as to sing well required all the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.

PHRENOLOGICAL SKETCH OF MR. HATFIELD.
(ASSOCIATE OF THE FOWLER INSTITUTE).

THIS gentleman has a mind for action. He is thoroughly in earnest, and puts his whole soul into what he does. He is decidedly executive and even forcible; he handles an opponent as though he would like to show him up. He cannot work in a quiet easy way; he is always at the butt-end of the load, and is a kind of a leader for his cause. He is in his element when he has an opponent; scarcely anything will stimulate him more than to know he has an opponent before him; he delights to argue; develop new thoughts and principles. He wants to say something new every time; and he is quite fruitful in his thoughts. He has much to say, and is forcible in his style of saying it. He possesses a clear intellect, and is original, he, at the same time, possesses a high order of imagination. He paints extravagant pictures, and magnifies his cause. He is rather witty, but more inclined to be sarcastic. He is more forcible than copious in his style of talking. He is not defective in perceptive power, but he generally sees with an object in view, and remembers what he sees. He is a man of method, has good practical judgment, is somewhat imitative in his style. He can be bland and youthful if necessary, and knows how to adapt himself to the company he is in. He is somewhat of an iconoclast. He is not so thorough as apt in his style of

doing things, but he does his work well. He will overdo rather than not do enough. All things considered he is rather a remarkable man—strong in will, high in ambition, specially energetic, and very much given to reasoning, inventing, and



MR. HATFIELD.

predicting new thoughts. He is a strong partizan, and would make a broad politician or party man. As a delineator of character, he would bring out all points, and make them fully as striking as they really were. He is not satisfied unless he has created a great sensation on the line where he labours.

“LIFE must be measured by thought and action, not by time.”

—Lubbock.

PHRENOLOGICAL SKETCH OF MR. A. HUBERT
(HARROGATE).

MR. A. HUBERT has a brain that indicates a distinct character. He has a fair degree of energy, industry, and economy. He is highly ambitious, mindful of appearances, self-reliant, and disposed to act for himself and take the responsibility. He is social, companionable, and capable of making friends; he succeeds in any cause where he has to adapt himself to the public. His mind acts with more than common accuracy; he is even very precise and particular



MR. A. HUBERT.

about what he does and how he does it. He has a practical, mechanical, scientific, analogical, and intuitive state of mind. He also has good powers of observation, and is much interested in all kinds of experiments, and specially good at gathering facts with great clearness. He soon becomes acquainted with what is going on around him. He learns much from experience, is quick to take a hint, to notice mistakes, and is prompt to rectify any faults of his own. He is orderly, methodical, and careful to do his work well. He has a good eye for proportions, can measure by the eye, judge of distances and localities correctly. He has fair conversational

talent, and expresses himself with precision. He has a good general memory of all that he sees and does, and is good at drawing inferences. The central portion of his head, from the root of the nose to the occipital brain, is large, and it gives him the important powers of his mind. He is sympathetic, respectful, and knows his place, and is prepared to look up to superiors. He is quite firm in his opinions, rather tenacious, and slow to change. He has so much self-esteem that it makes him feel his importance. He has a fair degree of prudence, forethought, and secretiveness. He is very sensitive about his character, and mindful of his appearance. He can enjoy fun if others make it, but he is not so well qualified to make it himself.

Children's Column.

P. T. BARNUM'S PHILOSOPHY OF CHILDHOOD :

Childish laughter is the echo of heavenly music.

—:O:—

The noblest art is that of making others happy.

—:O:—

Amusement to children is like rain to flowers.

—:O:—

Wholesome recreation conquers evil thoughts.

—:O:—

If you would be as happy as a child, please one.

—:O:—

Childish wonder is the first step in human wisdom.

—:O:—

Innocent amusement transforms tears into rainbows.

—:O:—

To best please a child is the highest triumph of philosophy.

—:O:—

I would rather be called the children's friend than the world's king.

—:O:—

He that makes knowledge most attractive to the young, is the king of sages.

A CAT MOURNS FOR A CHILD.—A strange story, in which a cat is a pathetic character, has come to light in Paoli, Ga. A little boy of that village owned a cat that was a great pet in the family. But the cat would have nothing to do with any one except the boy. The latter died, and for two weeks the cat would come as usual every morning to the door, and going into the room would cry mournfully, and walk over the child's bed hunting for its lost friend. Finally the cat disappeared, only returning occasionally. At last one of the child's

sisters saw the cat in the graveyard, where it remains, only returning occasionally for food. It keeps guard at the boy's grave, and can be heard at night crying pitifully. Cannot the brains of animals teach us many proofs of phrenology? See Dr. Ferrier on "Functions of the brain."

A DEAF CAT IN HIGH LIFE.—Snowball is one of the best known Angoras in the city, and although she is but four years of age she is the mother of seventeen kittens, every one of which has been of spotless whiteness. She weighs twelve pounds, and has a tail that waves in the air like an immense banner. Her eyes are sky blue, and she never heard a sound in her life. She has been thoroughly trained and knows many very amusing tricks, among which is that of fetching the ball when thrown by her mistress. She performs this with all the fidelity of a well-trained retriever. Her marked peculiarities are her grace and gentleness, and her habit of playing with shadows. A moving object has no attractions for her, but if a shadow is thrown upon the floor and moved rapidly about Snowball will chase it for hours with a grace and elegance of movement that would eclipse those of the finest ladies in the land. Notwithstanding her fastidiousness in other respects Snowball's appetite is gross, and she prefers raw liver to any other article of diet.

