

THE
Phrenological Magazine :

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THE
Phrenological Magazine.

JANUARY, 1893.



HIS ROYAL HIGHNESS THE DUKE OF YORK.

HIS Royal Highness the Duke of York has a favourably balanced head. It is well represented in the different parts. There is no important deficiency of superior organs. There is harmony between the head and the face. His organization favours a fair share of energy and conservative power. His moral brain is well represented. He will have respect for superiority and regard for moral consequences. He has a full degree of sympathy and interest in the welfare of others. The tone of

his mind is elevated, and the temperament, as a whole, indicates refinement and quality of texture. Under ordinary circumstances he would be able to manifest a uniform character, and would exhibit more consistency of character than persons generally under the same conditions. He has versatility of talent ; he could learn to do many different things, and especially show taste in art, and appreciation for the beautiful. Ingenuity joined to his individuality and moral brain gives him much inclination to cultivate the arts and encourage skill. His musical development is favourably represented. He is naturally mirthful, and capable of entertaining company in a variety of ways. He has good conversational talent, and if he made it his business he could succeed as a speaker. He is rather reserved in his general character, and not indiscreet in expressing his feelings. His perceptive faculties are fully developed. He is given to observation and readily remembers what he sees. He is methodical, systematic, and comparatively thorough in his pursuit of knowledge. He is easy in his manners ; has a full degree of imitation, and readily adapts himself to the society he is in, under pressing circumstances. He could show considerable pluck and power to endure hardships as a soldier, but if he had his choice he would prefer to distinguish himself in some other way besides hard fighting. The social brain is fully developed. He enjoys society and is much interested in the young. He is strongly attached to place, and would prefer to have one home and live in it than to be going from one place to another, yet he can enjoy travelling highly. There are no indications of eccentricity or excesses of powers that would be liable to throw him out of balance, and the harmony of his organisation is such as to favour an even and well-balanced character, with rather more of the moral brain than the average, which, joined to his firmness, would help to give uniformity of character and conduct. If he became a ruler and had great power he would use it consistently, and not take the advantage of his situation to gratify his own pride or to carry his influence into excess. If called upon to act in war he would be rather cool, self-possessed and sustain himself in his efforts, and show the same genial ability all the way through. He would do better as a demonstrator and king than he would as a general in the war, and would encourage peace and quietness rather than war and tumult. With such an organization there will be consistency all the way through, and he will be able to command respect wherever he goes or in whatever he does.

L. N. F.

DEBATE IN THE CRANIUM; OR, A TALK OF THE FACULTIES WITH EACH OTHER.

BY L. N. FOWLER.

PHRENOLOGY, as we know, explains the operations of the mind and accounts for the great variety of mental manifestations seen. It portrays natural abilities and what a person is capable of becoming with proper culture and direction.

The great principle which Phrenology proves is that the mind is composed of different faculties, which show distinct desires, talents, feelings, emotions, and characteristics. And although they can be exercised and cultivated separately the sympathy of them all is so great that they generally act more or less together and in harmony with each other, the same as do the organs of the body. Thus Causality does the planning and sets many of the faculties to work; while Cautiousness keeps many out of danger by its forethought; and Combateness defends them all by its courage. The causes for the great variety of character existing among us, can be thus explained by the various faculties and their combinations.

The violin has four strings only, yet how many combined melodies are produced! With only five fingers on each hand how much can be done! With nine figures how endless the combinations! So with the forty-two faculties of the mind how vast a number of mental manifestations can be brought out!

If we treated the different functions of the body and the faculties of the mind as individuals, and listened to what they would naturally say, we should be amused besides hearing many things both important for them to say and for us to hear. It has been estimated that the influences of the different organs of the body alone, when combined, give between five to six thousand changes and modifications.

Now, if we take only seven faculties and multiply their positive, passive, and negative changes, we find we shall get a sum like this:— Fifty-one quintrillions, ninety quadrillions, nine hundred and forty-two trillions, one hundred and seventy-one billions, seven hundred and nine millions, four hundred and forty thousands.

It would take a lifetime to count with any degree of accuracy the number of changes that all the powers of the mind are capable of showing. In fact, the calculation would go beyond our power to estimate in numbers. When there is health and prosperity, then all the powers of our nature act

in the direction of enjoyment, and all the pleasure-making qualities of the mind are wide awake. When there is disease and misfortune, the mental and bodily powers are reversed, and the mirth-loving and mirth-making faculties retire behind the scenes.

No one knows himself thoroughly until he is tested to the fullest degree of his strength. Without being tested we are liable to think we are stronger than we really are. We test the voice by speaking in different sized rooms. We test Causality by answering a complex question. And we find each faculty, like every kind of tool, is adapted to its work.

Some faculties draw us together and act like magnets and sticking-plasters, others detach and separate us. Some faculties give warmth, desire and impulse; others make us cold, forbidding and quiet. Some fraternise more easily than others, some being masters, others servants. Some faculties restrain, others propel. Some accumulate, others scatter and spend. Some elevate the mind, others lower it. Some faculties rove, while others hate to leave home. Some expand, while others contract. Some criticise, justify and excuse. Some encourage, and others discourage.

Our debate begins with the social and domestic group. The foundation or centre of attraction is Amativeness. "Where I am very large," it says, "I am apt to idolize and worship the object of my regard with inexpressible tenderness, and cherish the most exalted regard for others as though they were superior beings."

Conjugality says, "I give constancy and unity in companionship. I make husbands and wives cling to each other, and wish to be constantly in each other's society." If they happen to quarrel and separate they come together again and make up. A Lowell couple parted three times for good, but came back and started again.

Parental Love says, "I give regard and desire for parentage. I make the child an object of love, and the more young and tender, the more love is given to it: hence it is cared for the most affectionately when it is the most helpless." Some animals, birds and pets share in this love. Many parents literally sacrifice themselves through the love they have for their children. It would be well if children could but know the great anxiety, the love, and wonderful sacrifices a mother makes for a son or daughter, for the knowledge might save the spark of vitality from declining so early, and the weary hands from being laid aside before their time.

Philoprogenitiveness loves to caress. It tosses the child crowing in the air. It throws the head back and cuddles the

little soft dumpling in its mother's neck. When large in men it induces them to build orphanages, also to adopt children into their own families ;—like a man who had eight children of his own, yet adopted eight more and was proud of them all. We have known of several who have had this faculty immensely large who have become toy manufacturers. There were two brothers in America who made a speciality of baby carriages, and both gentlemen had the organ of Philoprogenitiveness large.

Friendship says, " I make attachments and give sociability, and keep up family ties. I have a fraternising disposition ; I join together in bands, clubs, companies, associations, communities, churches, states, and united states. I make company desirable. I visit and make others sociable and companionable. When I am small or inactive I make one prefer to live alone and entertain one's self, to walk and work alone and live like a hermit. When too large I am liable to lead to social dissipation and make too many sacrifices in other things, give too many large parties, and mix up among too many friends."

When friends meet who have not seen each other for years, they express it by the grasp of the hand and by the tender embrace.

This fraternal love is more extended and universal than any other, and gathers in all the nations of the earth, and makes no difference what the nationality or birth, whether black or white, old or young, cultured or uncultured, a Christian, Mohammedan, Jew or Catholic ; for the Methodist, Plymouth Brother or Churchman there is a fraternal tie, God is the common parent of all, and sheds His love on all.

Inhabitiveness says, " I am next door neighbour, and find a home to settle down in, to enjoy the family circle where all the children can be born, reared, and educated. I am the same in birds, who build their nests, lay all their eggs, hatch them all, and feed and rear the young birds together. I give to all, not only an attachment for home, but also for country ; I make the patriot fight for his country. I make the aged recall the days of their childhood with delight, for they love to think of the old farm in the valley, the orchard, and the favourite hiding-place in the barn ; and relate stories about the well-remembered homestead and birthplace to their grandchildren. No place has seemed quite the same since. I have given to the world her Wellingtons of England, her Washingtons of America, her Wallaces and Bruces of Scotland, who have immortalized their names for their countries' honour."

"While the Emerald Isle is as great an instance of my influence," says Inhabitiveness, "as there is." Even in Australia they know what its instincts and pleadings are, for each colony looks after its own boundary with jealousy and pride. Though in these days of rapid travel, a trip round the world is no unusual thing, still it is astonishing, that, though years may separate a man from the land of his birth, when Inhabitiveness is large, he always treasures up with regard to it sacred memories and tender recollections.

Continuity is like a cord that holds all the social powers together, so as to give constancy, solidity and increasing strength. When Inhabitiveness and Continuity are moderate, the family is liable to scatter and live in many parts of the world like wandering Jews, and do a great variety of things.

Much might be said about Continuity, how, when large, men become so absorbed in their work that they get into a brown study, and neglect to attend to things around. For instance, they let the fire go out, or get so close to the fire that their paper or slippers catch alight. They do not hear the clock strike, they go beyond their own stations on their way home, or pass their own streets. I have found it larger in the English than in the American or Australian. In the Englishman large Continuity says, "I prefer to spend seven years to perfect myself in a trade, and I will keep to that, than divide my time over many things. While small Continuity and large Constructiveness in the American or Australian say, "We will make in turn a mechanic, a farmer, a carpenter, a blacksmith, a teacher, lecturer, writer, statesman, lawyer, &c. An example of phenomenal versatility in a single individual is the late Professor Fleeming Jenkin. The number of patents taken out by him was legion, and pleasant to relate, many of them proved most valuable. Though he was emphatically "Jack-of-all-trades," he was at any-rate master of one, to wit, the science of electrical engineering. The serious business of his life was marine telegraphy, in taking up and laying down the Mid-Atlantic cables.

Few men have shown more versatility than William Barnes, the Dorset celebrity, who is called the Second Victorian Poet. He was singularly gifted. He was linguist and philologist; painter and musician; carpenter and gardener; schoolmaster and lecturer; poet and clergyman—all in one. Combative-ness is an offset to danger, encroachments or difficulties, and gives courage to defend personal, political, and moral rights. It is the plucky element. It says, "I will clear the way." It was very prominent in Gen. Grant, Neal Dow, and is large in Gladstone; and was notably large in Luther and John Knox.

Destructiveness says, "I give energy. I am the motive power—the engine of the mind—that sets all the faculties to work." Alimentiveness says, "I will look after the fuel and the heat, by supplying proper nourishment."

The mind and body are in want from the cradle to the grave, and Acquisitiveness says, "I will accumulate and lay by for the future." While Secretiveness says, "I will be the store-house with a lock and key, to retain that which you have accumulated. Cautiousness, like the switch-man, says, "Look ahead ; keep on the track ; avoid mistakes ; and do not go too fast." Self-esteem says, "I will be responsible ; pile it on ; I am equal to any task." It holds its head high ; and spoke for the Pharisee. Firmness says, "I will back you up, and see you through. I am as firm as a rock. I will help you to persevere unwaveringly to the end."

Constructiveness says, "I am the mechanic of the mind and do the contriving, tinkering and inventing. I give a frame work for Ideality to beautify, adorn and perfect ; while Sublimity adds the grandeur and creates enthusiasm."

A Frenchman has recently been at work upon a very wonderful instrument called the caloriphone, the object of which is to obtain telephonic communications without the use of the conducting wire, the distance between the communicating stations being comparatively very great.

The vibrations of the voice are impressed upon a telephone plate, their conversion into calorific undulations, and their reaction upon a substance, such as a selenium, which, by transmitting them to a telephonic receiver, transforms them into articulate words.

Individuality says, "I am the Paul Pry of the mind ; I like to peep into everything, and see and touch everything, and am always asking, 'What is it ?' I stop to look into the windows, and turn round to look at people after they have passed ; and every time the door opens I turn my head to see who comes in."

Eventuality is one of the most important faculties of the intellect and when small should be cultivated. Many people call it memory, thinking this one faculty does all the memorizing for us. And although it is the store-house of the intellect that not only takes notice of what is going on, but treasures up knowledge for future use, still we must not forget that each faculty has its memory. Eventuality pays special attention to facts, names, events, news of the past and present.

A man of Milton has the best memory of anyone in his county and was described as having large Eventuality. He was speaking of his wonderful power one day, and said that

at twenty-five years of age he used to forget what he went for from his office to his house. When he went to town he forgot most of his errands. He could not remember anything he read or heard, neither names, nor words, nor dates, nor facts. At length he resolved no longer to submit to this forgetfulness, but determined to discipline his mind, in doing which he adopted the following method. When he wanted anything from the house, he would think over and over in his mind what it was that he wanted, and thus exercise Eventuality upon it. He would then read a passage and re-read it and lay by his book but still revolve it in his mind and then read another passage, and go through the same process in reference to both together, and so on with the entire book, thus constantly exercising his Eventuality. After a little he could keep the history of two books and then three or four, each clearly before his mind. He found that he forgot names. He pursued the same course in reference to the memory of names, and thus improved it also. But he found that he forgot where on the page he left off, and was obliged to turn down a leaf where he finished. This he did not like so he impressed his Locality where he left off in each book and found that likewise he improved this kind of memory also. His Eventuality, Locality, and Language were all small, but by cultivation he admitted that at sixty years of age his memory was more retentive than ever before and that it continued to go on improving though at his age generally the memory usually becomes less vigorous.

Tune is the humming bird of the mind, and puts the voice into song, which soothes the spirits and relieves the mind, and puts it in a good nature to grapple with the uphill work of life. All nature is full of music to those who have the organ of Tune. On a warm spring day all nature begins the morning with a song. It puts the children to sleep in the evening. It makes the horse forget his temper. The man loses sight of his troubles. The woman has rest from her cares. It takes full possession of the mind for the time being, for while persons are paying attention to music they cannot attend to anything else.

Language, giving projection to the eye, also converts air into sound, and is the mouth-piece of the mind, and does all its talking and makes known all its wants and conditions. It is a noisy faculty, where several children are together, even if they are girls and more especially if they are boys, for they talk so loud and fast. It is the servant of all the faculties, and each one has something to say. Sometimes Language is made to grumble and find fault,

and scolds. Then it caresses, compliments, and says many pleasant and smooth things. It gives lectures on morals, and shows us the way to health, wealth, and happiness. It exposes the wickedness of mankind and evils of society. At one time it woos and coos, and talks love and affection, and says all sorts of sweet things. It flatters and coquettes more than any other faculty. Then it says hard and cruel things, and uses language that indicates jealousy and suspicion.

When among the sick and afflicted it speaks with great kindness, tenderness and sympathy. It speaks most eloquently and poetically, both in the pulpit and on the platform, and with Ideality and the moral faculties uses the most choice expressions. When under the influence of the base of the brain it descends to the use of low, coarse, and harsh words. It talks very loudly when Veneration does not check it. It whispers when Secretiveness tells it to. It makes a great noise over a very little thing, and cries boo, boo, boo. Then it laughs ha, ha, ha. It cannot always be depended upon, for sometimes it is used to hide the truth.

Mirthfulness is the jolly element of the mind. A condensing power, a medicine chest, a digester, an entertainer.

Mirthfulness gives a sense of the ludicrous, and sees what is amusing, mirthful, and incongruous. It is a spirit reviver. Like a flower-bed in a desert, a sunbeam in a dark cell, a healthy stimulant, a lively companion. It shortens the face, it brightens the eyes, and makes the wrinkles come by turning up the corners of the eyes and mouth. It makes the task lighter and journey shorter, and the sermon or story much more agreeable and easier to remember. Mirthful people have but few doctors' bills to pay, and want very little medicine. With no mirthfulness or laughter there is poor circulation and bad digestion. Some think it is not wrong to take a quart of medicine or a box of pills, but think it is wrong to laugh, when by laughing they might keep well. A man was left to die of starvation from quinsy. All the family, beginning with the oldest down to the youngest, came to bid him a last farewell. Then in came the ape. When the dying man saw the ape he could not refrain from laughing heartily, the quinsy broke, and he recovered. Sometimes the more serious and important the occasion the more mirth-provoking it is.

A worldly, wealthy Scotch gentleman was about to die without being prepared, and he sent for the clergyman of the kirk, and asked him if he thought by his giving £10,000 to the kirk his soul would be saved. He said he could not tell exactly, but thought it would be an experiment worth trying.

The way we take things makes the fun. The mother was describing the genius her son had in his head, and said he had made a table and a chair all out of his own head and had timber enough to make more.

Sterne was a very witty writer, so was Abraham Lincoln.

A man who was a notorious punster arranged to pay his grocer, whose name was Berry, once in three months ; but the grocer on one occasion being hard pressed for money, sent in his bill prematurely, whereupon the man indignantly said :

“ Why, here’s a *mull*, Berry ! You have sent in your *bill*, Berry, before it is *due*, Berry. Your father, the *elder* Berry, would not have been such a *goose*, Berry ; but you need not look *black*, Berry, and I sha’n’t pay you till the end of the quarter, Berry.”

So Wit is a part of mirthfulness, and makes an appropriate remark, on the spur of the moment, to suit the occasion. It gives the pith and essence of a thought and feeling. It says much in a little. Mirth, Wit and Language are the entertainers of the mind—the clowns of the circus. Laughter also comes from Mirthfulness and is one form of showing an excited state of the mind. A giggle means nothing but soft brains and a shallow mind, but a real laugh means something.

There is character in an honest, natural laugh. There are kinds, grades, and qualities of laughter, and people show who, and what they are, by their laugh. Mirthfulness says, “ Some laugh inside, others laugh outside ; some laugh to their hurt, others laugh for their good ; some laugh because others do, others laugh because they can’t help it ; some laugh at one thing, others laugh at many things ; some laugh in spots, others laugh all over.” That which would make one person laugh would not make another laugh. Sarcasm is Mirthfulness joined to Combaticiveness, and gives pointedness, personalities, pithy sayings, truths plainly uttered, making a direct attack. To joke is the principal expression of Mirthfulness, and likes to tease, or surprise a person, and, with Secretiveness, do funny things behind another’s back. Some jokes are funny, while others are very provoking. Time is the clock of the mind, and helps us to regulate our movements with some precision and punctuality. Order is the square and compass of the mind, and does things by method, system, and rule.

(*To be continued.*)

GIVE fools their gold, and knaves their power ;
 Let fortune’s bubbles rise and fall ;
 Who sows a field, or trains a flower,
 Or plants a tree, is more than all.—*Whittier.*

MEN AND WOMEN OF OUR TIMES.

THE COUNTESS OF COMPTON.—If the hair does not deform the shape of the head the indications are as follows:—First, she has a very tender, susceptible, impressible mind. Secondly, she has very devoted attachments, is sincere in matters of affection and love. Thirdly, she has patience



THE COUNTESS OF COMPTON.

(By kind permission of Russell & Sons.)

and application to finish what she begins, and to persevere with her task; she is steady, uniform, and reliable under ordinary circumstances. Fourthly, she is mindful of the presence of superiors, and gives credit where it is due. Fifthly, she is not proud, haughty, stubborn, and self-willed, but has a mind of her own. She accumulates knowledge for

herself, and knows what she believes in and why. She has good perceptive power; she is much interested in public events and the history of the day. She is well prepared to represent the subject that she talks about. She is not abstract in her thoughts or philosophy; she is quite intuitive in the discernment of character and motives; she is quick to sense what people are talking about. She has a good memory of what she sees, and what is going on around her. Her general organization favours application and a degree of patience that would result in success. She is rather too nervous, tender and sensitive, to endure great hardship, but still can bear a great deal before she breaks down. She has a good artistic eye; and, if an artist, would do her work so as to succeed in being commended rather than criticised. The balancing power as a whole is intellectual and moral; hence her character and conduct will not change much from that of an elevated tone of mind. She has the temperament to be social and attractive in society. She does not show any antagonisms in an impulsive manner, but on the contrary is plausible in the tone of her mind, and full enough inclined to give respect where respect is due. She is not forward as a speaker, but talks to the point and in an interesting way. She does not live on the surface, but will bear close examination, and the more persons become acquainted with her the better they will like her. She has rather a strong hold on life, and is not going to give up and faint by the way with ordinary troubles to go through. Her natural make-up calls for respect and affection from those who become acquainted with her. She is very good hearted, kind and sympathetic, and delights in doing good.

The Right Hon. Countess Compton is the daughter of Lady Louisa Ashburton, whose name has become a household word in the East End. Her genuine interest in East London is found in the noble buildings at Canning Town, containing all the necessary accommodation for a many sided work of love and sympathy and practical beneficence. The Countess Compton is an active Christian worker like her mother. She has quietly and in an unassuming manner put her hand to every good work that has come in her way. She works heartily in the well-known Mission and Ragged School in the East End, and is a pleasing and accomplished speaker.