SEEING THE POINT.—A boy returned from school one day with a report that his scholarship had fallen below the usual average. "Well," said his father, "you've fallen behind this month, have you?" "Yes, sir." "How did that happen?" "Don't know, sir." The father knew if his son did not. He had observed a number of cheap novels scattered about the house; but he had not thought it worth while to say anything until a fitting opportunity should offer itself. A basket of apples stood upon the floor, and he said: "Empty those apples and take the basket and bring it to me half full of chips." Suspecting nothing the son obeyed. "And now," he continued, "put those apples back into the basket." When half the apples were replaced, the son said: "Father, they roll off. I can't put in any more." "Put them in, I tell you." "But, father, I can't put them in." "Put them in! No; of course you can't put them in. Do you expect to fill a basket half full of chips, and then fill it with apples. You said you didn't know why you fell behind at school, and I will tell you. Your mind is like that basket. It will not hold more than so much. And here you have been the past month filling it up with dirt—cheap novels!" The boy turned on his heel and whistled, and said, "Whew! I see the point." Not a cheap novel has been seen in the house from that day to this.

AN Italian physiologist of repute, named Mosso, has demonstrated by experiment that thinking causes a rush of blood to the brain, which varies with the nature of the thought.

PHRENOLOGICAL SKETCH OF MADAME
PATENALL (HASTINGS).

THIS lady has a compact organization; is characterized for a thoughtful cast of mind. She is disposed to think for herself, and has much more intuitive talent than she shows under ordinary circumstances. Her thinking and reasoning brain is larger in proportion than her perceptive brain, hence she is



MADAME PATENALL.

known for her powers to instruct, to exercise judgment, to give directions to others, to manage and plan, than she is for her quick perceptions and prompt observation. She has an excellent moral brain, all of the moral faculties are fully represented. Conscientiousness joined to firmness and cautiousness have a powerful regulating influence on her

mind ; and veneration, benevolence, and spirituality, being fully represented, give pliability to her character, blandness to her manner, and great susceptibility of mind. She at once enters into the study of the mind of those with whom she is, and knows how to be interested in others. She manifests considerable forethought and prudence ; she looks ahead, and regulates herself according to the conditions that surround her. Her language is fully developed, which enables her to tell what she knows ; that, joined to her faculties for composition, must help her to write, teach, preach, and become interested in public affairs. She has a full share of force, but not so much as to endanger property, or the life of other people, for she is not at all thoughtless in her mode of doing things ; but with larger perceptive faculties she would be able to apply herself more easily to outlines, and learning the science of a subject, as well as the philosophy of it. She has not a very selfish cast of mind ; it is easy for her to live and do for others. She is social, but not so broad in the use of her social mind as she is to stick closely to her affections. Where she is a friend, she is a lasting one, and does not show any more attachment than she really has. Her gifts arise from her ability to think the matter up, to act from her judgment rather than from her quick perceptions ; hence, she is more sound and reliable than expert. She is good to give advice, and direct others what to do. She is never at a loss for thoughts and plans. She is not forward or specially ambitious to direct attention, but she is very sensitive about her character and reputation. Her real gifts are—first, her power to think, and ability to express herself ; prudence, and forethought to regulate her conduct ; integrity, and presence of mind in times of excitement ; and her strong, domestic, affectionate nature. She would appear to a better advantage if she had more base to the brain, more force of mind, and less prudence and restraint. As it is, her influences are on the right side, and she is a safe leader. She is a great student ; particularly interested in mental philosophy, and all that illustrates mind and character.

THE following is condensed from a boy's essay on total abstinence : —“ I abstain from alcoholic drinks because, if I would excel as a cricketer, Grace says, ‘ abstain ;’ as a walker, Weston says, ‘ abstain ;’ as an oarsman, Hanlon says, ‘ abstain ;’ as a swimmer, Webb says, ‘ abstain ;’ as an orator, Bright says, ‘ abstain ;’ as a missionary, Livingstone says, ‘ abstain ;’ as a doctor, Richardson says, ‘ abstain ;’ as a preacher, Farrar says, ‘ abstain.’ Asylums, prisons, and work-houses repeat the cry, ‘ abstain ! ’ ” That boy will get to “ the top.”

CONFERENCE OF MEDICALS AT SUNDERLAND. HYPNOTIC EXPERIMENTS BY PROFESSOR N. MORGAN.

“FEW subjects have probably caused so much controversy as Mesmerism. During the last few years there has certainly been a disposition in medical quarters to give it a more candid examination than it has hitherto received, and the late researches by physicians in Paris, Germany, and other centres of science abroad, have accelerated the impulse of enquiry, both in England and America.

Mr. Nicholas Morgan has been giving some practical proofs of the effects of Mesmerism, or Hypnotism, before an audience in this town, composed of medical men, ministers of various sects, town councillors, and members of the Press. Dr. Morgan, J.P., Senior Visiting Surgeon at the Sunderland Infirmary, occupied the chair.

In opening the meeting, he said he took it that they as medical men had perfectly open minds on this subject. They knew what disadvantages attended the use of chloroform, and he had often thought if Hypnotism really could be used in the place of chloroform it would be an immense advantage to the medical profession.

The lecturer then gave some facts in connection with the early history of Mesmerism, and referred to the labours of Dr. Elliotson; and mentioned that an arm was amputated in a London hospital. Dr. Elliotson mesmerised the patient, who did not feel one throb of pain. Dr. Elliotson started a Mesmeric infirmary.

Professor Morgan then produced four sensitive subjects whom he had operated upon in the past, and Drs. Scurfield, Percy Blumer, and Waterston, also ascended the platform to watch the proceedings. Dr. Morgan examined the subjects previous to the operation, and took note of the pulses. When under the Hypnotic influence two pulses rose from 84 to 104, and from 88 to 112, and the pulse of one was reduced by a pass from 112 to 84.

Dr. Morgan declared the pupils of the eyes to be insensible, and in one case a gold pin was pushed through the hand of a subject, painlessly, and without his moving. Another was stretched between the back of two chairs, supported only by the feet and the head, and the operator stood on the middle of the body while the patient sang a song; and, at the command of Mr. Morgan, his body bent down at the hips and rose again several times; then Mr. Morgan jumped off, the body remaining as stiff as a post.

At the conclusion of the demonstrations, the Chairman said that there was a great deal that they could not understand. He confessed he could not understand the phenomena that he had witnessed. He was still in the position that he was at the commencement. Referring to the operation of stiffening the body and standing on it while stretched across the chairs, the Chairman said that it was truly wonderful. If Hypnotism were true, he only wished it could be made practically useful in the alleviation of pain and suffering, which he had not seen it do yet.—Mr. N. Morgan said if the demonstration had only stimulated thought he would think that it had not been in vain.”

The above notice is quoted from a Sunderland paper.

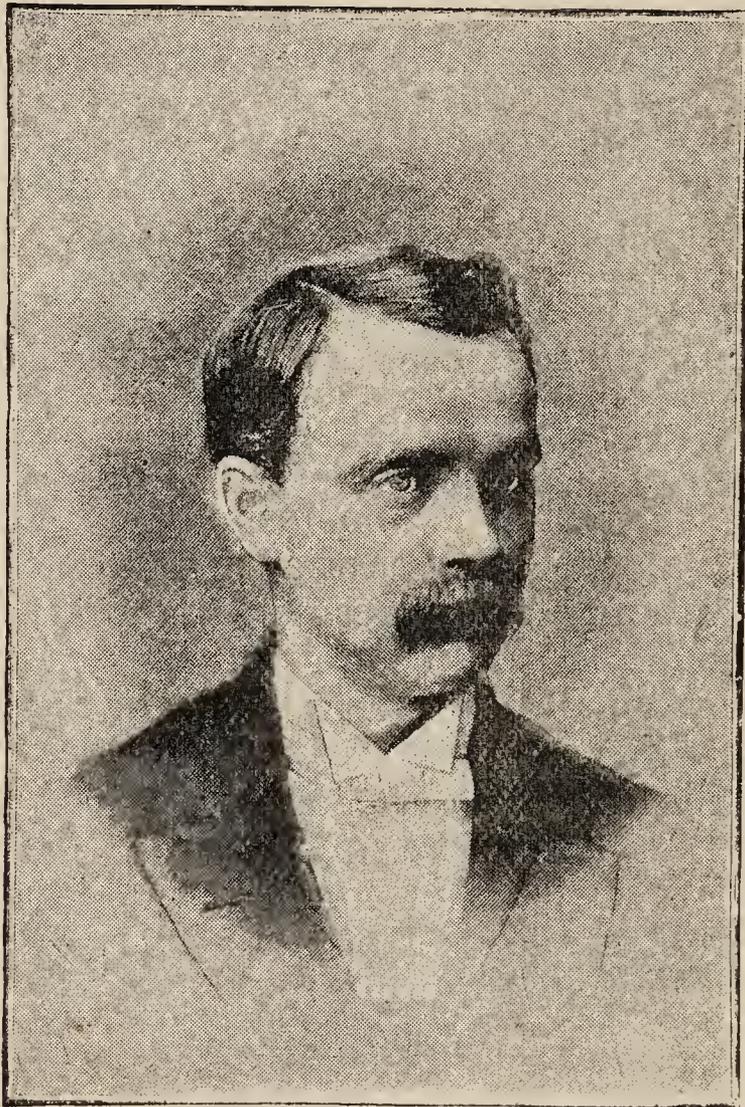
It is to be regretted that Mesmeric performances are not as a class conducted on a more scientific basis. We think it a great waste of time for powerful Mesmerists to prove their expertness by first Hypnotising and then standing upon patients to prove the solidity of their limbs. Such feats may please the *canaille*, but for the conversion of members of the medical profession to the helpful effects of Mesmerism, nothing short of operations performed on hospital or other patients can really show the amount of good that is aimed at. The day for laughable entertainment by mesmeric power has passed by, when willing subjects have been given candles to eat, or pins have been inserted into the arm, hand, or forehead without loss of blood. Perhaps we are not anticipating too much if we express the hope that the day is not far distant when Mr. Nicholas Morgan will be able to help the medical men of Sunderland (if he cannot induce them to start a special infirmary) for the purpose of treating patients requiring surgical aid without chloroform.

ED. P. M.

A SUPPLEMENT Sheet Almanac, illustrated with portraits of well-known persons, is presented gratis with every copy of this issue. Customers are requested to ask for it if not enclosed. The present and twelfth volume of the Magazine concludes with this issue. The January number commences a new volume. With it new features will be introduced, lessons on practical phrenology will be given monthly, and prizes will be offered to subscribers. The subscription fee has lately been reduced to six shillings for 12 months, or three shillings for six months, post free (foreign countries postage three shillings per year extra). Now is a good time to subscribe for 1892, and to get friends to do so. There are many people in the country very much interested in phrenology, who perhaps do not know of this Magazine; by making it known to them, and inviting them to subscribe, the interest of the science will be greatly spread.

PHRENOLOGICAL SKETCH OF MR. G. H. J. DUTTON
(SKEGNESS).

THIS gentleman could not very well devote himself to every-day life and labour; from a child he has had a profession in his mind, but it is going to be difficult for him to come up to his ambition and to be all that he wants to be. He is specially inclined to study, teach, and impart knowledge. He is naturally an educationalist; and if



MR. G. H. J. DUTTON.

a public speaker or writer, his forte is to give information, so that persons can learn easily and successfully. He is quite a thinker; has many ideas of his own, and is quick to catch ideas as they come into public notice. He has a fair talent for talking—could succeed as a linguist. He is also quite original in the study of language and grammar. He has rather more of the philosophical than scientific turn of mind. His moral brain is favourably developed; his head is high. If he is anxious to gain reputation and exert an influence, he will not make a mistake, for he has moral power enough to hold his mind to elevated principles. He could not sacrifice truth

to gain approbation—in fact he will sacrifice a great many worldly things to vindicate truth, and to show his appreciation of moral gifts. He is comparatively prudent, cautious, rather watchful, and circumspect ; he is respectful, has regard for age and superiority ; he is not positive or regardless of the claims of others, but presents his own views with the idea of doing good, rather than to show himself off. He may fail sometimes in details, because he is rather absent-minded, and gives his greatest thought and strength to new subjects and to the development of first principles. He has not much animal push. His influence over others is more purely spiritual than the result of physical courage or force of mind. He is candid and open-hearted. He is generally in earnest, but can enjoy fun and make some occasionally. He has more mental than physical power, and should be a professor rather than a common labourer.