THE LATE G. W. MCCREE.—The name of George McCree is so well-known, and his wise and witty sayings have become such household words that many will look for a

word or two about his Phrenology. He possessed a most unique combination of faculties. His head was rather over the medium size. He possessed a high, square forehead, which gave him a strong reasoning intellect, a keen sense of humour, a lively imagination, and good practical observing powers. Conscientiousness, Veneration and Cautiousness were large, which made him show uncommon justice and prudence, and respect for sacred things. He knew how to call out the respect of others; to show a strong sense of principle, and thus become a champion for the right, and a pioneer in reform. He was exceedingly prudent and far-seeing in important matters. His intuitive grasp of mind was very distinct; he made use of every opportunity to do good. He possessed a marked social brain, and was able to understand the domestic wants of his fellow-men. His organ of Language was most favourably developed, which, joined to his Benevolence, Conscientiousness, and Mirthfulness, gave him the ability to express himself with keen sympathy, strict integrity, and in a pleasant, agreeable, and witty style. The predominant feature of his mind was benevolence, which supplied him with abundant sympathy, tenderness, and solicitude for all distressed conditions of humanity. He was equally at home with the educated and uneducated, either in conversation with them or when lecturing or preaching before them. He had the combined genius and tact of many men, and the rarer gift of knowing how to use his powers to a good account. Few men have been able to accommodate themselves so readily to such a variety of people. He intuitively guessed the wants of others, and knew how to suit the word, tone, and action to the occasion. His rugged sense of honour and his appreciation of truth along with his wonderful comprehension of human nature, enabled him to get *honesty* from those people who were ready to cheat everyone else. He knew how to win the confidence and esteem of all classes, from the beggar to the nobleman. The Editor had the pleasure of knowing him for many years, and it was during his active work at the Seven Dials that the Editor and his wife attended a "Thieves' Supper" with him. It was among the poor, destitute, and neglected citizens of St. Giles' that his great unselfish character, the serene sweetness of his disposition, the chastened tranquillity of his harmonious temperament, and the bright and happy charm of his genial conversation, showed to the best advantage. His loss will be felt not only by his church and numerous friends, but by the whole philanthropic world. Several contemporaries, *The Temperance Record* and *The Alliance News*, &c.,

have given in detail the great work of his life, hence we need only give the mere outline of a few particulars. He began his twenty-six years of Missionary labour among the poor of St. Giles' when twenty-six years of age, but at the early age of seventeen he commenced preaching on the hills of Cumberland and Westmoreland. During his diligent studies, a lecturer came to his native town, Newcastle-on-Tyne, in the person of Mr. John Cassell, who spoke so convincingly on the question of temperance that young McCree signed the pledge and thus commenced his life-long service to that cause. For several years he was engaged as Secretary of the Band of Hope Union. His labours in the neighbourhood of Seven Dials won for him the title of "Bishop of St. Giles'." He laboured among the most notorious characters to be found—drunkards, thieves, prize-fighters, coiners, beggars, &c.; among them all the deceased was highly respected and honoured, and they became the subjects of his earnest labour and solicitude. The Rev. George McCree, with the Rev. Dawson Burns, proposed and was the means of inaugurating the work of the London Temperance Hospital, for the purpose of demonstrating the possibility of treating diseases of all kinds without the use of alcohol in any form—a work which has been carried on with considerable success. He was in his 73rd year, and was one of our most capable pioneers in the spiritual and social regeneration of the slums of our great city, for he was often able to accomplish what the police failed to do.

MR. C. KINLOCH COOKE, Editor of *Pall Mall Gazette*.—This gentleman has a well-balanced head, which is in harmony with his face and body; but there is a special harmony between the head and face. He knows what he is about, and seldom makes mistakes. He is sound in his judgment; elevated in his thoughts and feelings; not careless in conversation, in writing or talking. His brain is high in the moral organs, which must be very strongly represented in his character, whether he makes any special profession of religion or not. He cannot be a trifler, nor can he be much of a sectarian, for he has too liberal a mind to contract his thoughts into particular creeds. The base of his brain is fully developed, but not predominant. He has force of character when really called for. He has general industry and energy of mind in all that he does. One quality of his mind is method, order and system; another quality is versatility of talent and ability to devise ways and means; and a third, is scope of mind, liberality of thought, and freedom

of speech. His forte is in using appropriate language, and chaste ideas, hence he is particular in forming sentences. He is not so much known for his memory of details as he is for his memory of thoughts and ideas. His verbal memory is fairly good; he can generally tell what he knows in a free and easy manner. He is comparatively ingenious in his style of constructing sentences and in forming an argument. He is particularly intuitive in discerning character, motives and



MR. COOKE.

(From a photograph by Debenham, Ryde.)

truth. He is not long making up his mind on any subject. He has more than average taste, sense of beauty and perfection, and finds it difficult to please himself, for his standard is very high.

MR. A. GROVE.—This gentleman has more than an average amount of mental power. His brain is strongly represented in the intellectual and moral qualities. His social brain, as a whole, is not predominant. He is not largely developed in friendship, love of children, and love of place, but he appears to be quite social. The head is especially high, and Self-esteem, Firmness, and Conscientiousness are strongly represented. The head, as a whole, indicates a powerful character. He has a very high sense of character, is manly, proud, spirited and high minded. His ambition is of a moral

type, and all the moral faculties are so fully represented as to give dignity to his character. He has a good perceptive intellect, is wide awake, and has a large range of observation. He has order and method in his way of doing business. He is very intuitive in sensing character, and makes nice discriminations. He is especially able to reduce to practice what he knows, and gives a practical hearing to his conversation. He desires knowledge for the available and substantial good he gets from it, rather than to merely study and gain knowledge to gratify an enquiring mind. He may not be witty, but he says many apt things, and what he says is liable to be repeated because it is so truthful. He uses language rather copiously, especially



MR. A. GROVE.

if earnestly engaged in a debate. He could become a good linguist. He is critical, analytical, and intuitive in his perceptions of truth. He is an earnest seeker for truth, and general knowledge, and with common practice would make a good speaker.

Mr. A. Grove was son of the late Captain E. Grove; educated at Oriel College, Oxford, and took honours in history and law. He is founder, proprietor and editor of the *New Review*.

ORION.

Select well your acquaintances.
Never try to appear what you are not.

THE BLIND, AND HOW THEY ARE EDUCATED.*

THE subject of my paper is the Blind—their life, treatment, training, and difficulties—and I have treated the subject, as far as possible, upon a Phrenological basis.

The blind are a section of the community for whom I have much sympathy, and in whom I take a keen interest, and I thought that, perhaps, others who may not have had the same opportunities as myself for studying the matter, might, if they knew more particulars, find a good deal to interest them also.

My attention was first drawn to the blind some years ago, by seeing a gymnastic display given by one of the institutions in London, and I was very much struck with the exactness and precision with which they carried out their work. I heard a good deal talked about the College for the Blind at Norwood, but to hear of a thing in a haphazard way, and with no particular interest, is not likely to make much impression on one's mind ; and, like my fellow hearers, I expressed my admiration for the college, without having the least reason for so doing, or knowing anything about its inner life and management.

But during my visit to Scotland, the year before last, I spent about three weeks in a large institution in Glasgow, known as the Asylum for the Blind. My reasons for choosing this lively spot to spend a Summer holiday consisted solely in the fact that the Matron of that Asylum is a very dear friend of mine, and not from any interest I had in its inmates. In fact I rather grudged the time spent in the close city, instead of at one of the Lochs. And I also dreaded being among those who were called upon to suffer so much, being dull and depressing.

This is the state of mind in which I first entered the Asylum, and the price at which I determined to have the pleasure of a few weeks spent with my friend.

But my impressions of the blind were destined to be greatly changed, although I was not conscious of it then, and as perhaps many of my hearers may have somewhat the same feelings in reference to this subject, I hope, if such is the case, to be able to give them a happier view and keener insight into the work.

The Asylum is an immense institution, founded by John

* A paper read at the Fowler Institute, November 23rd, and illustrated by articles and specimens of work, &c., kindly lent from the Glasgow Asylum, the Association for the Blind, Cambridge Square, W., and Messrs. Philips and Co., Fleet Street, E.C.

Leitch, Esq., in 1827, and is most comfortably and conveniently fitted for the purpose it is used, with large and spacious dormitories, dining hall, and work rooms; each dormitory having its own bathrooms fitted with hot and cold water. The corridors run one above another, and turn in and out in a manner which is quite confusing, at least to me a stranger, and remember I am a sighted person.

Guessing roughly, there would be about five or six doors in each corridor, some opening into bedrooms, some into bathrooms, and yet these blind people find their way about as easily as possible, and alone.

My interest was first awakened by leaving my room in the morning to cross the landing to my bathroom, making no noise except by the opening of the heavy door, I found myself face to face with one of the inmates, who immediately exclaimed, "Who is there? it is not the Matron." "No," I said, "I am not the Matron; I am a lady staying here for a short time." She immediately begged my pardon and went on, leaving me not a little puzzled as to how she knew I was there, and, still more so, how she knew I was not the Matron.

Having just begun to study Phrenology I at once thought, Why, surely this is to be accounted for by some special development of the brain, or organization? but I could not satisfy myself on this point; and, as I was not willing to show my ignorance just at first, I determined to wait and see what else happened that might perhaps throw some light on the subject.

This I did not have to wait long for, for I soon found myself in such a state of wonderment and speculation, that I felt quite overwhelmed, and began to consider how it was I, with all the powers granted to me, was not much more clever and useful than I am. It was a decided rebuke, and I even began *almost* to wish I had not quite so many powers for perhaps then I might make more use of what I had. Anyway, I determined to sift this matter, and to find out how it was they were able to do so much.

My three weeks were very soon a thing of the past and I was looking back on them with the greatest of pleasure and enjoyment, and I can certainly say my surroundings had been a source of the greatest interest, instead of dull and depressing as I feared.

I was not long in noticing a decided want of development in the frontal part of the basilar brain; the percepts being in, I think I may say, *all* cases decidedly small, yet I found them doing the most minute work, such as pillow lace, and engaged in employments which I should have judged suitable

for a person with a strong development of the perceptive faculties and sharp eyesight. Therefore I decided there must be something to make up for and counterbalance the want of sight. The thing is, What ?

As this experience opened for me a new line of thought I have since then given considerable time to the subject, and have seen much of the daily routine of those afflicted with blindness, having visited the Normal College, and Glasgow Asylum as well as other places of interest, and have had a good deal of conversation with those of both institutions.

My investigations have ended in my being almost doubtful as to whether blindness is such a trial as many suppose, and secondly, by my being convinced that the blind are both talented and certainly happy.

As the Glasgow Asylum is founded principally for the benefit of the poorer classes, though not entirely, I was very pleased to learn that at its rear it is fitted with workshops of every description, and it is to these workshops I wish to take you for a short time, as I had the pleasure of visiting them, and it was here I learned the answers to almost all my questions.

Here at least I found the secret of their happiness, in the fact that they were employed, and with such work as they could apply to good purpose and by which they could earn an honest living, and so raise themselves above the position they must otherwise fill, of hopeless dependents : a position which to many an honest heart would be the greatest trial they could have to bear. These workshops are most spacious, light, airy, and scrupulously clean. They lead one within another until one in passing through wonders how in the world the inmates find their way about. I should have been completely lost, but for my guide.

We first of all entered a large room with some twenty sewing machines in it, all being used by women, executing the neatest of work.

The first I examined was a velvet cushion, which one was just finishing off by putting a cord round it, a piece of work which we sighted ladies know only too well is far from easy to fix. And this was arranged as neatly and perfectly as could be in every particular.

In the second room they were busy lining the mail baskets with American cloth.

The next, a room full of young girls and children making all descriptions of brushes, separating the hair, and threading the wire through the back of the brush and over the middle of the hair at such a rate that I could scarcely detect how it

was done. Scrubbing brushes, long brooms, nail and hair brushes, &c., are all part of their duty.

Then we pass on to the basket work. Here were men plaiting and twisting all kinds of straw and cane into various shapes of basket ware. In one room the mail hampers only were being made. These hampers were all finished as neatly as could be, and all true to form and pattern. They were then handed over to others to be bound with leather, lettered and lined.

Passing on, we find others weaving the fancy baskets with all the various patterns and shapes we are so well acquainted with, and it is to me wonderful to notice how, among all the hundreds made, many with various coloured straws, one can never detect a defective one, either in *shape* or *colour*.

Again I ask, How is it ?

Leaving these busy workers, we pass on to another department, that of the rope-making ; here we find long narrow rooms fitted as rope-walks, with machinery each end, and this affords a very interesting sight. In a room adjoining this the twine is worked up into ship's fenders, anchor ropes, and other useful articles.

On again, we pass into rooms where the wire and spring mattresses are made, and also the woollen ones, and we again notice with what wonderful exactness the manipulators twist this wire into the required shape, and with what speed.

We also find them making sieves, using sharp tools to cut the wire and fasten it. The wood frame is first cut, and then pierced with holes by a machine worked with the foot, and so constructed as to twist round a pivot, blocked at every half-inch by stops, for sufficient time for the sharp awl, with which it is pierced, to pass through the wood. The holes completed, it is handed over to the men who thread the wire across and across ; and having filled the holes one way, they begin to carry them under and over the previous ones from the opposite sides, and at each cross indenting the wire to make a rest and stay for the new one, thus forming the ordinary open holes, and when we stop to think, it is perfectly wonderful how they manage to get these openings so true. They are made to all sizes, some being done with wire almost as fine as hair, and others very much thicker.

Next we come to the mat department ; there the men are working the looms and weaving the fibre mats we use at our front doors ; threading the long shuttle, and inserting the fibre between as quickly and perfectly as in our ordinary factories, where the sighted are employed.

There are, I believe, about 200 hands employed in these workshops, principally men, and all totally or nearly blind.

Each department has a sighted overseer.

The education of the blind is not of very ancient date ; when in 1260 St. Louis founded the Blind Asylum for the crusaders who lost their sight in Egypt, no place for education was left in its plan.

It was four hundred years after that, when James Bernouilli taught the first blind girl to write.

He was a famous mathematician, but his teaching this girl the seemingly *impossible* brought him quite as much fame as his mastery of angles and curves. Bernouilli's was, however, not an isolated success, but the true pioneer of blind education was Valentine Harvy, born in 1745.

He was struck with the success obtained by Abbé de l'Epee with regard to the deaf mutes, and resolved, if possible, to develop the intelligence of the blind. In 1784 he began printing in raised characters, and founded an institution, among whose pupils we find Braille.

Harvy simply took the ordinary Italic characters and printed them heavily on paper, so as to force the letters into relief on the opposite side. This was rather roughly done, but it held the field for some years.

In 1827 Mr. Gall, of Edinburgh, greatly improved upon this system, by using a much clearer type of a peculiar character, in which the curves of the Roman alphabet were replaced by angles.

Nine years afterwards he improved his letters very much, and built them up, "serrations," otherwise dots, very close together ; and in this serrated type the Religious Tract Society printed some books in the year after the Queen's accession.

Gall was followed by How, of Boston, and Alston, of Glasgow. Alston was followed by Lucas, of Bristol, Moon, of Brighton, and Louis Braille, the latter two styles being used at the present time.

Louis Braille was a French Inventor, born 1809. He was the son of an artizan, and a very bright promising young fellow, but unfortunately, when he was three years old, he was hurt with a knife, and lost his sight. When he was ten he went to the Institution for Juvenile Blind, at Paris, where he remained the rest of his life. He was a most distinguished pupil, and at seventeen became one of the masters in the school.

Up to this time all the various systems had had one *great disadvantage*, they could only be read, not written and printed* ; but Braille made it the object of his life to invent a system by which the blind could not only read, but write.

* Alston type could be printed but by a very slow process.

Profiting by the long pointed lines of Barlier, invented in 1819, he in 1829 produced the system which is now of almost general adoption, either in its original form or in its developments.

The system is a very simple one, consisting of a series of combinations of six dots.

The writing instrument doing duty for a pen is a small bradawl. To guide this a frame is used, consisting of a metal bed containing ten shallow grooves, or a series of groups of six little pits apiece, over this is fitted a brass guide punched with oblong holes.

This fits into the wooden slate. The paper is placed between, and the punches are made through the holes.

The guide allows the writer to write two lines at a time, and when these are done he shifts the frame downwards to the next set of holes, until the first page is written, when he turns the paper over and the lines on the second page are punched in the intervals, this making it quite legible.

One must remember that the reading is from left to right, but the writing is from right to left.

This system being so simple is capable of use in all languages. Even in China the Scotch Bible Society's missionaries have adapted it so as to print Chinese, and in Egypt, where blindness has always been common, the Koran is printed in Braille.

Another adaptation in our own country is the type-writer, having the Braille characters fitted on the keys, and thus the blind man, by touching the keys, strikes the ordinary letters on the paper.

Of the six Braille dots, there are 62 possible combinations, so that the alphabet does not need them all, therefore many of the rest are used for contractions, such as for, of, and, &c., which render the reading much easier, owing to the words being more compact.

The Americans have adopted the Braille alphabet, but have turned it on its side.

But reading and writing is unfortunately not all the blind have to learn. There is the other R, arithmetic.

Many plans have been devised to enable the blind to practise arithmetic. The simplest is Saunderson's board, improved by Ballie, but an addition sum on this slate is a tedious business.

The best system is the English, invented by Taylor.

We also find these blind pupils studying geometry, and astronomy by means of the beautifully constructed orrery, and carpentering, wood carving, euclid, modelling in clay,

music, gymnastics, &c. And in the kindergarten we have them learning forms by means of wood models, building with bricks. Tablet laying, *i.e.* the Kaleidoscopic figures of beauty formed by polished wood laid together, the dark colours being raised and the light flat. Stick laying, or forming common objects by means of laying the sticks in their shape. Pea work, paper folding, straw work, bead work, and the study of zoology by the means of the various beautifully made models of animals.

The boys as well as the girls are taught to sew, *i.e.* buttons, tape, binding, hemming, seaming, gathering.

By the adaption of Braille music can be written clearly and easily.

I am glad to find that not only the education of the blind is provided for, but also their enjoyment is considered, and that many well-known games have been adapted to their use.

Although it has never been heard of, that any man opened the eyes of one born blind, save One, still we are thankful to see that what can be done is being done, and in a most scientific manner at the Normal College for the Blind, at Norwood.

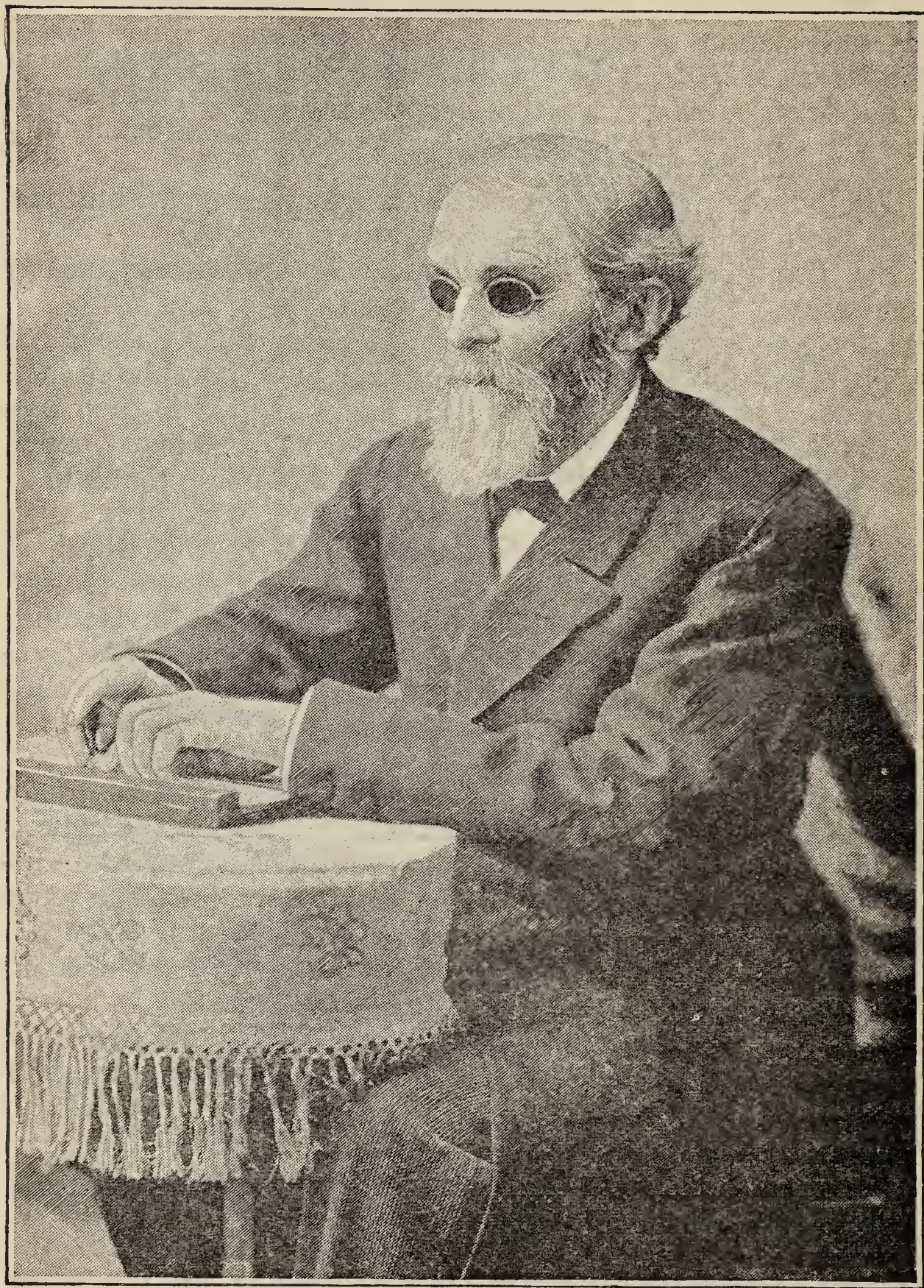
Dr. Campbell, its Principal, was born in Franklin County, Tennessee, on October 9th, 1834 ; he was deprived of his eyesight as a child of three and a half years old, by the sharp thong of an acacia tree running into his eye. Inflammation set in, and he was deprived of the sight of both eyes.

“After struggles and adventures, which alone would form an interesting romance,” says Canon Farrar ; “after large experience in the teaching of the blind, and thorough investigations into their condition—accompanied by efforts and self-denials truly heroic—he found himself in London, on January 20th, 1871.” He is *himself* a noble specimen of the power of a blind man, “to take up arms against a sea of troubles, and by opposing end them.” But it was no ‘happy *chance*’ which marked out his career for him—it was something much more. *Chance*, after all is but God’s incognito—“God’s unseen Providence,” which we call by a nickname.