PHRENOLOGICAL SKETCH OF MR. STOOKE (BRISTOL).

THIS gentleman has availability of organization. He shows what he is without much restraint ; but delights to tell what he knows. He is in his element when he is communicating to others. He does not care so much to be on the battle-field, exerting that kind of influence that is necessary there, but is quite anxious to be a general somewhere. He accumulates knowledge so easily that it is almost a matter of necessity that he talks continuously in order to work off his knowledge in society. He has a scientific turn of mind ; he delights very much in facts, occasionally in fiction, for he has rather strong imagination, and some love for poetry. If he followed his strongest inclinations he would have travelled, gone round the world several times, so as to actually come in contact with human nature and to gain many facts. He can describe places with great accuracy, and can illustrate any of his ideas with anecdotes of his own. He appears to have a love for music, and pays considerable attention to the voices of people. He is punctual in his engagements, unless he happens to get too many on hand, and cannot meet them all. His mind is quite distinct and individual ; he does not imitate anybody else in his style. He is direct, critical, analogical, intuitive, and sympathetic ; but so like himself that he is rather odd, and does not care to imitate anyone. In matters of opinion he adheres tenaciously to his own ideas, and does not stop to quote anybody else to back up his opinions.

LONDON,

December, 1891.

CAN A PERSON BE SANE ON ONE SIDE OF THE BRAIN AND INSANE ON THE OTHER?—The Pathological Anatomy of Insanity is an exceedingly interesting subject. According to recent researches by Dr. Luys, in Paris, certain alterations have taken place in the brains of his patients, who for many years had been in an excited condition, such as the hypertrophy of certain special regions of the paracentral lobules. The paracentral lobules are, as is well known, the point of confluence of the psycho-motor convolutions of the cortex, and one of the special regions where the psycho-motor innervations are specially accumulated. This hypertrophy, therefore, indicates a focus of continued excitation, absorbing to itself the vitality of the other cerebral regions which are found more or less notably atrophied. In the extreme cases of excitement with dementia, in which condition was observed, he claims the subjects are completely absorbed in the hallucination or delusion connected with this hypertrophied region of the brain. The hypertrophy is usually symmetrical in the two hemispheres, but he presented the brain of a patient in whom there was a visceral hallucination that she was inhabited by a tape-worm, which completely possessed her, that it became almost her sole idea. She dwelt constantly upon the coming and going of this parasite in her internal organs. Aside from this idea, when she could be induced to speak of other matters, she was perfectly lucid in her mind. The brain of this patient, so we learn, exhibited very marked hypertrophy of the paracentral lobe in one hemisphere; that of the other remaining perfectly normal. M. Luys explains, by this anatomical arrangement, the patient's clearness of mind co-existing with the delusion—she was sane with one hemisphere of her brain and irrational with the other.

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DR. GARNER has been drawing considerable public attention to his recent experiments with monkeys, and has suggested the possibility of understanding the language of the Simian tongue. In the *New Review* for November he concludes an account of his researches. His later experiments have somewhat modified the details of his first theories. After giving close attention to the sounds of the Chimpanzee, which he had daily visited in Cincinnati, he found they understood one of the words he used when he revisited them