Dr. Campbell having just completed a tour of inspection into the condition of the blind in Germany, his return ticket to the United States was taken for January 23rd, when on the evening of the 21st he went to a tea-meeting for the blind, held in London, and *that* meeting decided his fate.

The blind guests had a good meal provided for them, seemed happy and contented, and made grateful speeches, but on moving about them he found that all the contentment and gratitude were superficial. Almost all of them were

charity pensioners, hopelessly degraded by the sense that they were so, and feeling with bitter dissatisfaction that if a fair chance had been given them, they need not have been



DR. CAMPBELL.

pauperised. He found out that out of 3,150 blind persons in London, 2,300 depended on charitable relief. Depressed by these facts, Dr. Campbell deferred his voyage, sought out

Dr. Armitage, and entered with him into earnest discussion about the education of the blind, and finally promised to remain *one* year in England to organise new methods of instruction. That one year has now become *twenty-one* years.

In 1872 he opened the College near the Crystal Palace with two pupils. In 1873 the present beautiful freehold was purchased, and by the noble liberality of the Duke of Westminster, Dr. Armitage and others, it has gradually been fitted up with a library, gymnasium, swimming bath, all kinds of athletic apparatus, and said to be the best in England.

But it must not be supposed that things always wore this roseate aspect. New efforts are always met by suspicion, jealousy, criticism, and angry opposition, which are forgotten and denied when once perseverance has been crowned with success.

Those that return bringing their sheaves with them have often sown in tears and overwhelming disappointment. As late as September, 1871, Dr. Campbell says the discouragements were so great the movement had been practically given up. On a certain Saturday afternoon he and Dr. Armitage believed they were taking their last walk in the park, early Monday morning packing was begun. But during breakfast the letters came, and the first opened was from William Mather, Esq., M.P., and read as follows :—"Since your visit to Manchester I have thought much about the higher education of the blind, I wish to do my share and enclose a cheque. If more help is needed write to me." This letter gave us new inspiration, and the result is well-known.

Cannot we, as phrenologists, take a lesson from the above account, and determine by perseverance to do for Phrenology what Dr. Campbell has done for the education of the blind, set it on a higher footing.

Awful at the best must be the deprivations which blindness involves—literature and art have alike portrayed it in moving colours. Sir John Millais' picture, "The Blind Girl," in which he places the child in her coarse tattered dress in the midst of nature's most gorgeous colourings; a butterfly, in all its splendour, is seated on her shoulder; the sky is full of fresh sunshine after rain; the green fields are bathed in light, and in its pure flood, even the black wings of the rook become glossy, and almost purple, and on this glory the poor blind girl turns her sightless eyes in vain.

But thanks to the unquenchable fire of great men like Dr. Campbell, the blind now are not without hope, and are, by the untiring efforts of their patient teachers, taught to call forth *self-reliance*; the marvellous power of *will*; the unused

senses ; the untold reserve forces of their nature ; and call into existence new worlds of unsuspected capacity, to redress the balance of lost faculties.

E. CROW.

(To be continued.)

GOOD AND BAD POWERS OF OBSERVATION.*

SOME persons are good observers by nature, that is their lives and the lives of their ancestors have developed in them the power to see things as they are. Almost nothing escapes their keen sight. They will walk along the street, or the paths in the forest, and without much effort take in a very large part of the phenomena occurring around them. The phrenologists tell us these people have large perceptive, which I suppose means well developed and trained eyes, and back of the eyes, nervous centres, where objects and phenomena are taken account of and classified or put in their proper places. Other persons have very poor powers of observation. They do not see half that goes on about them. In very simple matters they may observe well enough, but when there is much to see and classify, they become confused and lose all power of discriminating accurately what is before them. If we ask the phrenologist about these people he says they have weak and untrained perceptive.

Again, there are some persons whose observing powers are good in one direction and not in another,—as for instance, the sea captain will sight a vessel on the ocean long before one untrained to use his eyes on the water, but the same captain might on land pass by unnoticed a thousand obscure flowers and plants that a botanist would observe with only one eye open ; or again a well trained observer of anatomical tissues will see at a glance under his microscope certain structures which a new student cannot possibly differentiate until he has been weeks and often months at work under a skilled teacher. I have noticed this often, not only in my own case, when trying to discover the terminations of the nerves in the liver, or kidneys, or the minute structure of blood corpuscles which need to be amplified, 1,000 or more diameters to be brought into view. At first nothing can be seen but the corpuscle as a whole, but after long training, minute structures come into the field of vision.

* R. P. Journal.

Let a botanist, a geologist, and a woodsman go through a forest, and each will observe different things. The botanist is on the look-out for new plants ; the geologist, for geological formations ; the woodsman will note every tree, its name, size, and other characteristics. Very different are the reports each brings home—I know this to be true for I have observed it myself. And once more, when the mind is occupied with one set of observations, other phenomena may take place almost under the eyes and not be observed at all. To illustrate : A gentleman who has now occupied a seat second to mine at the table for two or three years, and with whom I converse a good deal, finishes his breakfast or dinner and gets up and goes out very frequently (almost always) without my knowing it, although I sit at the end of the table and he is in full view. The reason is I am engaged at something else that preoccupies my attention. Two sets of observations cannot be fully attended to at the same instant without extra effort. Those whose power of concentration on the subject in hand is great, do not observe things their attention is not directed to unless these things come with unusual force to them so as to break up the mind's concentration on other things.

I believe that the difference in the keenness of observation of different persons is at the bottom of much of the mal-observation of spiritualistic phenomena, and also explains why tricksters have so often succeeded in passing off their deceptions as genuine. The phenomena of spiritualism require the keenest power of observation and much knowledge. A man who does not know how much can be done by trickery, is hardly able to judge as to the worth of his own observations. Even keen observers may be deceived by having their attention attracted to other things while tricksters perform under their eyes some wonderful trick unobserved. So far as relates to the mental phenomena, the same is true. The nervous system is a wonderful instrument. Those who know only of the mental phenomena which take place in ordinary life are often astonished at some occult occurrence, and at once attribute it to spirits, when it is only a product of unusual or hitherto unobserved and not understood nervous or psychical activity.

What is needed for studying psychological phenomena is a new set of observers, unprejudiced by old beliefs, with minds open to conviction, but not in haste to draw conclusions. These the Society for Psychical Research will, it is hoped, furnish. To them I look mainly for the best work in this new field in the future.

It does not follow, however, that the ordinary observer is

to shut his eyes and fold his hands and wait for these men to tell him what is true and what is false. Many ordinary observers have all the faculties for making excellent observers if they will train themselves and study the subject to be investigated thoroughly, so as to know what and how to observe. Often they have opportunities which are rare, which should not be allowed to escape notice.

In conclusion, let no one be over confident as to conclusions, no matter how well he is trained. It will finally be the consensus of a very large number of minds that will settle this question, and we can afford to wait for their verdict.

M. L. HOLBROOK, M.D.

THE FUTURE OF PHRENOLOGY.

WE are sometimes told that "Phrenology is all humbug, that its "professors" are imposters, that it has made no progress during the last 50 years, and that it cannot possibly be regarded as a *science*. Unfortunately, for the sceptical, these objections come from men who are usually ignorant of its principles and utility. Take, for instance, the article which recently appeared in *The Family Doctor*. The writer must have been unacquainted with the rudiments of the science, hence he thoroughly deserved the ridicule which his critics bestowed upon him. Still, we must not conclude from this that there are no loose joints in the phrenological armour. To quote Sir Isaac Newton, "we have only picked up a few pebbles on the beach, while the great ocean of truth lies before us." While it is gratifying to see our old warriors endeavouring to "Hold the fort," it is the duty of our young men to push the battle to the gate. There is a quotation from O. H. Holmes in the May *Phrenological Journal* that is worth repeating: "It's faith in something, and enthusiasm for something, that makes a life worth looking at." The study of "Character and Talents" embraces so many subjects. Among others may be named, "Criminal Anthropology," "Insanity," "Heredity," "Mind and Matter," "The Laws of Nature," "Education," in addition to "the choice of pursuits," "the training of children," "adaptation in marriage," "the cultivation and preservation of health," with which the professional man is daily familiar. We need more enthusiasm in our work. No great movement ever achieved success without it, and what science is there so full of glorious

possibilities as ours? I regret to see so much apathy among our young men. We have every reason to be encouraged. Recent discoveries in science have done much towards establishing the truth of Dr. Gall's deductions as to the localization of brain function, and medical men are finding this knowledge very useful in the treatment of brain disease. Only a few weeks ago the President of the British Medical Association congratulated its members on this fact, but in so doing he altogether ignored the founder of Phrenology, and declared that the discovery was due to Broca some 31 years ago. I instantly wrote to the *Nottingham Daily Guardian* where the report was published, and pointed out the error, but the Doctor never deigned to acknowledge his mistake. The British Association, which recently met at Edinburgh, discussed some subjects which should be interesting to every student of Human Nature and Social Reform. Amongst others was "Criminal Anthropology." It was very ably introduced by Dr. Clouston, Edinburgh, and an interesting discussion ensued, but few practical suggestions were made. My object in writing this article is to get both students and professional men to promulgate the truth and utility of Phrenology and mental science generally. This may be done on the platform, in the press, and in the circle in which we move.

Judges and magistrates must learn that before justice can fully be done they must know something of the heredity, brain condition, and environment of the criminal; ministers must learn that, before they can hope to influence for good all classes and conditions of men, they must know more of their mental and physical characteristics; teachers must learn that, ere they can impart instruction for which the youthful mind is most fitted, they must understand the formation of each child's brain; parents must learn that, if they would "train up a child in the way he should go," they must by example as well as precept point out the way; metaphysicians must learn that, before they can grasp fully the problems of life, they must be willing to accept truth and facts whenever and however presented; and this knowledge it is the duty and privilege of the phrenologist to inculcate. That this letter may be the means of stimulating my fellow-workers in the field is the earnest wish of the writer.

G. H. J. DUTTON.

LONDON,

IMPERIAL BUILDINGS, NEW BRIDGE STREET,

LUDGATE CIRCUS, E.C., JANUARY, 1893.

THE NEW YEAR. ALL growth is more or less painful, because the old clings tenaciously, and only blends into the new by a continual effort on the part of the individual. Genuine growth is a continued progression from one idea to another that is superior to it. The healthy tree of life is made up of true thoughts assimilated and evolved by the being. We are gratified with the increase in the circulation of the *Phrenological Magazine* on its entry into its fourteenth year. To progress, therefore, it is necessary for a Magazine of this nature to enlarge its scope, and to give out fresh ideas according to the advance of the age. Every opportunity of this kind it will be the endeavour of the Editor to embrace, so as to cut away from conventional trammels, and sail into the broad ocean of true investigation. That all our readers may be on the threshold of a Bright and Happy New Year, is the wish of the Editor.

THE DISCOVERER OF HYPNOTISM. WE owe our earliest knowledge of hypnotism to those wise men of the East, the Hindoos, to whom we owe our language, our religion, our philosophy and our Oriental rugs, as well as cholera and the opium habit. Who first in that land of dreams and dirt made use of hypnotic passes to put his fellow men into involuntary sleep is as obscure a personage in history as the discoverer of the oyster, and as unimportant, for while we enjoy all the material advantages of the discoveries of these unknown heroes of invention, we are not obliged to consider the claims of envious contestants every year, as we have to do in the case of the invention of the telephone and the discovery of America.

LONGEVITY. IT is generally agreed among Naturalists that the tortoise is the longest lived of all animals. The moral is plain. Don't risk your life running after something you are not sure of, and not worth the breath after being captured. In other words, don't run at all if you can get along better on a slow, sure walk. It is not work which kills brains so much as the hard way they go about using them.

REASONING
POWERS IN A
CAT.

A CORRESPONDENT of the *Morning Post* writes:—"I was walking in St. James's Square, on Tuesday morning when I saw a cat before me, looking very weak and weary, carrying something in her mouth. At first I thought it was a rat, but when I heard its little cry I knew it was a kitten. I was interested to see what she was going to do with it. She crawled across the road, and jumped into the Square, and carried her burden straight to the crossing-sweeper who was sitting by the rails, and laid it down close to her, as much as to say, "I know you will take care of it for me." The crossing-sweeper is the Good Samaritan of cats. She feeds them and keeps them warm, and as much as possible softens the life of misery it appears to be their destiny to lead. This was one of her cats; and she said her last litter were drowned. In the afternoon I called again to inquire, and I found the poor mother had made three more journeys, each time bringing a young one in her mouth, and giving it to her friend. I thought this courage and devotion to her young and confidence in one who had been kind to her, was very touching. She evidently knew that if her kittens were left where they were born they would be drowned without mercy, so she brought them to one whom her reason told her would pity and spare them. It is interesting to know that the writer made provision for the future of the feline family, which will find homes in due course with compassionate cabmen who frequent the rank in the Square."

GUY DE
MAUPASSANT.

THE curious fact about Guy de Maupassant is the one fixed idea that has taken possession of his mind, namely, that there is a vacant place in the brain, and that all his powers have failed him for that reason. *Où sont mes idées?* he has been heard to exclaim over and over again, and his attendant says it is his constant cry. A correspondent of the *P.M.B.* says, a ray of his old fancy sometimes comes to relieve this melancholy. These ideas for which he makes such pitiful quest, visit him at rare intervals, sometimes as birds, sometimes as butterflies. "The golden ones," Maupassant says, "come for glory, the dark ones for sadness, the rose-coloured for gaiety." But these visits are few; and his depression long and lasting, and the doctors consider his case quite hopeless. Dr. Voisin, of Paris, has made many observations on the region of the brain causing hopelessness, want of cheerfulness, which are valuable researches for the physiologist and phrenologist.

BRAIN
CURIOSITY. IN the recent number of the *Lancet* there is a most interesting article by the late Professor John Marshall on the brain of Mr. Grote, the eminent historian and banker, one of the founders of University College and for many years the Vice-Chancellor of the University of London. Mr. Grote died in June, 1871. His weight had fluctuated between 161 and 164 lb., his height was 5 ft. 11½ in., and he was neither very stout nor very thin. His family history was somewhat peculiar, for his paternal grandfather was a pure German who had married an Englishwoman, whilst his maternal grandfather was an Englishman who had married a French lady, but whose ancestry, however, was also partially English; so that Mr. Grote's descent was more than one-half English, one-fourth German, and less than one-fourth French. Eight years before his death this remarkable man expressed a wish in writing that his brain should be carefully weighed and examined by a skilled anatomist and any peculiarities noted, especially as to whether the cerebellum was deficient as compared with the cerebrum. The late Professor Marshall duly examined Mr. Grote's cranium and brain, and his report thereon is now published. It contains not only a mine of information on the details special to Mr. Grote, but it is especially valuable for its comments and observations on the general structure of the brain and its relations to some vexed questions in cerebral Physiology which are introduced into the report. In the present article, however, we must limit ourselves to the general characters and special details of Mr. Grote's brain and skull, omitting for the present some of the wider generalizations which are raised in the report. The brain, on its removal from the skull, with its covering of arachnoid and pia mater, weighed 49¾ oz. avoirdupois, which is three-quarters of an ounce heavier than the average weight of the European adult brain—if we take Welcker's standard of 49 oz.—and 1½ oz. heavier than the average English adult brain of 48¼ oz., as calculated by Dr. Robert Boyd from 110 observations. But Dr. Boyd's tables show conclusively that whilst the maximum weight of the brain is usually attained between thirty and forty years of age, it decreases at first slowly, then more rapidly, as age progresses, so that between seventy and eighty years of age its average weight is only 45½ oz. This would show that Mr. Grote's brain was about 3 oz. above the average weight at the age at which he died. The circumference of his hat on the inside was 23¾ in., and that is 1¼ in. above the average of English gentlemen.

(*To be continued.*)

THE MAN
WITH THE
IRON SKULL,
MR. ANDREW
HULL.

WE certainly hear of all kinds of abnormalities in fiction and real life, from the man with a silver skull, to less metallic marvels in the shape of Sampsons who break chains and carry elephants, but we have never advanced so far as to discover a person with an adamantine skull. From a scientific point of view the case in point is of a man who has premature ossification. At birth the skull was one solid bone, and did not contain, as is usual, eight distinct bones which only become solidly joined in the course of time. Another interesting fact which appears to have some connection with the strength of Mr. Hull's head and neck is, that all down the left side of his body he has hardly any feeling. He can move his limbs, but he does not feel pain acutely. In his daily performances he raises a heavy square block of iron on to his head. The floor of the platform shakes with its weight when he puts it down again, and on this is put "a hugh block of grey granite." He stands erect and receives blow after blow with a long handled sledge-hammer till, at the eighth or ninth blow the block is broken in two. His face shows the great concentration he puts into his eyes, and the drawn appearance of the lips, while the blows are falling. He once had a piece of marble 204 lb., and an iron plate 108 lb., rest upon his head. After a hard struggle the stone broke and fell to the ground. At first he only broke planks on his head, but as time went on he found he could bend iron bars an inch in diameter, on his bare head. He never suffers from headache. When boys broke their sticks over their knees he put his quite naturally on his head and broke them. He is also able to drive a large blunt nail with his bare hand through a plank two inches thick, so easily that it appears child's play to him. His cyclopean strength is certainly a strange freak of nature, which has been noticeable as long as he can remember.

Fowler Institute.

MEMBERS' NOTES.

*To business that we love, we rise betime
And go to it with delight.*—SHAKESPEARE.

THE members' meeting, which took place on December 12th, was presided over by Mr. Fowler, when the "Choice of Pursuits," considered phrenologically, was discussed.

Mr. Coleman opened the discussion by remarking that Phrenology

afforded the best possible guide one could employ in the selection of an occupation. The examiner, to be successful in his choice for a subject, must not only possess a good knowledge of the science, but must also have an equally reliable acquaintance with the pursuit he selects. He should be able to discriminate between cabinet-making and carpentry, engineering and watchmaking, banking and insurance, millinery and dressmaking, between a writer of fiction, science, and philosophy. There is no doubt whatever this *can* be accomplished by competent and experienced phrenologists, but students being acquainted with perhaps but a very limited number of avocations, naturally find some difficulty in arriving at a decision on the question of pursuits. To assist students in this particular branch of their training, a series of tables could be prepared—after the style of the one submitted—in which the various pursuits should be classified each under its ideal temperament, together with other necessary details, such as essential organs, secondary organs, &c. This would afford an easy mode of gaining an insight into a great variety of pursuits, besides showing the kind of work most suitable to each temperament or combination of temperaments.

Mr. Fowler remarked at some length on the need of practical advice being given by phrenologists, and the necessity of the latter getting hold of the whole spirit and soul of the individual, in order to arrive at the true character of a person. He considered it would be desirable for practising phrenologists to have a list of avocations by them, so that a distinguishing mark could be placed against the business for which the subject under examination was specially adapted, and those for which he was only fairly adapted.

Mr. Samuel said that to carry out Mr. Coleman's suggestion it would be necessary to fill many volumes, although it was of course requisite for students to know at least the rudiments of the subject. Happiness so much depends upon the proper use and harmonious development of the faculties, that the question arises, Should not a man select a pursuit where his weak organs are brought into play, rather than merely exercising his strongest organs? The highest professions are those which require the greatest exercise of the superior faculties, therefore the church may be regarded as the first of professions; that of the phrenologist second; and the doctor third.

Mr. Tovey considered if a man had to earn his own living, it would be a saving of time if he first followed a pursuit which engaged his largest faculties, as he would then have more time to devote to the cultivation of the smaller ones.

Miss Crow said she considered in this day of keen competition, that it was necessary to be specialists in whatever work one undertook.

Miss Fowler said she thought the suggestion of the tables a practical one to help students, and that phrenologists should be as definite as is possible in choosing an occupation for a subject. She also considered Mr. Samuel's *idea* of strengthening the weak faculties, and choosing an occupation that would necessarily stimulate such, an ideal and beautiful one. Few people take such a high and humanitarian view

of developing the mind as a whole, for generally individuals where they had to earn their own living, looked upon the brain as a mercenary organ, to get as much as they could out of it, though the largest organs, and not how they could perfect themselves into a harmonious whole. She said she would like to point out that Mr. Fowler's Register and Self-Instructor already contained tables to be filled up relative to professions and trades, and those students who studied Phrenology were enlightened on this point. That it was sometimes difficult to satisfy a parent upon the point of pursuit, as very often a phrenologist was told that what a child was most fitted for, was absolutely out of the question to put him to. Still she thought, whether rich or poor, the indications of the child's mind and the development of his head must be faithfully pointed out.

After a letter had been read from Mr. Smith, and Mr. Dommen and others had commented on the proposition, Miss Fowler proposed, and Mr. Ramsey seconded, "That it is desirable that tables should be prepared stating the necessary qualities to fit individuals for working in certain pursuits, and that members be invited to send in contributions of their observations." The proposition was carried unanimously.

After replying, Mr. Coleman stated that as this was the last member's meeting of the year it afforded us a fitting opportunity to express our best wishes to our absent friend and fellow-member, Miss A. M. Fowler, for a happy Christmas and a still happier new year.

* *

If the authorities of employment Bureaus really knew and appreciated the valuable assistance Phrenology offers towards the selection of a congenial employment, many of the coming signal failures would be averted, and where the failure has actually occurred the individual might be induced to try some other occupation for which he may be more suited. A resolution such as is capable of being worked by Phrenology operates slowly, but is nevertheless sure.

* *

In consequence of the Institute Annual Soirée, which will take place on Monday, January 9th, there will be no Members' meeting this month.

[G. B. COLEMAN.

Hygienic and Home Department.

HOW HIS MOTHER "MANAGED."

"YOU see how it is, my dear," he said, taking her soft hand, which had never done very hard work, and patting it reassuringly. "I'm poor—only two hundred a year, dear—and we shall have a struggle to get along at best—"

"I don't mind that in the least," she interrupted, stoutly, rubbing her cheek softly against his hand.

"And," he paused graciously having allowed the interrup-

tion, "we shall have to come down to strict economy. But if you can only manage as my mother does we shall pull through nicely."

"And how does your mother manage, dear?" she asked, smiling—but very happily—at the notion of the mother-in-law cropping out already.

"I don't know," replied the lover, radiantly; "but she always manages to have everything neat and cheerful, and something delicious to eat—and she does it all herself, you know! So that we always get along beautifully, and make both ends meet, and father and I still have plenty of spending money. You see when a woman is always hiring her laundry work done, and her gowns and bonnets made, and her scrubbing and stove-blackening done, and all that sort of thing—why it just walks into a man's income, and takes his breath away."

The young woman looked for a moment as if her breath was also inclined for a vacation; but she wisely concealed her dismay, and, being one of the stout hearted of the earth, she determined to learn a few things of John's mother, and so went to her for a long visit the next day. Upon the termination of this visit one fine morning John received, to his blank amazement, a little package containing his engagement ring, accompanied by the following letter:—

"I have learned how your mother 'manages,' and I am going to explain it to you, since you have confessed you didn't know. I find that she is a wife, a mother, a house-keeper, a business manager, a servant, a laundress, a seamstress, a mender and patcher, a dairy maid, a cook, a nurse, a kitchen gardener, and a general slave for a family of five. She works from five in the morning until ten at night; and I almost wept when I kissed her hand, it was so hard and wrinkled, and corded and unkissed. When I saw her polishing the grates, carrying big scuttles of coal, I asked her why John didn't do such things for her. 'John!' she repeated, 'John!'—and she sat down with a perfectly dazed look, as if I had asked why the angels didn't come down and scrub for her. 'Why—John'—she said in a trembling bewildered way—'he works in the office from 9 until 4 o'clock, you know, and when he comes home he is very tired, or else—or else—he goes down town.' Now, I have become strongly imbued with the conviction that I do not care to be so good a 'manager' as your mother. If the wife must do all sort of drudgery, so must the husband. If she must cook, he must carry the coal; if she must scrub, he must carry the water; if she must make butter, he must also milk the cows. You have allowed your mother to do every-

thing, and all you have to say of her is that she is an 'excellent manager.' I do not care for such a reputation, unless my husband earned the name also ; and judging from your lack of consideration for your mother, I am quite sure that you are not the man I thought you were, nor one whom I should care to marry. As the son is the husband is, is a good and happy rule to follow."

So the letter closed, and John pondered, and he is pondering yet.

ELLA HIGGINSON.

SOME UNSUSPECTED CAUSES OF DISEASE.—We constantly hear of and see professional and business people unable to work. The professional or literary man finds that his thoughts will not flow. He cannot write in an intelligent, to say nothing of an interesting, manner. The business man throws down his books. He can't make head or tail of them. Balances won't balance. Servants don't please, and everything is wrong for the want of right. They struggle on, without making progress. They are like weary travellers going up a snow-covered steppe, for two steps forward they make one-and-a-half back, and sometimes fail, struggle as they may, to make headway at all. The nerves are prostrated. Mental and physical exhaustion are pre-eminent. Medical men are consulted, pick-me-ups resorted to. Brandy and soda, strong cups of tea, rest, and a soothing pipe work the oracle for a little time, but the break-down comes at last. The stimulants and the tobacco have done for them what the whip does for a tired and hungry horse—*i.e.*, has taken the last ounce of strength out of them, and given them nothing but suffering and hard usage in return. "Change of scene and air is recommended by medical adviser." Literary and business work must be dropped. Brains weary, spirits dull, limbs lazy, and heart tired, they go. The sea trip, change of scene, and fresh air do good. *The phosphorous and ozone, partaken, inhaled, and assimilated*, do in many cases work wonders. But as long as alcohol, in any form, and tobacco are used, a return of bodily weariness, brain exhaustion, and nervous prostration may be looked for. There are no greater stumbling-blocks on the highway of health than these. I admit the temptations to use them are great. Besides the opinions and usages of society, there are the deceptive feelings which arise from their use. Even in moderation they are pernicious ; in excess, absolutely dangerous. We have found patients who, upon recommendation, have abstained from both, rally and speedily recover *without any other medical help*. As long as brain and nerves were weakened and oppressed by these drugs, whatever other remedies are resorted to the promise of health, like the glories of Macbeth, is fulfilled only in the seeming. The first hygienic hint is, then, to advise abstinence from habit detrimental to health ; and often the least suspected habit—the moderate use of alcohol or tobacco, or both—is the primary cause of continued ill-health.

SOME REAL CAUSES OF DISEASE.—It is so easy to blame overwork, confinement, financial worry, domestic inharmonies, and what-not, for ill-health, and leave the real causes—the gratification of self, insanitary and unhygienic habits (ignorantly or wilfully indulged in)—alone. A lady was once a great victim to neuralgia, facial neuralgia, of the periodical type, which was either preceded by, or accompanied with, derangement of the stomach. She blamed the use of vegetables as the cause of her stomach troubles and her neuralgia. She found that taking two potatoes to her dinner made her heavy and upset her for a time. There was nothing said of the pound, or three-quarters of a pound, of flesh meat she could take at a meal, or of the beer and the spirits which entered into her dietary, or of the strong tea which helped her so much at times—no ; not one word. The poor potatoes had to bear the blame. So we find others are inclined to blame everything save the real causes—the drinking and the smoking, the injudicious eating ; their neglect of the most obvious laws of personal purification and Nature's requirements. Nothing is said or admitted about the hours of rest lost in the fancied pursuit of happiness. The counting-house, literary labours, want of exercise, &c., get the blame. In fact everything gets the blame but the real causes.

LITERARY MEN AND THE USE OF ALCOHOL.—Rev. Joseph Cook, in reply to the question, “Can literary men, as a rule, do better work practising total abstinence ?” said “Assuredly, if they take proper care to sleep enough and maintain vigour by sufficient physical exercise. Every brain stimulated by alcohol is more or less disintoned. Such a brain injures the quality of its literary productions. No intoxicated brain is sound, and every brain more or less unsound has unsound ideas and sentiments.” This is assuredly sound philosophy, sound hygiene—in a word, the soundest of common sense. Of course Mr. Cook did not mean that sad abuse of brain power which arises from drinking at all hours, and drinking to excess, such as being more or less visibly intoxicated. He referred to the use of alcohol in small doses as a stimulant to help on literary work, just as some respectable business men take one or several small drinks during the day to enable them to get through business.

THE EVILS OF SMOKING.—Dr. B. W. Richardson is almost as hard upon smokers as upon drinkers. “They are not quite so bad as drinkers,” he says ; “but if drinkers deserve the gallows, smokers deserve penal servitude for life. Smoking disturbs the circulation, it often impedes digestion, it interferes with the fine adjustments of the senses, and sometimes impairs the lenses of vision altogether. Moreover, it generates a craving for itself in the nervous organism, always an evil sign, and indirectly it calls up, not infrequently, hereditary evils, like cancer, which would be latent if left alone.” Dr. Richardson speaks with authority, not as one of the scribes. His indictment against smoking is severe, but, unfortunately, is too true in every particular. There is always some hope of the victims of alcoholism abandoning

drink. Indeed there is abundant evidence they can do so. The devotees of the weed do not so readily give up the habit. Once tobacco gets a grip on the nervous system, the struggle is a long and an earnest one before "the smoke crave" is cured.

THE use of alcohol and tobacco undermines moral character. This fact is constantly brought home to us. That these drugs do unduly stimulate the propensities, the feelings, and the passions. Also, they weaken the powers of moral co-ordination, and self-government, and unbalance the harmony of the organisation. They tend downwards not up.

Notes and News of the Month.

GIVE Books! They Live when you are dead,
 Light on the Darkened Mind they shed;
 Good seed they sow from age to age,
 Through all this mortal Pilgrimage;
 They nurse the Germs of Holy Trust,
 They wake untired when you are dust.

—SIGOURNEY.

* *

THE article on "Skulls" has been unavoidably crowded out this month.

* *

THE contributors for the New Year include, Messrs. Caldwell, Holbrook, B. Hollander, Gray, L.L.C., J. Coates, G. Cox, L. N. and J. A. Fowler.

* *

EVENING Classes will be held early in the New Year for ladies and gentlemen, in Elocution, Physical Culture, Physiology and Shorthand. For particulars apply to the Secretary, Fowler Institute, Imperial Buildings, Ludgate Circus, E.C.

* *

CULTIVATE the physical exclusively and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training altogether—physical, intellectual, social, and spiritual—that the complete man can be found.

* *

A GENTLEMAN wisely remarked the other day, "*Character comes from Conduct, Conduct from Development.* Development is the outcome of heredity. Combined or single, the study of all these is infinitely more important than the mere suggestion of fitness for profit. Choice of occupation should be conduct, and again, the root of conduct is the highest possible that is man's portion. A profession in its modern view is brought down to the mere question of how to secure an income to maintain oneself which is connected only with a span of

time, while *conduct lives for ever*, and the understanding of the essentials to right conduct supersedes, and far outweighs all else combined." We think that words like these are worthy to be printed on all our New Year's cards and circulated broadcast. Let it be ours to spread the idea that the "*Survival of the fittest*" in us, shall be the *conduct* which will shine through our occupation that we may glorify the Author of all Truth, by raising our trade or profession to the work of harmonizing all the faculties of our minds.

* *

MR. JAY GOULD, who passed away on the 2nd of December, was a very remarkable man in his way. He was the Napoleon of Wall St. in New York City. He possessed a particularly intuitive mind; he was sagacious and knew how to make things fit to his purpose. He was not much of a talker. His head was particularly broad. His forehead was high and evenly balanced. He could keep his own affairs to himself and mind his own business; this must have been a remarkable feature of his mind. He was a great lover of home, could not have shown much taste for company or general society. His ambition was strong and he used and gratified it to the fullest extent. He had a mind that could control its feelings with wonderful ease. His Acquisitiveness, Causality, Intuition, Secretiveness, Cautiousness and Approbativeness worked together and combined to make him shrewd, taciturn, reserved, prudent—on the whole, capable of working out probabilities, &c. Language was not a strong feature of his mind.

* *

THE ladies of the Pioneers Club have issued a Christmas annual, which contains a large number of original articles, besides interviews with distinguished pioneers, portraits of whom are furnished. Some lady members contributing to the annual are content with the plain prosaic number, and are simply "Pioneer 98," "Pioneer 99," in accordance with what appears to be a cherished fashion among them. Mrs. Massingberd, the President, contributes an introductory letter, and "Pioneer 61" furnishes some Club Notes with a view to make known both what the Club is and what it is not. More than this, we gather that among members of the committee are Viscountess Harberton, Mrs. Eva McLaren, Mrs. Rose Crawshay, Mrs. Oscar Wilde, and Mrs. Frank Snoad, and that the Pioneers have a distinctive badge in the form of an axe, on which the member's number is inscribed. "Social evenings," "debates," and "Wednesday afternoons," figure in the Club programme. Finally, Pioneer 61 protests against an erroneous notion of the outside world that the Pioneers "are all 'very advanced women, mostly Radicals, Socialists, or faddists of some kind.' Although," says this lady, "we are proud to number many so-called advanced women in our ranks, we have also their exact opposites."

Watch carefully over your passions.
 Extend to everyone a kindly salutation.
 Yield not to discouragements.
 Zealously labour for the right.
 And success is yours.

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 Editor of the *Phrenological Annual* hopes, by 1894, to have a properly classified list of professional phrenologists, amateurs, physiognomists, graphologists, and medical hygienists, &c.

MR. W. WILLIAMS, of Port Talbot, has succeeded in securing twenty-four subscribers to the *Phrenological Magazine*, and hopes to gain several others by the commencement of the year.

MR. J. WEBB read a highly interesting paper on "Human Character," on December 6th, before the members of the British Phrenological Association, after which a discussion took place.

THE Editor of the *Phrenological Annual* regrets that Mr. A. G. Stooke, of 28, Bridge Street, Bristol, and Mr. J. V. Williams, of Wales, were accidentally omitted from the *Register* for 1893. Mr. Stooke is an earnest worker in the cause of Phrenology and kindred subjects.

IN December L. N. Fowler lectured on the "Language of the Faculties." Speaking of Constructiveness he told how a lad met him in the street one day, and asked him what he was fit for, whereupon Mr. Fowler told him to invent. "But I am poor," said the lad. He, however, went away determined to invent, and succeeded; and the next time Mr. Fowler saw the lad he had invented several useful patents.

THE American Phrenological Institute held their Third Annual Supper of the Alumni Association on the evening of October 18th, 1892, at the Columbia, New York City. About eighty members were present.

MR. C. BAKER, of Watford, wishes us to state that the word amateur against his name in the *Phrenological Annual*, 1893, is incorrect. We think, however, a distinction should be made between the phrenologists who devote their entire time to the science, and those who attach it to some other occupation. Mr. Baker is an artistic printer, and his spare time is devoted to Phrenology, hence, the word amateur was considered appropriate: but we are sorry the above stands as it is, if he has changed his occupation since particulars reached us.

RECENTLY, Mr. J. W. Taylor, of Morecambe, gave the first of a course of lectures on Phrenology in the Phoenix Rooms, Lancaster, in conjunction with Mr. W. Musgrove, of Blackpool. The subject was, "Heads, and what they indicate," and was illustrated by

diagrams of peculiar characters and remarkable men, with a view of showing the contrasts which prevail in human nature. Mr. Taylor, who has a very pleasant and easy style of delivery, commenced by remarking that the subject upon which he had to speak was a large one, and upon which very much might be said. There was one thing always interesting to himself, and it was this—that whether they believed in Phrenology and Physiology or not, they could not but believe there were very great contrasts in character. No two persons were alike, and no two heads were of the same exact shape, and they found throughout all nature that the head corresponded with the character. That being the case they should go further, and try and find out the characteristics of those differences. He believed that everything depended upon the formation of the head. At the close of the lecture delineations of character were given by Mr. Musgrove through persons selected from the audience, and proved very interesting. The following evening the subject dealt with was “What shall we do with our boys and girls?” —*Lancaster Gazette*.

MISS J. A. FOWLER gave a lecture on “Carlyle,” and showed two portraits of him, one as a younger man, when Mr. Fowler first knew him, and one of later years. Also portraits of Cuvier, who was lecturing in Paris when Carlyle was there, and whom the latter had the privilege of hearing. Also a portrait of Schiller, whose exquisite life was referred to. In Combe’s diary he mentions going to London, May 18th, 1858, during which visit he and his brother visited Sir James Clark, dined with Lord Ashburton, where he met Lords Lansdowne and Granville, Thomas Carlyle and wife, and others whom he describes. Miss Fowler said, when the worst has been said about Carlyle, a figure is left still of unblemished integrity, purity, loftiness of purpose, and inflexible resolution to do right, as of a man living consciously under his Maker’s eye, and with his thoughts fixed on the account which he would have to render of his talents. One thought was referred to which we will quote, which Carlyle emphasized: “Our works are the mirror wherein the spirit first sees its natural lineaments.” Hence the folly of that impossible precept—“Know thyself,” till it be translated into this partially possible one—“Know what thou canst work at.” In this the sage of Chelsea agreed perfectly with Phrenology. He was modest, retiring, courteous, with a native refinement. He cared but little for the ordinary pleasures of the world.

Book Notice.

BINDING CASES for *Phrenological Magazine* can now be obtained from this office, price 1s. 3d., post free; or we will find case and bind the magazines for 2s. 6d.

I LIKE the laughter which opens the lips and the heart,—that shows at the same time pearls and the soul.

Answer to Correspondent.

ADCOCK, Birmingham.—The size of brain may be marked full, and yet there will often be some faculties that are large or very large ; the size of the brain does not limit every faculty to average, full, large, or very large, according to its size. We often have a twenty-three inch brain which contains several faculties of only average development.

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 6s., for twelve 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.]

B. (London).—The photos of this gentleman indicate that he has a superior quality and tone of mind. His brain power is in the ascendancy and predominates over his body, but if anything he uses up too much of his vital forces. He needs to pay particular attention to his health. His mental characteristics are strongly marked. He has an expansive mind and he takes broad and extended views of things generally. His imagination is of the highest order, he loves to embellish, beautify, and add to, for effect ; and tones up and enlivens the commonplace and realistic ; his mind and actions all bespeak ideals, a reaching up, a soaring high ; and an emotional nature. There is brain force and energy, cautiousness and physical restraint, with candour and frank disposition. He has an outspoken character, he says what he means and means what he says. His mind is an intuitive one ; he is keen of perception of the sense and truth of things. He delights in the actions of man, loves to study him in all his aspects ; he is shrewd and shows great insight generally, is a deep thinker, is sound and reliable in judgment. His memory for general events is surpassed by his memory of forms and expressions, which is very good ; he is neat and systematic and shows much appreciation for the blending of colours ; he should show ingenuity in all he does. His sympathies are a strong characteristic, and his nature generally towards others is warm, social and affectionate. He delights in doing good and rendering service to others for humanity's sake. He has a strict sense of right and wrong, of duty and obligation, and is a severe critic with himself and the conduct of others when it touches morality.

J.N. (Milnathort).—The photo of this gentleman indicates an active and energetic mind. He has a strong hold on life, he is earnest and a hard worker, and he makes the most of his abilities, the tendency is to do too much, to overstrain. He uses to the full all his powers, he is restless and energetic and shows a very determined spirit. He shows considerable foresight and intuitive perception of the issue of events. He is a deep thinker and reasoner. As a worker he is systematic, decidedly methodical, a lover of order and decidedly ingenious. He is a fact gatherer and a keen observer, he is well balanced by his firmness, caution, and conscientiousness, these in combination with his other characteristics shape a character well fitted to a sphere of usefulness amongst his fellow-men ; his mind is one calculated to tone up and invigorate all those with whom he comes in contact.

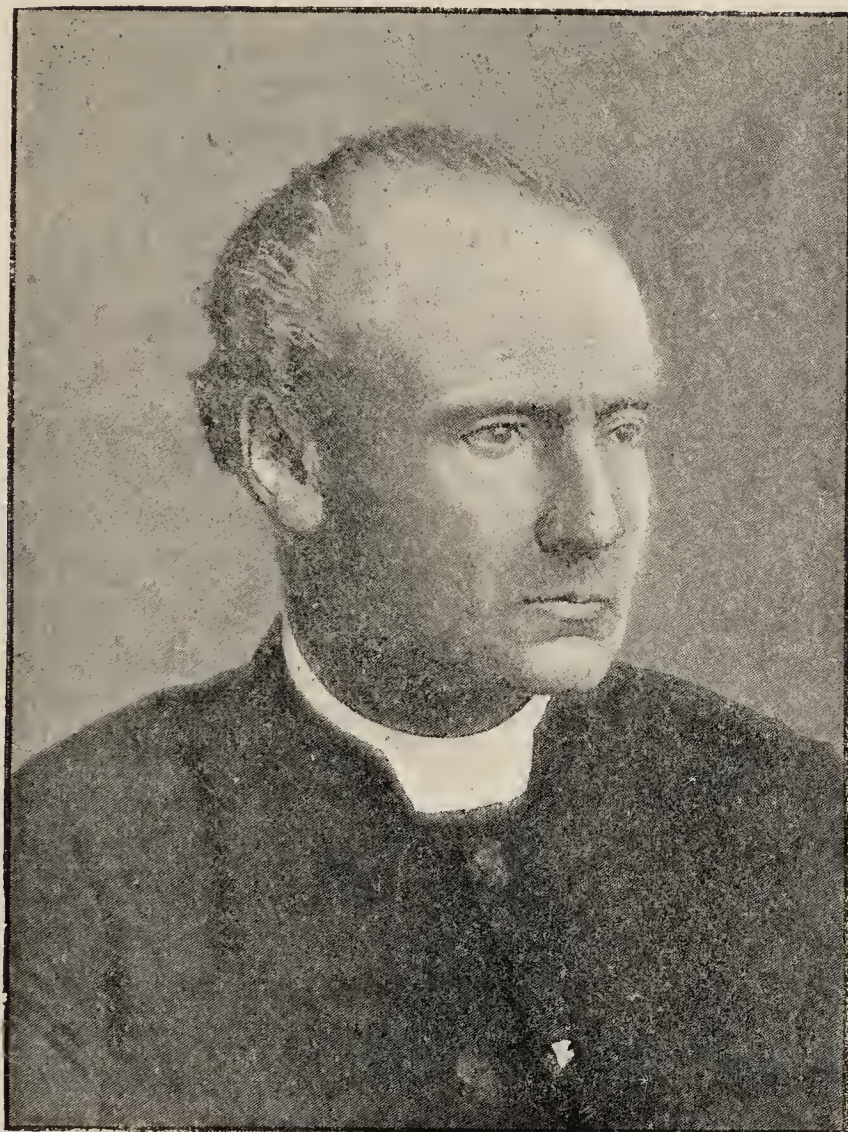
S.A.S. (Newport, Mon.)—The photos of this gentleman indicate their possessor to have a strong forcible mind ; he has considerable restraining powers, prudence and forethought being strong characteristics. He is equal to whatever he undertakes, he is reliable and methodical, and orders all his actions by well-grooved systems. He is decidedly ingenious and shows considerable constructive talent. The general indications tend to show a conservative and staple mind. He has considerable presence of mind and sustaining powers, he is quick to see and draw inferences, he has good judgment and insight into character ; his memory of events is not so strong, memory of faces very good,

G.S.S. (Heavitree).—This gentleman has a highly social and friendly disposition. His character is uniform, and he should be known for his versatility of talent ; he possesses considerable power of imitation, and is able to adapt himself to circumstances ; he is quick to understand and take on the ways of others. He is very sympathetic, and is liberal minded ; his resources are seldom exhausted, his energies and disposition to do are so extended. He is staple, and rather positive ; he is very ambitious ; he is finely organised, rather sensitive, and has a lively imagination. He has a natural love of oratory, and would develop into a good speaker. He has considerable abilities for designing and reproducing things that he has seen ; his memory of things, generally, is remarkable.