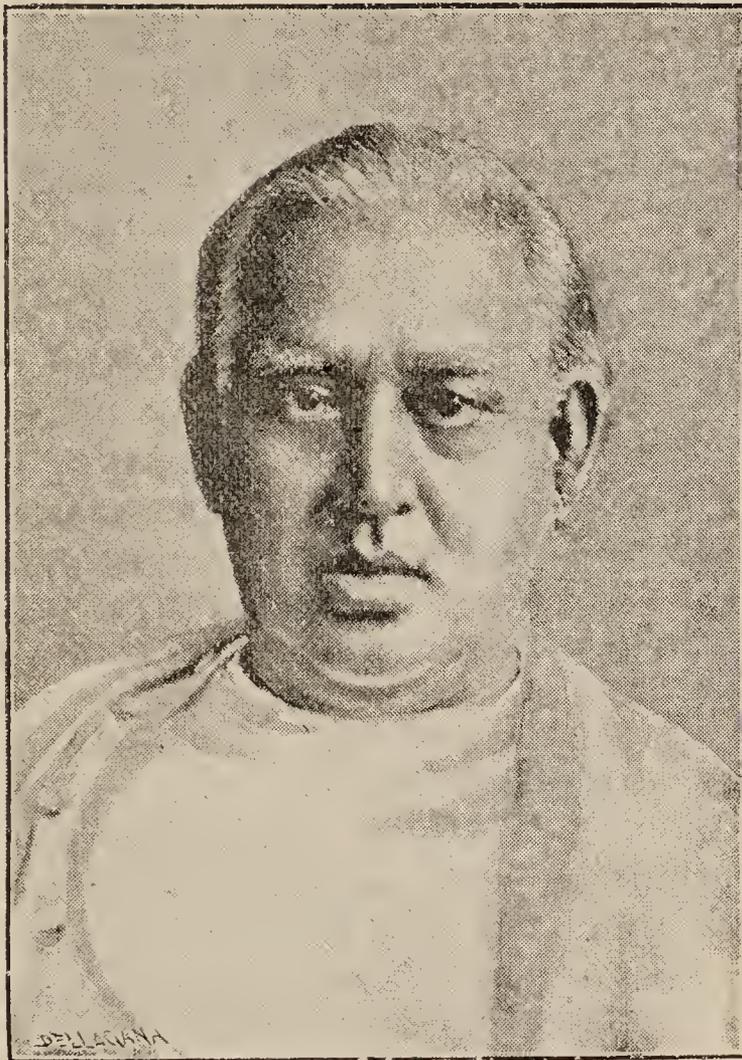
a year later. He says, "I am quite sure, from my studies of their vocal character in the graphophone, and by listening to them in their cage, if I could be more intimately associated with them, I could soon master their language." The female monkey went to him whenever he uttered a sound of theirs, which nearly resembles h-ou-wh, very slightly nasal, and so far the only trace of a nasal intonation in the vocal products of any of the lower animals which he has ever detected. He considers the Capuchin monkey, and all the words they speak, so far as he has ever been able to hear, can be reproduced by human vocal organs. He is now trying to arrange for a trip to interior Africa to visit the troglodytes in their native wilds, where he will be unmolested by keepers, and where the Simian tribe will not be surrounded by glass cases, or confined in artificial cages. Mr. Edison has kindly agreed to aid him in the phonograph feature—the only thing which will make these studies possible. He made a phonograph record of the great Anubis baboon in the Philadelphia garden, and compared it with other certain characters in the quality of vocal sounds, so as to determine whether there is not some unit of linguistic measure by which we can arrive at some standard in any given type. He is further of opinion that each cranial model has a certain vocal type, which is as much a conformation as are the cerebral hemispheres—that the vocal powers are measured by the gnathic index; that mind and voice are commensurate; and that as the craniofacial angles widen, the voice loses in quality and flexibility. In man, of course, he finds the highest type of vocalization, and just as he descends in the cranial scale, the vocal type degrades into sounds less flexible, less musical, and less capable. The Simian idea seems expressed in a single sound like wh-oo-w, the sound described before, as nearly as Dr. Garner can put it into letters. The sounds can be easily detected in a phonograph, because they can be repeated and compared, but it is a very difficult thing to get a monkey to record his notes in a phonograph. By reversing the cylinder on the graphophone sounds are perfectly analysed. The sound oo, as in shoot, is the dominant phonic in the speech of both man and ape, while consonants are generally elided or converted into some other form, and pure vocals, as they are called, are converted into words of three syllables, all of which he hopes to be able to describe in the near future. Dr. Garner concludes his second article by condensing his theories into the following brief texts: (1) The Simian words are ambiguous monotonous. (2) Speech is materialised thought, and thoughts are factors of consciousness. (3) Signs were the first form of speech,

and sounds are evolved from them. (4) All animals are capable of expressing as much as they can think. (5) All animals are capable of emotions, and all emotions capable of expression. (6) All voluntary sounds are the products of thoughts, and if they convey a meaning to another they perform the functions of human speech. (7) Consciousness is the differentiation of thoughts; thoughts formulate mental words, and they develop into sounds as exponents. (8) Voluntary sounds are the manifestation of thought, as matter is force; vocal power is commensurate with use, and this by the needs of the mind. (10) The vocal unit is commensurate with the unit of methodic cerebration. (11) The arc of vocalisation will substand the cranio-facial angle. (12) Words are the body of which thoughts are the soul.

PHRENOLOGICAL SKETCH OF MR. R. B. DOSS (CALCUTTA).

THIS likeness indicates a capacity to enjoy and take life as easily and uniformly as possible. He is not subject to many extremes. He works when he must, and enjoys himself most of the time. He has rather too much vitality for great action, and his nervous temperament is none too strong, hence he requires a little opposition to call him out. When he is fairly waked up to a subject, he exhibits considerable force and energy. He is not so nervous and active as to weary himself about things ahead. He has a predominance of the thinking intellect, hence has many thoughts of his own. He has good conversational talent, and when animated, can make an excellent speech; in fact, he has the capacity for an orator, and only needs favourable excitement to enable him to excel. His verbal memory is excellent, but he is not particularly good in memory of outlines; but his brain is so healthy, that he generally succeeds in carrying knowledge in his mind for a long time. He is not an imitator of others, but acts himself out in his own way, and does not take so much notice of how other people act. His musical talent is not so great as his fondness for it, for he delights to hear good music. He should be characterised for frankness, candour, and openness of mind. He shows out his real life in his character; he is not hidden and mysterious in his ways, nor is he one of the cunning, artful, or adroit kind. If educated as a lawyer, he could make a good judge; if a business man, he would succeed where conversation was needed, and would not make a bad auctioneer; but wherever

he is he shows a great deal of intuition, knowledge of facts, and is a good judge of character. He has a happy faculty of working easy, and making life a pleasure rather than a burden. He is naturally confiding, and treats others as if they were just as honest as himself. He should cultivate more cautiousness and circumspection, for he lays himself open to be taken advantage of by selfish people. He can work with his brain better than with his body. He should be a professional man, or one to oversee and have the charge of business; or be engaged in entertaining others by



MR. R. B. DOSS.

what he knows. He should be noted intellectually for his conversational talent; his intuitions and discernment of truth and human nature; and his broad sympathies for others.

Mr. Doss is a Hindoo and merchant by caste, respectably connected with one of the first families, on his mother's side. He early put his head and heart into his scholastic studies, but not before he was one day severely thrashed by his governor. Since then, he invariably has been found with his books, and never has he idled away his time. The latter portion of his education was in the old Hindu College, the best college available to the Hindoo youths at the time. In

his younger days he showed great mental powers, and when he left the college the Head Master gave him a special certificate for his intelligent progress. He took the profession of a book-keeper, and did well in this line. He was employed in several mercantile agencies, banking firms, &c.; and when he left their services he received high credentials from his masters. Lastly, he served his Empress and the country for more than seventeen years with credit to himself. His health at this age having failed, he availed himself of the last resort left him, and became a Government pensioner. Though otherwise engaged, his love for the science of phrenology never grew less. All the time he could find at his command he used to employ in its culture, by study and observations in Nature, to convince himself thoroughly of its truth and the rock on which it was founded. He took a few students in hand and trained them. He tried his best to establish a society, and found many ready to join him; but they, being mere students of schools and colleges, had not the means to afford pecuniary aid in such a cause. At one time, upwards of eighty youths registered their names to be members. The Calcutta Phrenological Society, under the presidentship of the late lamented Mr. Collycoomar Doss, was established on the 7th June, 1845, which he joined from the commencement, and he was elected by the members as an office bearer, and held the post of treasurer and librarian. In order to educate his own countrymen in the science of phrenology, he translated a phrenological work into the Bengallee language, and published it in pamphlet form in 1850. This created considerable comment in Calcutta. He contributed articles in phrenological journals and lectured on the subject. The people of India being generally apathetic to the study of any science for the sake of knowledge, phrenology has shared the same fate along with others, and therefore he was not able to do as much in its cause as he desired. He has now an office in Calcutta containing a library of valuable works on phrenology, etc., and a small museum, with a collection of busts, casts, masks, skulls, etc. He gives phrenological lectures occasionally, and makes delineations of character. The "Indian Mirror," and the "Hindoo Patriot," have both spoken in high terms of Mr. Doss as a practical phrenologist. In his practice he had many opportunities of coming in contact with all classes of people—Indian, European, Chinese, American, etc., etc.—holding various professions, such as judges, barristers-at-law, attorneys-at-law, engineers, merchants, clergymen, editors, military officers, civil servants, landholders, zemindars, and others, who speak very highly of

him. Even members of the Viceroys' and Lieutenant-Governors' Legislative Councils consulted him. He is held in high esteem by those who can appreciate his merits.

What Phrenologists are Doing.

[We shall be pleased to receive for insertion under this heading, reports of lectures, meetings, or engagements of phrenologists. In sending notices correspondents will oblige by enclosing their communications in an envelope and addressing them to the office of publication of the PHRENOLOGICAL MAGAZINE. Newspaper cuttings pasted on post-cards are an infringement of postal rules and subject to a fine.]

MR. G. H. J. DUTTON has been doing good service and winning many testimonials at Newark, during a Bazaar held in aid of the Wesleyan cause in that town, and has been asked to give another Phrenological Lecture early in December.

STUDIES IN HYGIENE—THE BRAIN.—This was the subject of the lecture delivered October 20th, by Miss J. Fowler, at the Fowler Institute, Ludgate-circus. Mrs. Ormiston Chant presided, and in a few words pointed out the very great importance of the subject before them. In dealing with children especially, some knowledge of the brain was most desirable. In the course of her lecture, Miss Fowler said that in order that the spiritual part of the human frame might be properly developed, the physical must be clearly understood. The brain was the crowning work of God's creation, and in the present day it was more necessary than ever that its power should be understood. There were different divisions of brain, and that accounted for the great difference existing among different people. She (the lecturer), would advise those who wished to make the greatest use of their brains not to use alcohol. The brain possessed a dual power, which was a wise provision of nature. In cases of accident the half brain could for a time do the work of the whole. One object in understanding the brain was that each particular temperament might have its proper treatment. This, the lecturer ventured to think, would often prevent insanity. Injury to the brain could alter the whole character. People did not give enough attention to the brains. The minds of little children were not sufficiently considered. When teachers treated all minds alike the most fatal mistakes in education must occur. Treatment according to organization was a necessity. The great doctrine that all could not do all things equally well ought to be more recognised than it was at the present time. It would be well if everyone present would get a sheep's brain and put it into spirits, as, although it was not so perfect as the human brain, it would greatly help them in their study of the same. One great thing in obtaining a healthy brain was to have, she added, a healthy body. Care of the body would result in a healthy mind. The great point of the lecture was to show the necessity of individual treatment in mind and body.

ON October 15th, a most interesting and instructive lecture was given by Miss Jessie Fowler, at Balmes-road Schoolroom, Southgate-road, her subject being "The Brain, and how affected by Alcohol." It was illustrated by numerous models, diagrams, &c. Miss Fowler had a thorough grasp of her subject, and a very happy way of making it attractive to her audience, amongst whom were many young people. The applause which greeted her at the close proved how thoroughly her remarks were appreciated. A hearty vote of thanks was unanimously accorded her, which was suitably acknowledged, with a promise of a visit on some future occasion.—*De Beauvoir Magazine*.

"MAN KNOW THYSELF."—Phrenology is a science which we believe may safely lay claim to "touch the truth with the finger tips." Some people hold very decided opinions about phrenology, and we would advise those who do not believe in it to pay a visit to Prof. Taylor, who has gained no little renown as a lecturer on physiognomy, health, and other kindred subjects. The question has often been asked in the press, "What shall we do with our boys?" Parents who are at all doubtful of what would be the most suitable occupation for their children should make a point of consulting him. Being a member of several learned societies, Prof. Taylor has lectured on various subjects to Mutual Improvement and other societies in the towns he has visited.—*Preston Weekly Advertiser*.

CURZON-STREET CHAPEL. — On Wednesday evening, Professor Timson, M.L.P.A., delivered an interesting lecture to a full audience, entitled "Heads and Faces," describing the general principles of phrenology and physiognomy. At the close of a very enjoyable evening, the Chairman, Rev. Mincher, said that phrenology had been in the past a subject of interest and of study to him. He had enjoyed the company and conversation of the venerable L. N. Fowler, for whom he had the deepest respect, and whom he considered was doing a grand and noble work for humanity in teaching men "how to live," so that they should be the better prepared to die, or to render an account of their stewardship and the talents with which they were endowed.—*Midland Free Press*.