R.L.H. (Maryport).—This gentleman should be known for his energy and his working abilities ; he is no idler, he must be doing something ; he has large sympathies, and entertains broad views of subjects. He is not content with a limited sphere of action, but must work for the cause of mankind. He is very kind-hearted, and desires to be a help to others ; he is a cautious and thoughtful man, rather enthusiastic. Is decidedly social, and has a strong affectionate nature. He shows considerable constructive ability, and a practical common-sense brain—one fitted for every-day life, and his resources are such (if he does not over-tax himself), that he can render much useful service and achieve good results.

THE
Phrenological Magazine.

FEBRUARY, 1893.



(From Photograph by Messrs. Russell & Sons, Baker Street.)

CANON WILBERFORCE.

THE organization of this gentleman indicates a powerful brain, and a strong original cast of mind. His head is particularly high, which gives power in the moral and reasoning faculties. He is especially sharp, quick, and brilliant, and he is likewise strong, sound, and thoughtful. Has a good faculty to entertain in conversation. Should be fluent as a speaker and also able and sharp in debate, for he thinks much, and knows what he is talking about. He has more than ordinary reserve power when he

has apparently exhausted himself. He does not tell all he knows at first. He is particularly good at answering questions and comprehending the subject of the conversation. His base of brain is about the average size, at the same time there is a great degree of activity and sharpness of mind. His superior brain being large should make him noticeable for his uniform strength and power to perceive the points in argument. Such a man cannot go into a public capacity without making a distinct mark in the world. He does not exhaust himself in one speech, but only prepares the way for another still better. His memory for stories and facts is especially good. He has power to think and pass judgment on matters and things, and has remarkable ability to explain his thoughts and ideas distinctly. He can entertain and instruct where there is intuitional power and sound judgment required. He is a man of method and accuracy, and does not have to do his work over twice or say a thing and then correct it, but applies himself to a subject as he goes along. He is exceedingly firm, persevering and circumspect ; is also conscientious and careful to do exactly as he agrees to, or as he thinks is right. He is not timid or afraid of committing himself when he knows he is right. He is qualified to exert a regulating and modifying influence, and has a stimulating effect on others even though he says but little. He is adapted to be a regulator among men. He has the power to suit himself to any occasion, and to adapt himself to a variety of work and thought. He has good general perceptive power to estimate men and things, and is sound and substantial in his arguments. Having a quick perception of the ridiculous, absurd and witty, as a speaker he should throw off a great deal of humour and say much in a little. He is decidedly original, takes a course of his own, and does not necessarily follow anyone else's track. He often shows more power in the handling of a subject than those who have paid more attention to it, for he condenses and becomes so easily inspired that he gains the confidence of men. He has energy, industry and force of character, which incline him to be thorough in what he does.

L. N. FOWLER.

So should we live that every hour
May die, as dies the natural flower,
A self-reviving thing of power ;
That every thought and every deed
May hold within itself the seed
Of future good and future need.

—*Lord Houghton.*

SUBLIMITY.

BY JESSIE A. FOWLER.

“ Greatly begin. If thou have time
But for a line, be that sublime ;
Not failure, but low aim, a crime.”

THE definition of Sublime : *Sublimis*—probably from *Sublevare*, to lift up. Lifted up, high in place, exalted aloft in a mental and physical sense ; distinguished by lofty or noble traits.

It was even said of some men that they were sublime, like De Quincey said of Julian : “ The age was fruitful in great men, but if we except the sublime Julian, leader, none as regards splendour of endowments stood upon the same level as Cicero.” Sublimity shows itself in awakening or expressing the emotion, awe, adoration, veneration, heroic resolve, and is dignified, grand, solemn, and stately ; said of an impressive object in nature, of a noble action, of a discourse, of a work of art, of a spectacle. Sublimity shows itself in elevated manner, lofty carriage or mien. In authorship it shows itself in a grand and noble style that expresses lofty conceptions. Addison says, “ Milton’s distinguishing excellence lies in the sublimity of his thoughts.” “ The sublime rises from the nobleness of thoughts, the magnificence of words, or the harmonious and lively turn of the phrase.”

Bishop Taylor says, “ An ordinary gift cannot sublime a person to a supernatural employment.” Many people think Sublimity only belongs to nature as applied to scenery, but it bears a personal significance, a nobleness of nature or character eminence, or an elevated feeling consisting of a union of astonishment and awe, at the contemplation of great scenes and objects, or of exalted excellence. It also means grandeur, magnificence. The mental state indicated by these two words is the same, namely, a mingled emotion of astonishment and awe. In speaking of the quality which produces this emotion, we call it grandeur when it springs from what is vast in space, power, &c. ; we call it Sublimity when it springs from what is elevated far above the ordinary incidents of humanity. An immense plane is grand. The heavens are not only grand but sublime, from their immense height. Exalted intellect, and especially exalted virtue under severe trials gives us the sense of moral Sublimity, as in the case of our Saviour in his prayer on the cross. There is also a melancholy grandeur in the gigantic power of sin, misery, and suffering.

Sublimity is as requisite to man’s character as Ideality or

the other surrounding faculties. I consider this faculty is particularly necessary for us to understand and appreciate.

Phrenology is a scientific subject, hence we need to be lovers of science, and able to appreciate the great works of nature. My idea of Sublimity is, that it is more comprehensive than is generally understood. In the early days of Gall's and Spurzheim's discoveries, this faculty was merged into



THE LATE LORD TENNYSON.—Sublimity.

(From Photo from "Cameron Studio.")

Ideality, and I think we should remember that the fore part of Sublimity gives the expansiveness of mind, that is sometimes only attributed to Ideality, as on the phrenological bust that word is placed on the fore part of the line.

My father examined these parts very definitely and could not put Ideality and Cautiousness together. He found that part of the brain was different. Sublimity was developed in orators like Preston, who had great power of swelling and

expanding. A large stream ran through the country, and people were disposed to make a good deal of that stream, and wanted to make use of it for a dock, but Preston made fun of it to such an extent as a port, that the scheme was abandoned.

Rev. Mr. Bascom, Methodist preacher, had a particular facility for making anything sublime—thousands into millions. My father and his brother watched the heads of such men closely. Newland Maffitt, a preacher, worked everything up extravagantly and exquisitely, and magnified to a great extent. My father came to know him familiarly. He expressed large Ideality, Sublimity, Imitation, and Language, and had an exquisite nervous temperament.

For science, Sublimity is necessary. I have rubbed up against men who think science is a dull list of statistics. Those who have not tried for themselves can hardly imagine how much science adds to the interest and variety of life. It is altogether a mistake to regard it as dry, difficult, or prosaic. "A wise man's eyes are in his head, but the fool walketh in darkness," is applicable to men who love and do not love science.

To be sure, technical works, descriptions of species, &c., I know bear the same relation to science that dictionaries do to literature. Now a dictionary, especially Webster's, can only be truly appreciated by large Sublimity. I admire and respect the student who can read poetry out of a dictionary, and who has Sublimity enough to actually study it. Occasionally science may destroy some poetic myth of antiquity, but the real causes of natural phenomena are far more striking and contain more true poetry than those which have occurred to the untrained imagination of mankind.

In endless aspects science is as wonderful and interesting as a fairy tale.

Sublimity shows itself in expressions of delight or appreciation of small things. Some think that Ideality only can appreciate little things, but I tell you an Address on "Little Things" is one of the largest subjects a man can take. The little button which the child pressed at Hellgate, New York, and which blew up the surrounding rock, was a great object of admiration. Some of the most insignificant things in nature are the most sublime. The microscope, to my mind, is more truly appreciated by natures who have large Sublimity than those who have large Ideality.

It has been calculated that a particle of albumen contains no less than one hundred and twenty-five millions of molecules. In a simpler compound the number would be much greater; in water, for instance, no less than eight billions of

molecules can be seen under a powerful microscope. It requires a spacious mind to comprehend this. Now, if we could construct instruments far more powerful than any which we now possess, they could not enable us to obtain by direct vision any idea of the ultimate organization of matter. So it is with the minute brain cells which are so wonderfully constructed; it requires the keenest sense of Sublimity to appreciate them.

Sublimity has many uses. For instance, in the discovery of anæsthetics. At the beginning of the century Sir Humphrey Davy discovered *laughing gas*, as it was then called. He found it produced complete insensibility to pain, and yet did not injure health. A tooth was actually extracted under its influence, and of course without suffering. These facts were known to our chemists, they were even explained to the students in our great hospitals, and yet for half a century the obvious application occurred to no one. Operations continued to be performed as before, patients suffered the same horrible tortures, and yet the beneficent element was in our hands; its divine properties were known, but it never occurred to anyone to make use of it then. The conception of the benefit of such a discovery was not sufficient to bring it forward, although the practical illustration of its use had been explained. This may not seem to be the province of Sublimity, but the more we look at the faculty in a comprehensive light, the more we shall see that a want of appreciation of many useful arts, prevents them from coming into every day use.

Aristotle appreciated the diversity of the powers of the mind and the division of the brain into various functions, but it was not until Gall's discovery of the great division of the mind into faculties, that any practical understanding of the brain was arrived at.

Sound is the sensation produced on us when the vibrations of the air strike on the drum of our ear. When they are few, the sound is deep; as they increase in number it becomes shriller and shriller; but when they reach forty thousand in a second, they cease to be audible. Sight is the effect produced on us when waves of light strike on the eye. When four hundred millions of millions of vibrations of ether strike the retina in a second, they produce red, and as the number increases the colour passes into orange, then yellow, green, blue, and violet. But between forty thousand vibrations in a second and four hundred millions of millions we have no organ of sense capable of receiving, yet between these limits any number of sensations may exist. We have

five senses, but sometimes fancy that no others are possible. But it is obvious that we cannot measure the infinite by our own narrow limitations, and the education of the faculty of Sublimity has not as yet been so thoroughly understood as it will be.

This faculty, of course, can be put to a bad use as well as to an exalted one, namely, it can pervert and exaggerate to such an extent as to almost lead one to suppose that the conscience is dead or sleepeth. If parents knew how to train this faculty by elevating it to appreciate some one of nature's great works, instead of letting it run wild over idle exaggerations on daily occurrences, there would be a legitimate expression to a very valuable faculty. Instead of which, children are punished severely for misrepresenting the truth, when they are simply picturing the images their little minds conceive. Lubbock, in his "Senses of Animals," says we find in animals complex organs of sense, richly supplied with nerves, but the function of which we are as yet powerless to explain. There may be fifty other senses as different from ours as sound is from sight; and even within the boundary of our own senses there may be endless sounds which we cannot hear, and colours, as different as red from green, of which we have no conception.

The familiar world which surrounds us may be a totally different place to other animals. To them, it may be full of music which we cannot hear, of sensations which we cannot conceive, and, I may add, organs which we have not yet conceived. My own Sublimity has already become actively engaged over one new faculty, the full light of which I have not yet come into possession. To place stuffed birds and beasts in cases, to arrange insects in drawers, and dried plants and leaves in books, is merely the drudgery and preliminary of study; while what follows draws out the intelligence of Sublimity, namely, to watch their habits, to understand their relations to one another, to study their instincts and intelligence, to ascertain their adaptations and their relations to the forces of *nature*, to realise what the world appears to them. These constitute, as it seems to me at least, the true interests of natural history, and may even give us the clue to senses and perceptions of which at present we have no conception.

We were speaking of science and its endless aspects—truly it is as wonderful as any fairy tale. Byron aptly says:—

"There are things whose strong reality
Outshines our fairyland; in shape and hues
More beautiful than our fantastic sky."

One has got into a groove of thought by supposing that

the perceptive faculties are alone necessary to give the scientific craze, while if we step a little further back in the cranium we shall find a faculty which enhances a butterfly's wing, the tiny star in the firmament, the petal of the daisy.

It is not a little amusing to hear some people exclaim with Dr. Johnson that when you had seen one green field you had seen them all. Socrates possessed, like Johnson, such a type of intellect without science, he once said he was always anxious to learn, but from fields and trees he could learn nothing.

It cannot be true of all botanists that they

"Love not the flower they pluck and know it not,
And all their botany is but Latin names."

Nor of anatomists,

"They love not the bone they study, and know it not,
For all their 'natomy is but Latin names."

For a moment consider with Ruskin what we owe to the meadow grass, to the covering of the dark ground by that glorious enamel, by the companies of those soft, countless, and peaceful spears of the field ! Follow but for a moment more the thought of all time that we ought to recognise in these words. "All Spring and Summer is in them, the life of the sunlight upon the world falling in emerald streaks and soft blue shadows, when else it would have struck on the dark mould or scorching dust." To be entranced with one science you can hardly fail to feel an interest in them all. Who among you would not have liked to have heralded to the notice of all men the fifth moon to Jupiter, which has just been discovered by patient and diligent watching and an intense appreciation of the heavenly bodies.

Sublimity makes the true student stand on an eminence from which he looks back on the universe of God, and forward over the generations of men. Even if it be true that science was once dry when it was buried in huge folios, that is certainly no longer the case now ; and Lord Chesterfield's wish, that Minerva might have three graces as well as Venus, has been amply fulfilled. The perceptive faculties often exist without Sublimity, the same as many scientists have only the feeling for nature that we commonly share "with the weed and the worm." They love birds as boys do—that is, they love throwing stones at them, or small shot ; or wonder if they are good to eat, as the Esquimaux asked about the watch ; or treat them as certain devout Afreedee villagers are said to have treated a descendant of the prophet—killed him in order to worship at his tomb ; but gradually we hope that the love of science or the Sublime will become

more and more, as already it is to many, "a faithful and sacred element of human feeling."

When the untrained eye will see nothing but mire and dirt, science will often reveal exquisite possibilities. So with conceptions of character, and the future possibilities of heads and minds you are asked to delineate. The mud we tread under our feet in the street is a grimy mixture of clay and



J. R. WHITLEY.—Sublimity.

sand, soot and water. Separate the sand, however, and you have the opal. Separate the clay, and it becomes a white earth, fit for the finest porcelain; or, if it still further purifies itself, you have the sapphire. Take the soot, and if properly treated it will give you a diamond. While, lastly, the water, purified and distilled, will become a dewdrop, or crystallise into a lovely star. Or, again, you may see as you will in any shallow pool either the mud lying at the bottom, or the image of the heavens above.

The case of an anxious mother who brought her son all the way from Wales, illustrates this point. The father is a farmer, and the lad desires to follow the plough. He has small Self-esteem, but is like the soot before-mentioned, which, if properly treated will give you a diamond, for he, if properly educated and made to feel his ability to study, will make one of the first lawyers and judges of the land. The mother strongly disapproved of the idea of the farm, and wished the lad to study. She saw possibilities in him that many would have passed by. Though a very practical woman, she fortunately saw through the eyes of her Sublimity as well, and raised her estimate of the boy's capabilities not to the level of her ambition, but according to what she thought he could do ; and when told he would make an able lawyer, she was satisfied and felt repaid for coming so far.

(To be continued.)

DEBATE IN THE CRANIUM ; OR, A TALK OF THE FACULTIES WITH EACH OTHER.

BY L. N. FOWLER.

(Continued from page 10.)

LOCALITY is a wandering Jew, going up and down the earth spying out every locality, nook, and corner of creation. It is an explorer, a Rambler. It aids greatly in expanding our mental vision and enlarging our range of knowledge. It likes a place for everything, and wants everything in its place. Without it we should be afraid to go out of sight of the house ; should be afraid to turn a corner, or venture into a forest that we could not see through. Without it we could not find what we had put away with care, and should live and die where we were born.

Comparison says, "I see that analogies and resemblances run all through nature, that one law, quality, and condition of things, has a bearing on all others, and that association and combination joined to utility, appear to be the order of nature, a condition in science, and a law in philosophy." It takes the place of an essayist dissector and analyser. It sees the bearings and relation of things. It comes to conclusions after it has averaged the subject and taken all things into account. It also divides, discriminates, analyses, criticizes, and dissects a subject.

Causality, who is always going back to the beginning of things and forward to the end, trying to account for everything, says, "I would like to know all about the power that

created the universe and the object of the whole design of man's existence ; his birth, growth, death, and immortality of the mind." Causality is the key of the mind. It opens all nature's treasures and explains their value and meaning. It is a great expounder of nature's truths and laws, and leaves nothing in the dark. It is not satisfied till everything is understood. It reveals all the secret and hidden things of nature and ventures to expound and reason upon Divinity.

Intuition says, "I think I can penetrate a little into the future and into motives of the actions of my friends, I can read some without letters, can discern the signs of the times and almost predict what is going to take place. Can see somewhat into hidden and undeveloped character so as to like or dislike at first sight."

Imitation is the elastic element of the mind ; the plagiarist. It imitates others and acts an artificial part. It mimics and copies after others. It gives the capacity and disposition to assume a character, or it enables persons to act out their own thoughts and feelings. It gives the ability to copy others and have the same manners. With Mirthfulness it disposes persons to act grotesquely, to take others off in walk, action, expression, and voice, like George Grossmith. It gives ease and grace to the manners. Art, mechanism and manners are copied and multiplied, and thus this faculty becomes a civilizer. Without it a person is odd, awkward and unique.

We possess something that cannot be seen, heard, tasted, weighed, measured or divided. Yet it grows, and may be strong or weak, in the young or old, bright or obscure. It had a beginning but no one knows when or where it will end. It is never discouraged. It never gives up to despair. It never says die. It is a constant stimulant to the other faculties. It elevates us above trouble. It gives us a clear sky, a warming, growing sun, a genial expectancy, a soft bed, a cushioned chair, a spring easy carriage, bright prospects, large dividends and a fortune almost in hand. It is the faculty of Hope, and it makes the mind in this life look always ahead. Buoyancy is based on the hopeful element of the mind and puts us on stilts, on a pinnacle, and helps us to look over the hill, over the Red Sea, over the Jordan, beyond the battle of life.

Hope yields in most things in this life the greatest amount of happiness in anticipation. Boys are more happy when they are running after the butterfly than after they have caught it. For after it is caught they quarrel about to whom it belongs. So it is often in making a fortune ; in getting

married ; in gaining office ; in having power. Possession brings responsibility, and that produces care, anxiety, and often trouble. Hope makes us joyful, it quickens the imagination and makes us see everything in the best light, and thus the butterfly is always more beautiful before it is caught than afterwards ; the fortune is larger before it is made, and easier to take care of than afterwards. The anticipated wife is nothing less than an angel ; the wife is often nothing more than a woman. The anticipated heir in the family will be nothing less than a beautiful cherub, a darling pet. The child in hand is crying, cross and sickly, and a source of constant care. That which makes a journey short, a burden light, and a future bright, should be hailed as a gift of God. I pity a person who has nothing to hope for, he is like Xerxes who was utterly cast down because he could not find a new pleasure, and he offered to give a fortune to anyone who would invent one. Small Hope in one lady produced such an effect as to cause her to become so melancholy that she drew her blinds down to keep the sun out of her house and her heart, for her face was as long as she could make it.

Hope says, "I was remarkably developed in Sir Walter Scott, and was the secret of his buoyancy, and cheerfulness when he was weighed down by accumulated misfortune, debt and anxieties. When at the age of fifty-five he found himself pressed by creditors to whom he owed more than £100,000, he calmly sat down and began to win by literary toil the money due. 'Gentleman,' said he, 'time and my efforts against any two. Let me take this good ally into company, and I believe I shall be able to pay you every farthing.'"

Veneration, the centre and capstone of the moral group, looks up adoringly and says, "Surely there is a great creating power so true and wise as to be worthy of fear, homage, and obedience." "Yes," says Spirituality, "and I believe there is a spirit that pervades all nature, and knows our thoughts and hears our prayers. I am the eye of the mind. I can see in the dark. I am a powerful spur. I bring forth latent energies. I am a prop that supports when all other aids fail. I see angels and hear them whisper. I inspire the young. I reveal to the strong. I encourage the aged. I am large in Peruvians, who are exceedingly credulous, who took the Spaniards for superhuman beings. I have no power in the New Hollanders, for when Capt. Cook passed near their shore I could not create any enthusiasm even about so novel a spectacle. In Mr. Bedlam I was so large that he became insane on this point, and constantly saw phantoms and acted as though they were realities. He admitted that he ex-

perienced peculiar and uneasy sensations in this part of his head, when afflicted with visions. I am often as much, if not more, deranged than any other faculty, and then people always believe themselves to be supernatural beings. In Whitefield and Ann Lee, founder of the Shakers, I was very large, but small in Thomas Paine, Voltaire, Cardinal de Retz. I gave to Joan of Arc her power to believe that she had communication with God through St. Michael, who appeared to her and made known his will in regard to France. I helped Socrates to guide with a superhuman sense. I helped Tasso to understand spiritual subjects. In Swedenborg I dwelt supreme, so much so that he said he often felt that he communed with God Himself, who gave him a knowledge of the spiritual world. He was thoroughly sincere, but so highly enthusiastic that it requires a similar mind to follow him in his writings. Napoleon was ever pointing to his star of destiny and lucky day."

Benevolence says, "I am the faculty which supplies sympathy, delights in doing good, in showing mercy, charity and liberality. I help those who cannot help themselves. I encourage the broken in spirit, have the welfare of mankind on my shoulders, and take a universal interest in foreign as well as home missions. I often sacrifice my own inclinations when by so doing I can add to the happiness of others. It is my business to supply the soft answer which turneth away wrath. In Father Mathew, the noted temperance reformer, I was very strongly developed, also in Whittier, the American poet, whose writings and character showed a remarkable degree of philanthropy. I was so large in Gosse that he could not resist any solicitation whatsoever. He gave away two fortunes for charitable objects and, on inheriting a third, had a guardian placed over it that he might not give that away also.

Benevolence is like oil on troubled waters. It turns harsh words into smooth ones. It makes one able to bear even a rough life. It makes one glad that life is not rougher than it is. It gives a kiss for a blow and a smile for a frown.

Conscientiousness says, "It is my business to be a moral watchman, monitor, and judge. To show the other faculties how to do right, deal justly, and love and practise truth. I take a wider sphere than a regard for legal rights and property; I also weigh and compare the opinions, conduct, and talents of others. I was so large in Jeannie Deans in Scott's 'Heart of Mid-Lothian,' that I made her give evidence on her sister's trial, even though it led to her condemnation. I was immense in Laura Bridgman, the celebrated deaf, dumb, and blind woman."

Agreeableness begins to talk at once ; it says, " I am the youthful, playful, bland, pliable faculty. I aid in entertaining, soothing and mellowing the minds of my friends. I have a kind of mesmeric influence, for I know how it sugar-coats my pills. I blind the eye to faults. I draw people together. I make persons so agreeable that time, place, and circumstances are forgotten and lost sight of. I make old people appear younger than they are, and without me young people appear older than they are. When very large, I am liable to lead to mannerism, to the putting on of airs, to say things merely to entertain and please. I can sometimes compliment and flatter, and smooth the company down, and make the social wheels run easily. I sell the goods and make the purchaser think he has the best of the bargain. Shallow-minded people like me and are caught by me when I am not controlled by the other faculties. A little 'blarney' appropriately administered at times is palatable, like seasoning to food, but too much of it piled on without discrimination disgusts and drives people away. Blarney is the flat-iron and the starch after the washing is over."

Individuality says, " I would like to see all that has taken place from the first event. Would like to see how everything works and how everything is put together, and witness all kinds of experiments and performances. Form expresses a desire to take the outline of everything. Size says, " I would like to measure and take the proportion and see the fitness of things." Weight says, " I should like to know how much force and resistance it takes to keep everything in its proper place and in motion, and each at a proper distance from the other." Colour says, " I would like to know all about light and its effects on colours, and how it is that there are so many colours on one bird, or flower, or animal."

At this point of the debate the faculties said before settling down in life that they would like to travel. Individuality said, " I should like to see everybody and everything on the earth, as well as the different stars in the heavens." Sublimity said, " I want to see grand scenery." Locality said, " I will join you for I love to explore and find new places by land and water." Eventuality said, " I would like to know the history of the places you visit."

After the close of this debate of the different faculties, the mind went into committee on the whole, and passed some resolutions and offered some suggestions with reference to future action, Causality being in the chair, Constructiveness secretary, and Conscientiousness speaker. The most active members of the committee were the Intellectual and Moral Faculties, and they took the lead.

After due deliberation they brought forward the following resolutions in order, which were passed unanimously, after Comparison had criticized and Combativeness opposed them.

Resolution 1st.—We consider the Book of Nature the greatest and most important of all books, and true from beginning to end, and should be the first book put into the hands of a child. It should not be lost sight of during life, for the more it is studied the more it will be appreciated.

Resolution 2nd.—We consider the last volume of the Book of Nature describing man, physically and mentally, to embody the most important truths for man to know as connected with his existence in this life. Its teachings should be known and observed.

Resolution 3rd.—We deem it of vital importance that the science of Phrenology along with other sciences should be taught in our schools and colleges that children may learn how to govern as well as cultivate and restrain their faculties, and that when they take positions in our Halls of Legislature, or become judges, jurors, editors, authors, orators, and preachers as well as managers, superintendents, or parents, they may guide the minds of those under them aright.

These resolutions were then put to the meeting and carried unanimously. Thus the debate was brought to a close.

CHARACTER SKETCH OF MISS MÜLLER.

MISS MULLER has a predominance of the mental temperament. She is highly organized and is decidedly elevated in the tone of her mind. She possesses more energy than strength, and wants to be more busy than she can afford to be. She is naturally very clear-headed, capable of a great amount of enjoyment, and her sufferings are mental rather than physical. She has apparently great self-possession and presence of mind. She can regulate her thoughts and feelings quite uniformly. She is better able to distinguish herself for the power of her brain than for her physical strength, although it would appear that she came from a strong and long-lived family. She is organized to exert quite a distinct and individual influence. She is so elevated and excited in her tone of mind that she is instinctively looked up to, and thus exerts more influence than if she had a less exquisite temperament and tone of mind. She can distinguish herself as a writer as well as a speaker, and has favourable developments for organizing, systematising, and doing everything by rule. She must have been a very accurate scholar in the different

studies that she pursued. She is naturally quite precise in figuring up and making estimates of using her means with prudence. The conservative qualities of her mind are strong. She has the habit of thinking before she speaks and acts. She is naturally cautious, prudent, and circumspect, also very firm, persevering, steady and tenacious. She has a fair



(By kind permission of the "Woman's Herald.")

The likeness was taken before the lines of experience were so fully marked as now.

degree of physical force, animal life, and power to get rid of the surrounding difficulties. She is disposed to look ahead, to plan with reference to results, oversee what is being done, and thus save strength and force. She is a guiding spirit well qualified to superintend and advise others what to do. She has such a distinct character, and her prudential brain is so active that she must have a direct influence over others. She

is organized on a high key, but makes up her mind after taking everything into account, and is quite firm, persevering, and tenacious in carrying out all her plans. She would be even more forcible if she had the vitality and bodily powers to sustain her mental operations. As it is, her influences are more exclusively through the nervous system. She is remarkable for her power to plan with reference to definite results, and she figures up as accurately as a clerk in the bank, and estimates things very correctly. She likes everything to be perfect, and if she had pets would like the finest breeds, &c. She appreciates the sublime and grand. In short, she will be known for her strong intellectual powers, her remarkable intuitive foresight and ability to predict forthcoming events.

Miss Müller called on me on her return from India, where she had been for some twelve months to study Indian life and character.

We had a most interesting chat about her life amongst the Indian people, where she lived as the natives live, eating their food, and becoming as one of them, thus obtaining an unusual insight into their inner life, and the real history of their religion. Miss Müller still retains her eastern habits of living on rice, fruit, &c.

Just as she was about to leave, I said, I wish you would allow me to examine your head, for I am sure it is a remarkable one.

Miss Müller was born at Valparaiso, in Chilé. When she was only nine years old she came with her parents round Cape Horn to Boston, in the United States. They went from there to London, where she had governesses and masters, and after two years they left England, went again round Cape Horn, and returned to Valparaiso. There they remained for two years, living in the country, some three or four miles out of the town of Valparaiso. She was much attached to her home, and spent an unusually happy childhood, surrounded by, and learning from Nature's influences. The vegetation during spring and early summer was luxurious; the hills around were covered with bamboos, with here and there a palm tree. About every three months or so, they were favoured with an earthquake, which was very alarming, and these shocks probably made her a nervous child. After two years she came for the third time round Cape Horn, and returned to England for good. Both her father and mother were very fond of travelling, hence she has been many times on the Continent. As a young girl, she enjoyed dancing, riding, rowing, and any kind of exercise.

After three or four years she began to weary of social life, and felt that she had something to do for her fellow creatures. She then spent three years at Girton, and came out with honours. She took up the moral science tripos, which included political economy, philosophy, psychology, logic, &c. Her final success helped to reconcile her friends to a step which had been extremely distasteful to them.

At the suggestion of Professor Lawcett, she decided to stand for the London School Board, and she came out head of the poll for all London. She remained on the London School Board six years. During that time she was speaking a great deal on all sorts of subjects in public. She bought a house in Cadogan Place, and resolved upon the novel and unusual plan not to pay her taxes as a protest against being denied the right to vote, and on the grounds that representation and taxation go together. She is a good linguist and can speak fluently in French, Spanish, German, Italian, &c.

J. A. FOWLER.

THE BLIND, AND HOW THEY ARE EDUCATED.*

(Continued from page 26.)

ARCHDEACON FARRAR says, "I once stood by Mr. Fawcett on the day when the Earl of Beaconsfield unfolded his foreign policy before a brilliant assemblage of princes and nobles in the House of Lords.

A friendly M.P. had led the blind statesman into the painted chamber, and was describing the scene to him: "On that cross-bench before us," he said, "are sitting the Prince of Wales, the Duke of Edinburgh, and Duke of Connaught." "*I see*," said Mr. Fawcett. "And there sits the Earl of Dudley; and there, Lord Granville, with his usual pleasant smile; near him, Lord Houghton, and so on." "*I see, I see*," was the eager answer of the blind man to every indication. It was his indomitable plan and principle to ignore his blindness.

He would hunt, fish, ride, and walk, and go to picture galleries, just as if he saw; and Dr. Campbell does the same. It is his great delight to visit a picture gallery with friends, and hear their description, and so realise the subjects as if he saw them.

* A paper read at the Fowler Institute, November 23rd, and illustrated by articles and specimens of work, &c., kindly lent from the Glasgow Asylum, the Association for the Blind, Cambridge Square, W., and Messrs. Philips and Co., Fleet Street, E.C.

It may be said that this advantage must be denied altogether to those who have been actually born blind, but I am informed however, that *not* 70 per cent. of the blind are really born blind. In all these cases the blindness might have been at least partially averted by timely care. It is often due to neglect and ignorance of physical laws. But even in the case of those born blind imagination (sublimity) comes in when the other faculties of mind and body have been duly trained. We all know the story of the blind man who compared the colour scarlet to the crowing of a cock.



THE LATE RIGHT HON. HENRY FAWCETT.

“There is,” says Dr. Playfair, “a faculty which comes to the intelligent blind which almost compensates them for the loss of sight, and that is what I call intro-reception, which means the power of taking outward objects and picturing them on the brain.”

To an intelligent blind person, that faculty becomes almost a substitute for sight, as they are able by description of the things around to believe that they see the objects. Those

who are not intelligent have not this sense *nearly* so strongly developed, for in order to produce it, there must be two kinds of training, physical and mental. At the Normal College, where nothing is neglected, this faculty is constantly being cultivated. The children are so taught as to take an interest in the *colour* of their dresses, as well as in the *texture*. And when out walking it is made an ordinary thing to speak of all the objects passed, such as a fountain, a tree, a sign, a bird, a horse, the fleecy clouds, the gathering storm and returning sunshine, the springing grass or opening flower, *all* furnish topics of interesting conversation and valuable lessons to the little listener.

Besides this, nature gives to the blind an acuteness of hearing so preternatural, as it seems to us, who do not need it, that they can hear hedges and even lamp-posts.

As I said before, the system of Dr. Campbell's College is purely scientific, and hence the pre-eminence of *physical* culture. It is a great feature of its work, in fact it is considered the basis of everything else. As phrenologists we are interested in the fact that Dr. Campbell considers that as a rule the vitality of the blind is below the average of seeing persons. Sir Lyon Playfair says about one-fourth lower, and that this lack of power tends to indolence, timidity and discouragement.

The blind need rousing from their dependence upon others, and made to believe in their independence and success. Energy and determination are the two powers which make the great difference between the feeble and powerful, and once get these qualities fixed in a person, and it is a case of death or victory. No talent, circumstances or opposition will make a two-legged creature into a man unless he has these powers; and "it is the lack of these qualities, and *not* the lack of sight," says Dr. Campbell, "that has caused so many failures among the blind." I have found nothing that will rouse the indolent, encourage the timid, but gymnastic exercise, it is the lever which gives force to all the other branches of education.

As a spectator I can affirm to the excellent manner in which this theory is carried out at Norwood. They have one of the most perfectly fitted gymnasiums I have ever seen, and the work there is certainly equal, if not superior, to any exhibition I have witnessed given by our well known and sighted gymnasts.

Having been introduced to one of the ladies in the College, I ventured one day to ask her whether she did feel her affliction very much (I should not ask that question *now*, I

assure you, but I am glad I did so then); and I was most surprised at her answer. Said she, "It is a great loss, and a heavy cross to bear, but we should not feel it nearly so much if sighted people would but treat us differently." I began to wonder what I might have done, so pressed her to explain, for it seemed dreadful to me that we should add anything to the already suffering. But, nevertheless, I found it was so, and the root of the trouble lies in the fact that we do not realize that the blind, though *blind*, are not deficient in any of the other senses. Consequently we are apt to treat them differently from other beings.

Those who suffer the most from these needless *thistles* are the cultured and enterprising blind. The old saying, "If you prick us we do not bleed," is no more true of the Jew than of us, neither is it true that the blind are not hurt by mental pricks as much as we are. And we are apt to forget that where sight is wanting, feeling, and the other senses, are mostly intensified.

In fact it is now generally admitted that the blind possess a sixth sense, called intro-reception, giving them mental vision, and it is this power of which we know so little that we sighted people are so apt to be unconscious of and to offend.

Every child knows it is rude to stare even at a person who can return it, and how much worse is it, when the victim, while *feeling* it just as keenly, cannot retaliate.

What blind person has not writhed under a bombardment of questions put to him until he has almost wished his tormentor were deaf and dumb? and I ask, "Has he no right to a delicate reserve?"

Another thistle is the use of peculiar language, for example—

"Have you *seen* or rather *spoken* with your sister? Just *feel* of this basket of fruit!"

"You say you *read* the book, was it written in blind type or did you hear it read?" As though the medium was of any consequence.

Again, we are apt by direct compliments, while never in good taste, and sometimes almost insulting, to inflict the pricks of other thistles, *i.e.* "I suppose he plays the piano without seeing the keys?"

"So does every good performer."

"She knits by sense of feeling I suppose?"

"Well, I know many who knit while reading."

"His touch is marvellously delicate."

"So is the surgeon's and watchmaker's."

"His ear is so quick."

"So is yours, madam, when the baby cries, or the cook breaks a dish."

"Do *you* keep your eyes on your feet while going upstairs?"

"Fancy praising a speaker for lifting a glass of water without deluging the platform!"

"I could not sew like that with my eyes shut," said a would-be gallant. "I doubt whether you could do it with your eyes open," the lady retorted, "just try it;" and handed him her work, while she silently picked out the thistle. Hard indeed would this world be without *sympathy*, but *pity* often contains an element of scorn, which is most galling to a sensitive nature.

Very few are totally blind, most can see colours, and large objects.

They are accustomed to this degree of light, and the world does not seem dark to them, any more than it does to us when we think of the brighter blaze of Mercury. They know they are surrounded by objects they cannot see. So are we! Yet we do not grieve and weep because we have not microscopic eyes.

We think it must be dreadful to have no knowledge of sight, but how much do we know of the ecstasy of wings, still, we do not groan with envy when a butterfly flits past us, but we plod along like sensible men and don't even long to die, that we may fly away.

Incredible as it may seem, the blind might often forget their loss if not reminded by those around them, by such examples of ignorance and want of thought as the above.

Again, there is many a fashionable belle so helpless that she cannot pick up her own handkerchief, cannot cross the parlour to go into dinner alone, cannot even play on the piano without help, strap on her skates or mount a horse, and all this assistance must be rendered by a gentleman, and he is proud of the honour. But suppose a blind girl goes into society, these attentions for which she perhaps may have some need, are either omitted, or bestowed by some motherly dowager, while the young man wonders why she came, or coming, why she did not bring an attendant to wait on her.

Oh thistles! thistles! how the young heart often bleeds!

Surely these gentlemen could not have been phrenologists, else they would have known that the occipital portion of the blind head is no less developed than it is in the seeing, and that a blind person possesses as much affection and keen enjoyment in social life as we do, and has as much power to prove a genius as if she had her sight.

"Conversing one day with a philosopher," says the Poet

Saadi, "I entreated him to tell me of whom he had acquired so much knowledge." "Of the blind," said he, "who do not lift their feet until they have first sounded with their stick the ground on which they are going to tread."

Speaking phrenologically, the blind seem far from wanting in mental capacity.

True, their percepts are usually small, but this is largely made up to them by that extra power intro-reception. They usually have the organ of time largely developed, and a keen appreciation of music, in which art they excel.

They have small hope and little ambition, which, with the lymphatic temperament so often predominating, give them that disinclination to work so prevalent among them.

They are keenly affectionate, and from their dependence on others are usually demonstrative to those they love.

Their reasoning faculties are often very active, I should say owing to their being thrown so much upon themselves for amusement, but are inclined to be wanting in self-reliance, and to under-value their own powers, but when once roused are very earnest and forcible workers.

I trust you may have found some points of interest in my paper, and that it may induce many, who have the opportunity and time, to further so noble a work as the education of the blind.

EMILY CROW.

SOME THOUGHTS IN A NEGLECTED GROOVE.

ACCORDING to Phrenology mental manifestation is dependent as to direction and power, mainly upon cerebral development; but Phrenology has never claimed that mind and matter are synonymous.

There is a vast difference between the mental powers of infancy and of maturity, with corresponding difference of cerebral development, but it does not follow that the mind itself is different at one time from the other. The mind of a little child is not unlikely identical with the mind of the same adult, the difference between the two being simply one of power of function; in other words, a matter of cerebral development and similar physiological conditions. The phenomena of mental derangement from accident and disease point in this direction. A man is thrown from his horse, and from skull fracture and pressure upon the brain, mental balance is suspended, and the man is for a time insane. The surgeon's skill is called in, and the operation of

trepanning and lifting a depressed bone results in a return to consciousness and mental balance. In such a case, what has happened? Surely the material brain only, and not the mind has been injured. The glasses of a lantern are smeared and obscured, and the light is retained, but the light itself is none the less powerful than before. While working through the brain the mind is limited by it. In the accounts of the return of Lazarus to life, and the raising of the son of the widow of Nain, we have no intimation of any communications made by these of their experiences in the disembodied state, nothing is related of what these two saw and experienced in the interval of departure from this life. Is it because in each case the mind, on returning to the material body, was again narrowed down to its former possibilities of manifestation, limited by the material organization?

“The mind is the standard of the man,” *i.e.* the mind as we know it; but what is the standard or limit of the mind? Who can know the possibilities of mental development?

There is doubtless a deep meaning in the words: “And God made man in His own image, and breathed into his nostrils the breath of life,” for it is questionable if the soul can ever know growth or diminution. It may (in its dependent condition) be said to become conscious of new ideas; and genius, or great power, in any direction, is very much the absence of impediment in the cerebral structure.

The amount of likeness in man to his Creator, behind his material organization, is not for us to know; but the thought indicates on phrenological lines the possibility of much higher human elevation than has yet been attained, for the full promise of original mental endowment can in no case be realised apart from much cultivation and hard work. In this connection Phrenology encourages and points the way, while “Idleness is death anticipated” (Goethe).

Phrenology claims the innateness of all the mental faculties, not only “that poets are born, not made,” but that the same is true of the numerous shades of human character resulting from the endless combinations of strength and weakness in the mental organs; and that the distinctive peculiarities of individual character are determined at birth, subject generally to the modifying influences of environment.

The religious community are prone to suspect here the thin end of a wedge. Here is seen the line of teaching, which, pushed to its logical extremity, means universal license and reckless irresponsibility, relieving men of all sense of accountability for their life and conduct. If individuals are born with particular proclivities, “How is it possible,” it is asked, “that

they can be held responsible for the outcome of such innate conditions ? ” And this, without waiting for reply, is supposed to settle the whole question of Phrenology being worthy of investigation ; and yet it is this same innateness which refutes the objection : the conditions of accountability being bound up in the human organization by this same inflexible law.

Every sane individual has an amount of intellectual and moral control, and is in some degree able to determine the direction of his mental activities ; and coupled with this is the providential provision for increase by exercise, the law which governs growth. The bare desire or intention in a right direction means increase of power of performance. So far from Phrenology suggesting irresponsibility, accountability is increased by it. Phrenology forbids a man's leaning to the promptings of his own inner consciousness and so being biassed by it in favour of excusing himself, enables him to compare and to know himself, to know his weakness and his strength, what environment to seek and what to avoid, and accordingly his accountability is increased by the light which Phrenology gives. It is no longer possible for a man to argue, “ I was born with certain tendencies, and I am therefore no longer an agent, but a victim.” His phrenological knowledge of himself condemns the attempt. To know of a danger is half-way towards steering clear of it, and Phrenology points out, on Scripture lines, to avoid the stimulus of evil influences. The battle for some persons is decidedly harder than for others, but the Bible clearly teaches that the possession of certain inherited evil tendencies is no justification for evil actions, and that it is required of us all to control and govern ourselves. In Daniel v. 22, the reproof given to Belshazzar was that, with the history of his grandfather's pride and fall fairly before him, he did not humble himself, but walked in all the pride and sin of his grandfather. Arrogant pride belonged to Belshazzar in direct line from his grandfather, but he was, nevertheless, held responsible for despising the light which should have guided him ; and further down in the chapter we have the solemn words : “ that night was Belshazzar, the king, slain.”

A sane man is not compelled by his organization to act in a certain way or fated to do certain things. He is a responsible being with intellectual and moral powers of control of his whole nature ; and he will respond more or less readily to such control in proportion as his admiration, his adoration, or his worship is of that which is above him and of an elevating nature, for assimilation to the object of worship is

established law. That certain lines of thought and certain actions are decidedly more easy to one than to another, by reason of definite inherited tendencies is correct ; but absolute automatonism belongs to a lower order of things.