Miss J. Fowler gave a very interesting lecture on October 27th, at the Fowler Institute, on the subject of "Food Reform," according to Temperament. Mrs. John Richards presided, and in a few suitable words touched on the need of more instruction on this important subject. The lecturer, in the course of her remarks, impressed upon her hearers the need of self-culture. As had often been stated, man was not made to eat, but it was necessary to eat in order to live. In the work of self-culture great attention must be paid to the question of diet. In studying the body the mind would be greatly benefitted. As a rule, people lived much longer now than was the case fifty years ago, and this arose from the fact that men and women were learning

to live more purely and cleanly. Mothers were learning to become the doctors of their own children, and this was as it should be. Perfect liberty in mind and body could not be attained without studying the science of food. It could not be sufficiently impressed on all classes that diet should be according to temperament. Nature had supplied a very generous menu, from which all kinds of temperaments could select their choice : curiously enough, those who did the greatest work in life, as a rule, lived most simply. She (the lecturer) would recommend those who lived at high pressure not to take a heavy meal in the middle of the day. After dinner, rest was absolutely necessary for those who would keep their digestive powers unimpaired. In following certain simple laws, said Miss Fowler in conclusion, all would be rewarded by having healthy bodies and vigorous minds.
—*City Press.*

Notes and News of the Month.

THE Phrenological Sketches which appear in this number have been delineated by Mr. L. N. Fowler, without personal knowledge of the photos from which they have been described.

SUB-ED. P. M.

WE keep in stock all published books on phrenology, physiology, health, mesmerism, etc., etc., and shall be pleased to send our revised and enlarged catalogue post free.

THE Examination for Diplomas and Certificates will be held in January, 1892. All intending candidates for this examination must please send in their names to the Secretary on or before the 31st of December.

Answers to Correspondents.

GIBBON, MANCHESTER.—Of the two machines about which you ask our advice, we unhesitatingly recommend Dr. Dowd's Home Exerciser. It is the best apparatus for physical culture yet devised. It takes up but little room; it is not unsightly; it is noiseless; it cannot get out of order; can be adapted to anyone over four years old; and it is all the apparatus that is necessary. The work on it is fascinating; by it anyone can strengthen any part of the body at will; and when the weak parts have been restored or strengthened, can go on with a harmonious development of the body. The weight can be varied according to the strength of the user from $3\frac{1}{2}$ -lbs. to 15-lbs. or more. You get a greater variety of movements in the "Health Exerciser" than in the "Boating Machine."

Character Sketches from Photographs.

[Persons sending photographs for remarks on their character under this heading must observe the following conditions:—Each photograph must be accompanied by a stamped and directed envelope, for the return of the photographs; the photograph, or photographs (for, where possible, two should be sent, one giving a front, the other a side view), must be good and recent; and, lastly, each application must be accompanied by a remittance (in Postal Order) of 3s., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—Letters to be addressed to L. N. FOWLER.]

RECHABITE.—Has a compact, condensed, and vigorous organization; is constitutionally industrious, and takes pleasure in removing all obstacles in his way. He loses as little powder and shot as possible. As a lad, he must have been full of mischief—disturbing the furniture; making a noise; clearing his way; and showing authority. As a man, he will succeed because he will succeed. He is not one of the kind to give up. He is much in earnest; has a worldly spirit; will look out for number one. His idea would be to get rich first, and then use his money to the best advantage to give him notoriety. He has a favourable organization for a business man, and is sufficiently able to take care of what belongs to himself. His moral brain is comparatively well developed, having something of an inventive progressive spirit; besides, he has versatility of talent, and can accommodate himself to almost any condition. He is qualified to be a leader among men—to superintend men in their work. He has a favourable faculty to figure up. He is always in earnest, and when he talks, there is a tendency to sarcasm in his jokes. He is intuitive in his perceptions, and for one of his age, he can go through with more work than most men ten years older. His character will conflict somewhat. He will contradict himself if he is not careful, for he has a strong desire to be useful and do good; at the same time he has so much of self in him that he may show his worldly spirit almost too strong.

GOULD (Oldham.)—This organization is well rounded out. She has comparatively a large brain, and scarcely a small organ or faculty represented. She is equal almost to anything in work or in mental development, more especially as a business woman, nurse, or doctor. She has good perceptive power. She is naturally neat, orderly, and can turn her hand to almost anything. She could build a house, or an engine, if necessary. She manages her own affairs; she is on the look-out, cautious, rather reticent, very firm and determined when she has settled upon a course. She is not given to talking unless she is highly excited. She is one of the faithful and true kind as a wife, mother, and friend; and she does not show all her feelings as some do, for she is rather conservative, and reserves something for another time rather than to consume everything at once. She does not want any help; would rather do all the work herself than to have

anyone else, for their way of doing would not be like hers. She comes from a very strong family, long-lived, and with more than ordinary character and strength of mind.

DRUID.—Is determined to make a noise in the world, and he will succeed. His character is on the outside as well as the inside. He loves to talk, and he would do it when all alone by himself for entertainment. He is witty, has strong imagination, rather extravagant in his style of expressing himself; has good taste, wants everything in style. He is so organized that, if he is fortunate in his education, and makes no particular mistakes so as to injure him before the public, he will continue to rise until he gets to the top. He has great executive ability; will do business in a methodical, systematic manner. He can manifest more than ordinary scholastic ability. He is able to resist disease. He will hold his own in the midst of much opposition. His talents are scholastic and philosophical. His memory of common occurrences is not first-rate. He has a clear brain, and when he pays attention to a subject his memory will seldom fail. He ought to make up his mind to rank among the first, and put forth every effort to secure that end. He has a good constitution, which, if not trifled with, will last him into old age, as he is from a long-lived ancestry. His gift is that of a speaker—probably a lawyer and statesman—and he should exert himself in that direction.

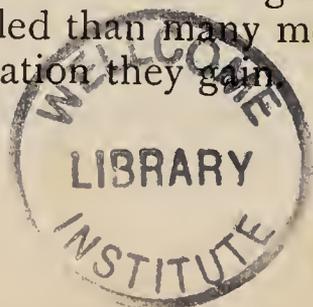
J.B. (Liverpool).—Has a favourable organization for health. She has a strong ambition to excel; she has hardly confidence enough in herself, and needs someone behind her to sound her praises and speak a good word for her. She is energetic when once started in her work, but it takes her a little time to feel the importance to start. She has a practical intellect, and wants to know the uses for things. She will be governed by what she sees first, and by what she reads next; she is sincere and earnest in what she says; she cannot joke so well as appreciate the fun of others. Her head is high compared with its breadth, and hence she will be known for her sympathy, kindly feeling toward others, and desire to do good, rather than for hardness or severity of mind. She has a full degree of taste, power to embellish, and make things suitable to the occasion, but she will prefer a pattern to follow rather than to be guided by her own ingenuity. She is persevering, and having once made up her mind can be quite firm in carrying out her purposes, for she has quite available desires to carry out the wishes of others, and would make a good teacher of the young, provided she did not do too much for them.

T.S. (Headingley).—He has an exceedingly capable and forcible mind, and a powerful constitution. He should be able to do more than ordinary work, both of a physical and a mental character. His constitution is one that will wear well, and he ought to live to a ripe old age. Intellectually he has a mind of knowledge, and should be gifted in the expression of his thoughts, copious in his style of conversation, and logical in his arguments. He has a ready

flow of language, suitable to almost any subject or occasion. He is particularly gifted in the conversation in which he writes and speaks. He is a marked critic—few things escape his attention that are worthy of note. He is able to analyse subjects, and as a teacher of men, he would be particularly acute in bringing the subject to a point, and in using telling illustrations. He knows how to adapt himself to people and circumstances, particularly when travelling. He is not odd or awkward when placed in fresh circumstances, or under fresh experiences. He would feel far more inclined to teach, or to preach the Gospel, than the law. He would rather save sinners through mercy, than inflict the whole penalty of a strict doctrine. He will be known for his versatile mind, broad sympathies, keen perceptions of truth, practical judgment, fluency of utterance, energy of spirit, and his general adaptation of circumstances and materials at command. He could not very well hide his talents or his influences under a bushel.

J. W. (Bristol).—This lad is fairly organized for health and strength, but he will need special physical exercise to bring out the power that he possesses. He is so finely organized that he will be averse to hard work, and will be more suited to study, or a professional career, than an ordinary business. He has high aspirations, and will be willing to work mentally, to qualify himself so as to be successful. His head is high, which gives him an aspiring, ambitious, persevering, hopeful, and determined character. He will be firm in making up his mind; will want some things very much, and will manœuvre to get them. He is a cautious lad; will not make many mistakes, and will show more than ordinary prudence in what he does and says. He must cultivate language, and learn to do his share toward entertaining company. He forgets little things, and has to be reminded of them. If possible, he should be educated for a profession.

J. W., senr. (Bristol).—Has a well-built organization; is a man adapted to work, but will always use his brain to save his muscles. He is a planner, and should know how to superintend the order of many things.. He is not particularly severe, hard-hearted, or cruel in his disposition to carry out work, but is more of a humanitarian kind of man. His sympathies will enter into all his work, and make him desirous of helping along others, while he is working for himself and family. He is ingenious in contriving ways and means; he knows how to economise and use up material; he dislikes to see waste of any kind. He is not a great talker in his own home; when he talks he has something special to say, and he may with advantage cultivate more freedom of speech and entertain company with more ease and confidence. His memory of new experiences is better than his memory of names and details. What he has once done himself he seldom forgets. His reflective and perceptive intellect appears to be well balanced, and as a man among men he will have his storehouse of knowledge better filled than many men who make more fuss and noise about the information they gain. A little more force will be of advantage to him.





Objects.

—*—
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Study of Man

—
ETHNOLOGY

Study of Race

—
PHRENOLOGY

Study of Mind

—
ANATOMY

Study of Structure

—
PHYSIOLOGY

Study of Body

—
PHYSIOGNOMY

Study of Face

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PROFESSOR L. N. FOWLER has founded and started a Phrenological Institute, known as the Fowler Institute. Its premises are situated in the most central part of the city of London, and contains a Library, Museum, Class Rooms, and Lecture Hall. Among the topics taught are the General Principles of Phrenology and Physiology. Special effort is also made not only to train the Students to understand Phrenology in its laws and philosophy, but to apply the science to the reading of character, and directing patrons to such occupations as are in harmony with their organisation and constitution.

This is the first and only institute in Great Britain which has a circulating library of Works on Phrenology, Physiology, Physiognomy, etc., and where a thorough course of training in Phrenology, Physiology, and kindred subjects can be obtained, under the personal supervision of the renowned Phrenologist, Professor L. N. Fowler.

The Library contains about 500 volumes, by various authors, for the use of the country and town members; also a large number of rare and scarce works (which cannot now be bought) for reference only.

The Museum, which Mr. Fowler has been collecting for upwards of 50 years, is open daily, and contains upwards of 300 skulls, busts, casts, French models, etc. Many additions have been added to the Museum this last year. Some valuable skulls from the collection of the late Mr. Hawkyard, of Leeds, have just been presented to the Fowler Institute through Mrs. Hawkyard, lately deceased.

There are over 600 Phrenological engravings and physiological plates for illustrating classes, etc. The Lecture Room is open to the public three Wednesday evenings in