In this same connection the question is often put and in all seriousness : What standing has Phrenology in face of the fact that a man, with a certain organization and definite brain-shape after for years living a reckless and sensual life, has in a short space of time become changed in his character, so that he now moves in entirely different surroundings, having higher desires, and living an altered life, hating the things he once loved, and prizing, as of the highest value, that which he once despised ? What standing has Phrenology here ? Does the brain undergo modification consistent with the alteration on phrenological lines ? If not, how does Phrenology explain the change ? The change of life is by no means a myth, but is on every hand admitted as a great fact, from Saul of Tarsus down to John Bunyan the tinker, and on to our own time. To say that the whole is the outcome of "Regeneration," that the change of aim and life is the result of the "new birth" is right enough on Scripture lines, but where is Phrenology ? Phrenology assuming innateness of all the mental faculties and definite relation between the mental manifestation and functional capacity is here felt to be decidedly antagonistic to the Bible and its teachings ; but the whole confusion arises from a misunderstanding of the phrenological claim. It is not the province of Phrenology to determine the direction of a man's life upward or downward, *i.e.* as to whether he will use his powers in the service of God or go with the stream of the world as he finds it, and use them in the service of sin and Satan. Every faculty of the mind is adapted to surrounding nature, and finds therein ample scope for exercise and development ; and the subject of the spiritual awakening referred to, will on a careful analysis be found to be exercising the same faculties as when unregenerate, and in very much the same order of precedence as regards their relative activities, but in a loftier sphere, and in different combinations, and certainly for higher ends. There is also some relation between the proportion which the basilar or animal brain bears to the whole, and the measure of a man's conflict with himself and his usefulness as a Christian ; and Phrenology as truly reveals the character of the individual after as before the change of life referred to. The Bible account of man unregenerate is "alienated from God," "carnal," "rebellious," "at enmity with God," "dead," *i.e.* *spiritually* dead, and consequently lacking the initial incentive

to a truly spiritual direction of mental manifestation for "that which is born of flesh is flesh, and that which is born of spirit is spirit," John iii. 6, and "they that are in the flesh cannot please God," Rom. viii. 8. For truly spiritual life there is a want of "the one thing needful." From the same source also we get it that so great is this marvellous change that if a man "be in Christ he is a new creature, old things are passed away, all things are become new," 2 Cor. v. 17. He now lives under the consciousness of an ever-present God, infinitely above him in all that is elevating and ennobling, and still lives consistently with his old organization and Phrenology, *i.e.* with himself; and there is still the same harmony and definite relation between these higher manifestations and his old functional capacities; and the life of the individual both before and after the change will be found to be phrenologically consistent with the same form of head. That which differentiates man from a Bible standpoint, making the great division into two companies, is in no way dependent upon organic conditions. The law of "life from life" obtains in all God's kingdoms, from the vegetable kingdom upwards; and the lesson to Nicodemus that for spiritual life a man "must be born from above" is the pivot upon which the whole hinges.

Phrenologists tread on very dangerous ground when they venture from phrenological indications to predicate that such an one is or is not susceptible of spiritual influences in a sense of liability to become the subjects of the spiritual regeneration or new birth referred to. No man was ever a subject of the new birth simply as the outcome of any special fitness of organization. Spurzheim says:—"A phrenologist's knowledge is confined to the results of innate dispositions, but the certainty of revelation depends on proofs of another nature, beyond the region of Phrenology;" and it is altogether outside of the province of Phrenology to deal with susceptibility in this matter. Innateness and heredity have their place, but they have no standing here. If it were possible to analyse phrenologically the great masses of mankind on the two sides of this great Scriptural dividing line, *i.e.* the two companies of the "regenerate" and the "unregenerate," it is not unlikely that as great disparity of organization, as much variety of development, even in the direction of so-called capacities for spiritual life, would be found on the one side as on the other; and this fact is quite in accordance with Phrenology and with the Scripture teaching further down in the 3rd chapter of John already quoted, where we read:

"The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth : so is every one that is born of the Spirit."

Those who suspect antagonism between the teachings of Phrenology and the Bible have not looked far below the surface. According to Phrenology, the voluntary entertainment of sinful thought means a widening of the gap by which it entered, for the exercise of a faculty and its development run in the same line. If, according to Phrenology, a man would keep his mind strong for the highest service he must needs watch the direction of his thought, lest he encourage unbidden guests. Phrenology teaches that to improve the capacity for spiritual thought and enjoyment one must think in that direction. Scripture teaching is precisely the same. St. Paul in his letter to the Philippians, after a running exhortation "to stand fast in the Lord," "to rejoice in the Lord alway," "and in everything with thanksgiving to let their requests be made known unto God," he sums up the whole principle of spiritual growth in the words : "Finally, my brethren, whatsoever things are *true*, whatsoever things are *honest*, whatsoever things are *just*, whatsoever things are *pure*, whatsoever things are *lovely*, whatsoever things are *of good report* ; if there be any *virtue*, if there be any *praise* think on these things." What will be the condition of the mind, according to Phrenology, which is thus exercised ? The teaching of Phrenology and of the Bible is so distinctly on parallel lines here as to need no comment ; and elsewhere we read : "Set your affections on things above, for where your treasure is there will your heart be also." Recognition of this natural law is so decided that explicit direction is thus given in the Bible as to the most profitable mental occupation. The law of increase of the mental organs by exercise carries with it the necessity for carefulness as to environment. Activity of an organ in one individual stimulates activity of the same organ in another ; and the continual excitation of particular nerve centres corresponding with the mental activities of individuals in contact needs time only to make the similarity permanent. We cannot follow Phrenology and at the same time carelessly expose ourselves to damaging excitement or temptation. This again is in accordance with 6th chapter Rom. 16th verse : "Know ye not, that to whom ye yield yourselves servants to obey, his servants ye are to whom ye obey." We are further exhorted in Gal. vi. 7, "Be not deceived, . . . whatsoever a man soweth, that shall he also reap."

It is well known that artists, in order to stimulate high

conception in art, travel round the world and visit the galleries of the great masters, and they will sit for hours in silent contemplation of the masterpieces of Raphael, Murillo, Sebastain, Rubens, and others; and it is also well known that a muddy stream in its passage down a street will generally leave the trail of its filth behind it. Impure thought and desire cannot be encouraged without indelible results.

In all the feelings and sentiments of mankind there is a natural craving; craving is their distinctive quality, and this applies also to Conscientiousness.* Hope craves in the direction of expectancy, and feels pleasure in anticipation; Alimentiveness craves food; Ideality craves beauty and perfection; Approbateness craves recognition, fame, distinction; Sublimity craves grandeur and greatness; and Conscientiousness craves righteousness, justice, and truth. These organs are alike impelling powers, craving for satisfaction; but the craving of Conscientiousness, like the craving of Approbateness or of Alimentiveness, is still only a craving, and may be misguided by false information or the want of information. Alimentiveness may, from want of right knowledge, allow injurious foods and drinks to be taken and be all the while satisfied, the craving being met. Similarly, Conscientiousness large is no guarantee of any particular standard of moral integrity. The organ, according to its power of function, indicates the individual's capacity for the feeling of remorse, and is the measure of his natural craving for truth and justice. Discernment of the actual right or wrong of a thing is a matter for the intellect, independently of Conscientiousness. Conscientiousness will impel the individual to act right up to his standard of right and wrong, whatever that standard may happen to be. And the same individual modifying his standard, or even entirely altering it as experience and further light may dictate, will conscientiously act up to the light possessed at the time, so that he may at one time do the reverse of what he would have done at another, and yet on both occasions be strictly conscientious. Witness Saul of Tarsus consenting to the death of Stephen, with the same man Paul, preaching the Gospel of Jesus Christ at Damascus.

Conscience may be defined as inner knowledge; and is distinct from Conscientiousness. If we carefully study the organ of Conscientiousness, this inborn sense of craving for the morally right, we shall see the desirability for its cultivation. Moral elevation and positive happiness flow from its gratification; it is the helm which guides the ship, and

* With acknowledgments to Rev. John Pierpont.

without it the vessel is doomed and must ere long become a moral wreck. Unfortunate indeed is the man who knows little of the active craving of this faculty. Now listen to the language of the greatest Teacher the world ever knew : "Blessed are they that hunger and thirst after righteousness." What is intended here but the *enlightened*, healthy and earnest craving of the faculty of conscientiousness. We may be mistaken in many things but we cannot well be mistaken as to our desires ; and to hunger and thirst after righteousness evidences not only the possession of an active or stimulated organ of conscientiousness, but the promise of fulfilment, whether we regard it from the phrenological or the spiritual side. According to Phrenology, a man in this condition cannot drift morally ; he is not in a condition to incline to evil ; while the awakening of the faculty to a craving for acceptance before a righteous God is the certain precursor of the "being filled" referred to ; "for they shall be filled." Popular applause, the opinion of the people, self-interest and all such considerations give place before the higher moral consideration of right and wrong which this faculty gives ; and individuals thus awakened, like Bunyan's burdened pilgrim, pay little heed to the jaunts and jeers of a giddy world. Most of the commercial, political, and social trouble, the greed and oppression with which the world is filled, comes from the want of this faculty. The Great Teacher understood human nature when He said : "Whatsoever ye would that men should do to you, do ye even so to them." Let mankind adopt this, and the atmosphere will clear about them. Phrenology and the Bible point upward from the lower to the higher, and are in agreement at all points.

This strange compound of our nature stands related to all that lies between dust and Deity, and one of the great hindrances in the way of scientific as well as of spiritual progress, lies in the lurking thought that there is necessarily some lack of harmony between that which is highest and that which is lowest, a divorcing of God in revelation from God in nature.

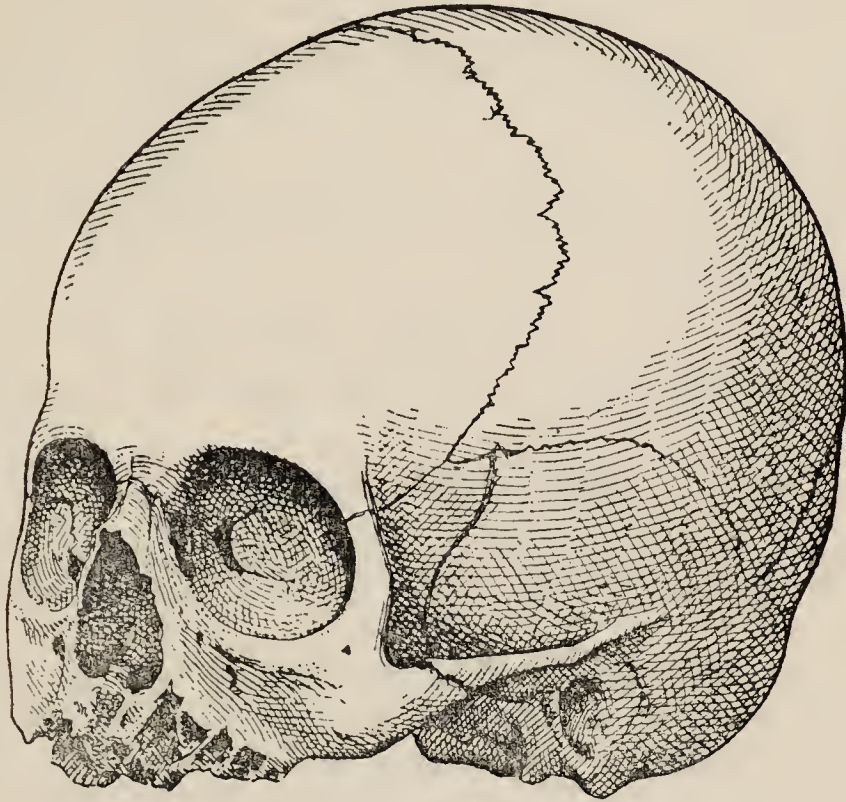
Theologians and scientists have alike made mistakes in reading their own books, and consequently these great authorities often differ ; but the two great books themselves, Nature and the Bible, are in perfect harmony and agreement.

GEORGE COX.

THE veil which covers the face of futurity is woven by the hand of mercy.—*Lord Lytton.*

REPRESENTATIVE SKULLS.

ARTICLE No I.



THIS skull indicates a very full, favourable development of mind ; it must have been that a child of promise who was very loving and affectionate, and of a parentage equally so. Was extravagantly fond of children, and capable of making many friends.

It is evidently the skull of a girl, and if she had lived would have made a very loving woman.

She was not proud and haughty, but accommodated herself to those she loved. Was very fond of praise and the attentions of others. She had a great share of animal life, and must have been very active and rather forward in the development of her mind.

She had a good base to the brain, and the intellectual brain was favourably developed, especially the power to take in ideas and understand things. She was decidedly mirthful and entertaining. The social brain is extravagantly developed, and when grown up would have been exceedingly fond of the opposite sex.

She had naturally a good appetite, and was not wanting in the selfish brain generally. Was cautious, and generally watchful, and on the look-out for danger. Naturally capable of a high degree of improvement.

All the moral faculties were distinct and favourably developed ; had naturally good sense and power to appreciate

ideas. Had more of a thoughtful, reflective cast of mind, than a knowing perceptive one. Had good powers to imitate and do like others ; and all the indications of being a lively, forward, imitative child. The moral brain was specially fully developed, and had she lived would have had a great thirst for knowledge, and shown gifts in a variety of ways, such as in music, talking, entertaining company and making friends.

She singularly combined strong affection with winning manners ; had great ambition to excel, and had a particularly strong love for society.

She had all the qualifications naturally for a superior woman, but would have required great care in training and education.

L. N. F.

FOWLER INSTITUTE CONVERSAZIONE.

At the City Temple Lecture Hall, on Monday evening, January 9th, a conversazione was held in connection with the Fowler Institute—a body formed to promote the training of phrenologists. Mr. L. N. Fowler, the President, delivered an address of welcome, and further remarked, “Many are suffering just because they do not live as they ought to live. Their cup of life is not half full. It is not a hard matter to do right, but we make a hard business of it.”

Miss Fowler, in introducing Mr. Stead, said this was the first time she had had the pleasure of doing so in his capacity as Vice-President. She was sure that every one would see the appropriateness with which he filled the office, for his broad interests in humanity link him to his fellow-men the world over, wherever a human life existed, and as the uncrowned king and master of journalism, he held a unique position.

Mr. Stead, editor of the *Review of Reviews*, said, “I should just like to wish you well, and thank Mr. Fowler for the services he has rendered to all good causes. He is one of the living shuttles in the loom of time which labour to weave together into universal vesture the nations of men. Wherever the English language is spoken there is some man, woman, or child, who has heard Professor Fowler speak. I am very glad to be here to-night. Miss Fowler has examined my head, and she showed a great insight into my character. She delineated me so well, that if she had been my nearest friend she could not have told me better. I have had my children’s heads examined, and I recommend it where I can. I should like to have a phrenologist attached to every police court, every industrial school, and the jails which have to deal with the failures of society. I was one of them myself seven years ago, but when we have made a failure on the ordinary lines we ought to try a new method. In dealing with a confirmed criminal, a confirmed truant, the phrenologist might give us a hint. I do not feel that phrenological

science is getting the grasp upon the public that it ought to have. We want people who are off their heads a little to advance any true cause. It would lead people to have a great deal more charity and more hope, if they only had some guide to the characters of the criminals. Phrenology, some say, tends to fatalism ; I think it tends to charity. It seems to me that Phrenology is a kind of popular way of teaching the most advanced scientific doctrines of heredity and responsibility of parentage, which is only just beginning to get known. The indifference of people, of parents to their children, is one of the marvels of this century. I say a little more zeal, and let us get a few more fanatics who have Phrenology on the brain, and this will speed the subject. Raise some fanatics, and the more the better."

Mr. Lobb, M.L.S.B., C.C., Vice-President of the F.I., said : " I have just arrived from the workhouse or the lunatic asylum, and have been round six hundred beds. First, allow me to say how pleased I am to see our old friend Mr. Fowler, whose praise is in all lands ; I am sure you will all agree with me, when I say that it is a great honour for anyone who has grasped his hand to-night. I am proud that in this centre of the world you have established this Institute, because I am sure that it is but a beginning of a great Institution. I am glad to know that Mr. Fowler has commenced it, has formed and increased it. I hope the time is not far distant when I shall be able to persuade my colleagues on the London C.C. to have a phrenologist to discriminate between the small brained and large brained children and people. I have remarked on this matter on more than one occasion, and we have already the thin edge of the wedge in ; and I think the time is not far distant when the London School Board will take up this very important science. I think we shall have better results mentally and physically. I desire to show my heart-felt sympathy. I am a constant advocate of this science, and wherever I am I endeavour to examine heads. I know that the science has helped me considerably. I have learned when to speak and when to hold my tongue, and, although I am a very hard hitter and make a bit of a stir among my colleagues, yet, through the little knowledge of Phrenology that I possess, I retain their affection. I owe to Phrenology much of my success in public life, and I do think that we should carry this great and all-important subject into our families. I have a written phrenological character of all my children ; when I send them to school apart from home, I send also the written chart which I obtained from the phrenologist."

Miss Fowler said : " I cannot let the opportunity pass without expressing to you the pleasure you have given us in being present. We hope that you have been able to understand the phrenological architecture, which we have introduced into our programme to-night. To me this subject of architecture is of double interest, because so many applicable thoughts suggest themselves from it. Many thoughts on all the various kinds of architecture, from the earliest ages, when man lived in grottoes and in caves, and then in the cottages made from branches of trees. Then we have a sudden growth of beauty and harmony from Norman and Gothic in the middle ages,

and so on through all these various styles we find a something connected with the study of the human mind, for there are no two persons exactly alike. You are architects, you are builders of character, whether you think so or not. The Great Architect has given you a character, how will you make use of it? We have seen the first great architect of Phrenology here to-night—Dr. Gall. We have seen his co-workers, Spurzheim and Combe. I was pleased with the idea which Mr. Stead expressed with regard to fanatics in the study of Phrenology; I am proud to be a moral fanatic in this cause, and I think that no subject can possibly succeed without some form of fanaticism. So we must look to earnestness to say whether this subject is going to engage the attention of the public. I do not think any man or woman exists who is too old to benefit themselves by the further study of their minds. May I refer to one building which has been erected during the last year—the Fowler Institute; many have taken part in erecting it, for all kinds of intellects are necessary in this work. There have been several ladies and gentlemen who have asked to put memorial tablets in this structure. Now, in the coming year, who are going to be architects, who are going to be builders? We want to know whether any of you are willing to sacrifice something in order to be architects? In ancient times, an architect was a man of power and brain, therefore we want you, because you are men of power and women of ability. Another man, Dr. Parker, has given a tablet to this building. Mr. Stead is another man who is giving a tablet in this building. His phrenological light is an electric one which goes the world over. Mr. Lobb has given another tablet. H. Spencer, Dr. Ferrier, and Dr. Benedict, of Vienna, have given others. We need all the finest intellects and keenest minds to work in this science, and we want you all to help us by being moral fanatics in this cause.”

Mr. Piercy then read several letters from the Provincial members and others, expressing regret at not being able to be present; also from Dr. and Mrs. Parker, Mr. and Mrs. Caine, Rev. W. J. Dawson, Miss Buss, Dr. Clifford, Mr. and Mrs. Richards, and a letter from our Aberavon (South Wales) infant, our dearly beloved first-born affiliated society.

The entertainment was interspersed with songs and glees, given by Dr. Campbell's choir, from the Normal College for the Blind, and the members of the Institute were artistically represented in some Scientific Tableaux Vivants of the Founder and his Coadjutors, the Races, the phrenological faculties, &c., which were admirably arranged by Mrs. Piercy and Mr. Baldwin. There were about 150 present.

P. S.

FOR who would lose,
 Though full of pain, his intellectual being,
 Those thoughts that wander through eternity,
 To perish rather, swallowed up and lost
 In the mid womb of uncreated night.

—Milton.

LONDON,

IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., FEBRUARY, 1893.

LARGE HEADS. THE *Echo* has recently called our attention to remarkable heads, and re-echoed some opinions on "large heads," "receding foreheads," "small heads," "low-browed heads," and "average foreheads," as follows : It is usually supposed that men of great intellectual powers have large and massive heads, but this theory, which Dr. Gilbert, Physician to Queen Elizabeth, was the first to suggest, is not borne out by facts. The writer is quite right, but how utterly absurd it is for people who know nothing about the physiological or psychological value of large or small heads, to give their opinions in such fragrant terms to the public, who has forgotten what Longfellow said some years ago, "Things are not what they seem." Under this condition of things, no wonder the writer in the *Echo* goes on to say, "An examination of busts, pictures, medallions, &c., of famous celebrities almost tends the other way." Those who have made a study of the world's best crania, would scarcely desire to contradict this statement, for it is what phrenologists have preached since the days of Gall. The same writer further states that the large heads in the earlier paintings are presented for having large heads, which he thinks is attributable to the painters, "who wished to flatter their sitters." This is not a very high compliment to pay to the accuracy of the artist. The next point commented upon is a receding forehead, which is said to be "mostly condemned ; nevertheless this feature is found in Alexander the Great, and to a lesser degree in Julius Cæsar, and the head of Frederick the Great, as will be seen from one of the portraits in Carlyle's works, receded dreadfully." Now, only a modicum knowledge of science would explain to those ready denouncers of this form of head, that many of the clever anthropologists have this form of forehead, as we had the opportunity of noticing the other evening, Dr. Garson, among the number. "Other great men have had positively small heads. Lord Byron's was remarkably small, as were those of Lord Bacon and Cosmo de Medici." The smallness of their heads did not debar them from becoming great specialists, for the quality of their organizations was remarkable. "Men of genius, of ancient times, have only what may be called an ordinary, or every-day forehead ; and Herodotus, Alcibiades,

Plato, Aristotle, and Epicurus, among others, are mentioned as instances." Here, there has been more romancing than practical knowledge, about foreheads. The low-browed heads are also attacked, and Burton, the author of "The Anatomy of Melancholy," Sir Thomas Browne, and Albert Durer, are mentioned. The average forehead of the Greek sculptures in the frieze, from the Parthenon, we are told, is lower, if anything, than what is seen in modern foreheads." Now, from an artistic point of view, the low forehead simply means that the hair is represented low on the forehead, irrespective of whether the frontal lobe is high or not. Every keen observer of human crania, when judging of the living subject or from casts, should know something more about measurements than to be deluded into the idea that a "low brow," *per se*, means a poor intellect. When the day arrives that sees each man his own phrenologist, the "popular notion" on this matter will not be "erroneous," for everyone will know "that there may be great men without big heads," the same as there are Geneva watches that are capable of keeping as good time as an eight-day clock.

HEAVY
BRAINS. APROPOS of large heads much more might be said about heavy brains. A big brain does not of necessity imply that its possessor is endowed with mental qualities of a superior order. In brains, as in other things, quality is vastly more important than size. The big brain may be flabby, and badly developed, while the small brain may be in perfect working order, every cell and fibre exercised, and its owner, the mental superior of men with a much larger quantity of brain substance in their skulls. This is not saying, however, that if the large brain were properly cultivated, the possessor might not outshine the small-brained men intellectually. To support the fact that large brains are not always possessed by intellectual or clever men, we find that the heaviest brain ever weighed and examined belonged to a bricklayer, who died in 1849, in University College Hospital. A brief account was published by Dr. Morris, in the *British Medical Journal*, of October 26th, 1872. He was 5 ft. 9 in. in height, and of robust frame. He is credited with having had a good memory, but he could neither read nor write. A most careful weighing of his brain gave the extraordinary weight of over 67 oz., which is considerably greater than that of Cuvier, the French naturalist. Cuvier's name heads the list of distinguished brain-weights, given by the best authorities. His brain weighed $64\frac{1}{2}$ oz. The brain of Abercrombie, the physician, and Schiller, weighed

63 oz.; that of Goodsir, the anatomist, $57\frac{1}{2}$ oz.; of Dr. Chalmers, the great Scotch preacher, 53 oz.; of Dr. Morgan, the mathematician, $52\frac{3}{4}$ oz.; of Grote, the historian, $49\frac{3}{4}$ oz.; of Whewell, the philosopher, 49 oz.; and of Hausmann, the mineralogist, $43\frac{1}{5}$ oz. These examples of well-known names, selected from a long list, show a great range of variation among eminent men, and evidence abounds to show that mere brain weight has very little to do with intellectual superiority.

MEASURING THE EMOTIONS. THE appointment of Prof. E. W. Scripture to teach students how to measure their emotions by machinery is the latest addition to the department of physiological psychology, at Yale, says the *Boston Herald*. While it is, perhaps, one of the additions least needed in the current work of the University, in the department of scientific study and investigation it is an appointment of the greatest importance. Prof. Scripture is one of the most eminent students whom Clark University has been training for independent and original work, and it is in taking up these new and original studies that the significance of the appointment lies. Heretofore, Yale has done almost no new work outside of its scientific department, and in the addition of Professor Scripture it will begin to explore the frontiers of science. If he can discover, as he proposes to, the relation of experiment to education, and the point where fatigue begins in the physical system, he will have rendered important services to physiological psychology, and this is what he proposes to do.

Fowler Institute.

MEMBERS' NOTES.

"Every noble life leaves the fibre of it interwoven for ever in the work of the world."—RUSKIN.

THE third annual conversazione of the Institute is now a thing of the past, but must long be remembered by all those present. The capacious and comfortable Lecture Hall of the City Temple was admirably arranged for the occasion, where about one hundred and fifty members and friends assembled. The hearty "address of welcome" by our President was as full of force and vigour as might have been expected from one half his age; but the wisdom of his remarks were such as only emanate from an experienced sage. Vice-presidents were represented by W. T. Stead, Esq., of literary renown, J. Lobb, Esq., M.L.S.B., C.C., both of whom delivered a brilliant

speech, and W. Brown, Esq., who succeeded in entertaining the audience with his well-known lightning sketches. Miss J. A. Fowler, in her speech on "The Architecture of Phrenology," gave us a metaphorical sketch of the progress of the Institute during the past year. The members of the Westminster Glee Club contributed largely to the interest of the evening; the duet by the Misses Hyde and Lucas being worthy of especial praise. Four tableaux vivants, by F.I. members, proved an attractive feature; the first consisted of the founder and his coadjutors, Messrs. Gall, Spurzheim, Combe and Fowler. The second tableau was a representation of the following faculties: conscientiousness, benevolence, hope, veneration, causality, tune, acquisitiveness, combativeness, and alimentiveness.

* *

THE Ethnological group comprised many brilliant but appropriate costumes, Caucasian, English, Greek, Swede, Canadian, Mongolian, Chinese, Japanese, Turk, Malay, Indian and Negro. "Anatomy and Physical Culture" was the title of the fourth tableau, and portrayed the various sports and physical exercises, while a human sketch surveyed the scene from the background. Both Mrs. Piercy and Mr. Baldwin are deserving of special commendation for the arrangement and carrying out of this portion of the programme, the whole of which was highly enjoyable and duly appreciated.

* *

THE following extract, for which we are indebted to Mr. Smith, is taken from Burnet's "History of his own times," which was described by Johnson as "one of the most entertaining books in the English language." It compares Charles II. to Tiberius, and shows very clearly how character is indicated by appearance.

"His person and temper, his vices as well as his fortune resemble the character that we have given us of Tiberius so much that it were easy to draw the parallel between them. Tiberius' banishment and his coming afterwards to reign, makes the comparison in that respect come pretty near. His hating of business, and his love of pleasure; his raising of favourites, and trusting them entirely; and his pulling them down and hating them excessively; his art of covering deep designs, particularly of revenge, with an appearance of softness, brings them so near a likeness that I did not wonder much to observe *the resemblance of their faces and persons*. At Rome, I saw one of the last statues made for Tiberius, after he had lost his teeth. But baiting the alteration which that made, it was so like King Charles, that Prince Boughese, and Signor Dominico to whom it belonged, did agree with me in thinking it *looked like a statue made for him*."

* *

THE general belief that somnambulists have the power of seeing by means of the points of the fingers, would seem to be confirmed by Prof. Fischer's description of a remarkable case observed by himself and others when a boy at school. One of the pupils, who was not considered of the mental type, was subject to regular fits of somnambulism about 10 o'clock at night. "When running, he always

held his hands before him with his fingers stretched out, and was so agile that his companions could scarcely ever catch him." During the nightly attacks he would at times play at skittles, and by stretching out his fingers in the direction of the pins, would always count accurately the number knocked down. When gloves and stockings had been cautiously tied upon his hands and feet during sleep, he appeared more like a blind or drunken man during his wanderings, but immediately on discovering the cause, the gloves were thrown aside, and he sprang forward with his usual agility.

* *

THERE appeared in a daily paper, recently, a remark to the effect that at the *post-mortem* examination made upon Crampon, a thief, a drunkard, and a murderer, the Paris medical men declared he had a head "indicating the intellect of a philosopher, and the morals of a philanthropist." It would be interesting to discover how the doctors came to these conclusions, and what allowance was made—if any—for the basilar part of the brain; a phrenologist would, in all probability, have drawn very different inferences. Besides, we have not yet learnt to believe that everything "declared" by even "Paris medical men" is infallible. According to the writer of a paragraph, forwarded by Miss C., he would have us believe that nature favours the transmission of parents' bad qualities to their offspring rather than the good, and offers as an illustration of this supposed fact, that the child of the drunkard has a tendency towards drink, and the criminal's child a tendency towards crime. This is certainly true, and only natural, "like produces like," but the author of this opinion seems to consider the subject in a one-sided light, and disregards the overwhelming universal power for good, which will assert itself if only the surrounding conditions are fairly favourable. Do not elevated thoughts and aspirations descend from father to son, with as much or more distinctness than emanations from the basilar portions of the brain? It is difficult to conceive to what depths the human family would have sunk by this time had it not ever been so; and it is well to remember the powerful influence each member of that family may exert over one another for good or evil. Archdeacon Farrar is doubtless correct in stating, "Men are, and ever will be, what their wives, and sisters, and above all, their mothers, tend to make them, by influence, which begins with the cradle and ends only with the grave."

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MR. J. BALDWIN will give a lecture at the next monthly meeting, Feb. 13th, on Phrenology, illustrated by lantern slides.

G. B. COLEMAN.

TRUE TEST OF DEATH.—It is not generally known, an unfailing test of death can be made by producing a blister on the hand or foot, by holding the flame of a candle to the same until a blister is formed. If the blister contains any fluid, it is evidence of life; if, on the contrary, the blister contains only steam, it may be asserted that life is extinct.

Hygienic and Home Department.

RICH WITHOUT MONEY.

MANY a man is rich without money. Thousands of men with nothing in their pockets, and thousands without even a pocket are rich. A man born with a good, sound constitution, a good stomach, a good heart, and good limbs, and a pretty good headpiece, is rich. Good bones are better than gold ; tough muscles than silver ; and nerves that flash fire and carry energy to every function are better than houses and land. It is better than a landed estate to have the right kind of a father and mother. Good breeds and bad breeds exist among men as really as among herds and horses. Education may do much to check evil tendencies or to develop good ones ; but it is a great thing to inherit the right proportion of faculties to start with. The man is rich who has a good disposition, who is kind, patient, cheerful, hopeful, and who has a flavour of wit and fun in his composition. The hardest thing to get on with in this life is a man's own self. A cross, selfish fellow, a desponding and complaining fellow, a timid and care-burdened man—these are all born deformed on the inside. They do not limp, but their thoughts sometimes do.

GOLDEN RULES FOR PRESERVING HEALTH.

AVOID beginning a journey without taking breakfast.

Avoid going into a cold atmosphere immediately after taking hot drinks.

Never lean with the back upon anything that is cold.

Avoid riding in an open carriage, or near the window of a train, when heated with exercise of any kind ; it is dangerous to health, and even to life.

Never go to bed with damp or cold feet.

Avoid keeping the mouth open when sleeping in a cold room ; therefore establish the habit of breathing through the nose, and not the mouth.

Bathe regularly. Unless the skin is in active condition the cold will close the pores and thus assist the inroads of disease.

Avoid much speaking when suffering from hoarseness, lest difficulties be produced in the throat, and the voice be permanently injured or lost.

Avoid getting cold at the chest or back, particularly between the shoulder-blades ; therefore, keep these parts well protected, but never keep the back exposed to the fire after it has become comfortably warm.

Avoid standing still in cold weather, particularly so after any degree of exercise.

Avoid standing in a draught or cold wind, or upon ice or snow.

Avoid keeping the mouth open when passing from a warm atmosphere to a cold one ; but breathe through the nose, so that the air may be warmed ere it reaches the lungs.

IF hunger is a good sauce, contentment is a better dessert.

MANUFACTURING DISEASE.—Glasgow is one of the largest provincial cities in Great Britain. It is fairly typical on the law of average of the drunken habits of the inhabitants of large cities. In Glasgow (Professor Levi's figures), the "working classes" spend £33,000 per week, or £1,716,000 per annum on drink, and the well-to-do people another million. In all, £2,716,000 per annum. That is the minimum, but Mr. Dobbie, of Blochairn, believes, since the extension of the city, the amount spent is nearer £5,000,000. Even the minimum means 1s. 8d. per second, or £5 per minute. The sum per minute for house rents over the extended city is £3 10s. The conclusion is obvious—the houseless, homeless, and diseased, aye, the unemployed, may surely trace their unfed, unkempt, and unhealthy conditions to the prodigality of those, along with themselves, who spend £5 per minute dram drinking.

EAT BEFORE YOU DRINK.—"A large proportion of intemperance in the use of stimulants," says a physician, "may be laid to the light breakfasts eaten by most people. Breakfast is the most important meal of the day, and sufficient importance is not attached to it in the majority of households. After the long fast enforced between supper or late dinner and seven or eight o'clock in the morning, a person in good health should feel hungry ; and it is at this hour of the day that the heartiest meal may be eaten with the least probability of bad results. The man who starts out in the morning after having eaten a hearty breakfast will seldom, unless suffering from chronic indigestion, experience any of the discomforts which might follow a similar meal at any other time of day. The chances are, he will also enjoy a happy frame of mind all day ; whatever be his custom, he will find himself with an excellent appetite. Eating creates appetite. The very opposite results will follow the other course in this matter, and the man who has not had a good breakfast will not enjoy a good dinner. I have treated a good many cases of habitual drunkenness, and in a great many of them I have found that the evil practice of tippling was begun to satisfy a craving, faint sensation in the stomach in the morning, which was nothing more or less than disguised hunger."—*Housewife*.

THE HOT VAPOUR BATH.—With the possible renewal of the influenza epidemic, there is possibly no better prevention of attacks, or certainty of cure when attacked, than the purification the hot vapour

bath gives to the skin, and indirectly the whole organization. It is, however, a safe remedy for more than this derangement. Baron Alderson, in a letter to his son, says, "I have been obliged at last to send for Sir Benjamin Brodie, to see me for my sciatica, and to-day, by his order, I have been stewed alive in a vapour bath. Dreadfully hot, I can tell you—140 degrees, yet it was not unpleasant after ; for hot air does not burn like hot water, as it communicates its heat gradually to you, air being what they call a bad conductor of heat. So by the time the hot air makes you warm, a perspiration breaks out and cools you again. People have been known to bear 400 degrees of heat without much inconvenience. Sir Francis Chantry told me that once he went into the oven where he baked his moulds, which was heated by a nearly red-hot plate at the bottom. He wore thick wooden shoes to protect his feet, and a flannel dress, and was able to bear it very well. That was a dead heat that would have baked a pie, and yet a man alive would not be heated much above blood heat, or about one hundred degrees. Is not this curious? Life is able, you see, to bear heat which would roast a dead body." No evil results arise from the great heat, or the hot air, or the Turkish bath, and the great cleansing of the blood which arises from its use, renovates the system.

Notes and News of the Month.

THE Annual Meeting of the Fowler Institute will be held on Wednesday, March 8th.

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THE FOWLER INSTITUTE CLASSES.—The Editor is anxious to draw the attention of members and readers to the classes just opening at the above Institute, in Theoretical and Practical Phrenology, Physiology, Shorthand, Elocution, and Physical Culture. In the latter, classes will be formed for adults and children of both sexes. The above classes will open the first week in February, 1893. Intending students should apply at once for particulars to the Secretary, 4 and 5, Imperial Buildings, Ludgate Circus, E.C.

* *

WE have no fewer than fourteen English proverbs relating to this important feature of the human face divine—the nose.

* *

A BARRISTER writes :—"If Mr. Horsley is really in earnest as to the benefits which vivisection can and does confer upon the human race, obviously we ought to make experiments upon the members of that race as well as upon the quadrupeds. Allow me, therefore, to invite Mr. Horsley to set the example in this direction, and offer himself a victim on the altar of his so-called 'science' for the benefit of the race whose welfare he has so much at heart. According to his own showing, he will feel no pain. Let him, then, come forward and ascend the frame of vivisection, and I, for one, will then believe in his views ; if he declines to do this, I will not believe in either himself or his statements."

THE Annual Conversazione of the British Phrenological Association, will be held at Cavendish Rooms, 51, Mortimer Street, W., on March 1st, at 8.30 p.m.

* * *

THE Monthly Meeting of the above Association was held on January 3rd, when Mr. Melville read a paper on "Language."

* * *

THE Fowler Institute is open for Phrenological Examinations every evening, from 7 to 9 p.m. ; Saturdays, 10 a.m. to 6 p.m.

* * *

MR. ALEXANDER DAVIES, the well-known phrenologist, has recently given some extraordinary entertainments in this locality, as those who were present at the Pink Bazaar last week can testify. As a phrenologist, no matter whoever visits him, he is neither a flatterer nor a humbug, but hits "straight out" for the benefit of his patrons.—From *The Bournemouth Free Press*, December 15th, 1892.

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 6s., for twelve 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.T.E. (Norfolk).—The photos of this gentleman indicate that his body is in harmony with, and in fair proportion to his brain. He is full of animal spirits, and with care will wear to a good age. He needs to exercise his lungs more and cultivate deep breathing to expand the chest, and improve the condition of his blood. He will do well to avoid stimulants of all kinds. He is warm blooded, and vigorous in constitution ; he is very enthusiastic, and should be known for his energetic nature. He has the will power that makes him, if he chooses, efficient in overcoming difficulties and achieving his own ends. He is more determined than prudent and forethoughtful, hence he will learn by experience, and must come in contact with things before he realizes what they are. He is hopeful and sanguine of success ; is ambitious, and desirous of excelling and earning a reputation. He has a scientific cast of mind, hence strong observing powers ; he is not a deep reasoner, but is more ready and versatile. He has good observing powers, and is in touch with his surroundings ; he accumulates knowledge as he goes along. He is sociable and friendly, and all the domestic faculties are amply developed ; he is fitted to take his place in the world, and capable of maintaining himself among his fellow-men in a scientific, practical sphere ; will do well in outdoor sports or work, as farming, surveying, navigation, &c.

M.R.—The photo of this lady indicates that she has a very impressive and ardent nature. She is finely organized and is very susceptible to great enjoyment or suffering. All the mental manifestations are lively, and her actions quick. She has an impulsive nature, and a bright disposition ; she is refined, and has a strong sense of, and aim for, perfection in all she does ; she shows much taste and arrangement in her work. She is precise, and orderly in her ways, and is very systematic in work and habits. She can get through more work than many because of her planning ability and forethoughtful disposition. She is very particular, and is quite thorough in what she does. She is rather sensitive and independent. She has strength of mind to maintain her own when needed. She is cautious and has a prudent and calculating disposition ; she is social and affectionate, but requires to be known to be understood ; if anything, she is too sensitive.

A.R.—The photo of this gentleman indicates that he has a favourable development of both mind and body. The head is well balanced, and there is every indication of a strong forcible character. In disposition his sympathies play a very important part ; he is liberal-minded, kind-hearted, and deeply-interested in all progressive measures for the benefit of mankind ; he would like to do work on a large scale, and cover a great deal of ground. His mind is full of philanthropic ideas, and he would gladly sink his own interests in the desire to promote the welfare of others ; he has considerable constructive talent, and as a worker he is decidedly ingenious and versatile. His is a planning and contriving mind, capable of using the material at hand to the best advantage. His artistic abilities would stimulate his efforts to produce the best possible results. He has a lively imagination, and is expressive and capable in speech. He has a grasp of mind that enables him to present his ideas in an able manner. He has a critical disposition, is a deep reasoner and thinker, with more insight and intuitive power than most men. He has a strong will and a very energetic mind, capable of exerting considerable influence and accomplishing much good.

MRS. R. (Cornwall).—This lady has a very favourable organization. She is very impressible, susceptible, and has an enthusiastic and a warm hearted disposition. Her prominent qualities are : sympathy, presence of mind, and organizing capabilities. She has considerable foresight and a penetrating mind. She has strong convictions and beliefs, and is apt in her intuitive perceptions, and understanding of subjects, and things generally. She quickly makes up her mind, and generally acts from first impressions. She is in her element when she is planning, organizing and directing others. As a worker she is very systematic, has a strong love of order and neatness. Her social nature is strong. She forms distinct attachments, and is a warm-hearted friend. She allows her sympathies to carry her away sometimes, making her do too much, and sacrifice more than she ought. She has a constant and affectionate nature. Her memory of details and general events is not so strong as her power to lay, to plan, and understand how to do and manage. She is shrewd, penetrating, and has sound judgment, and may sometimes see too much for her own ease of mind.

THE,
Phrenological Magazine.

MARCH, 1893.



DR. NANSEN.

THIS gentleman possesses a powerful organization, and one well adapted to health and long life. There are no weak spots that disease can attack. His fibres are strongly knit together, and there is remarkable solidity in his desires joined to great quality in the whole of his organization, as well as harmony between body and mind.

His head is high or mesocephalic, and broad or brachiocephalic. This development of head, together with the well-set face, indicate strength, determination, courage, and superior power to combat obstacles. He has no superfluous adipose tissue, hence he has energy of brain and muscle of body rather strong in consequence. His head is high, notwithstanding that the hair stands straight up from the head. He possesses unusual perseverance, and should be able to inspire the same spirit into others. There is no vacillation in his mind when he has once determined on a certain course of action. Taking into account the height of his head, he has also particular power in the parietal eminence, which gives him prudence as well as foresightedness. He will be bold and fearless, yet will measure his line before he drops it into the sea, to see if he is equal to his task. He will not attempt what he has not well considered on all sides, and, even if he places his ambition too high, he will nevertheless make more out of the amount of success he achieves than ninety-nine men out of a hundred. His head is exceedingly high from the root of the nose to the top of the forehead, which gives him great intuitive insight into men and things. His mind penetrates below the surface, and he is able to come to correct conclusions about important matters. He should be able to know how to choose his men in whatever calling he was engaged. His mind is particularly receptive of inspiration. He receives light on many subjects which he cannot account for in an ordinary way. He is particularly open to conviction on any new subject and is not afraid of entertaining advanced thoughts, and of trying new inventions. His executive brain is well developed, which gives him force, energy, spirit and considerable power to work things out in a masterly way. He never looks back when he has once undertaken a project, and will win better results with poorer material to work with, than many who have everything they want. If he were a general and all his troops deserted him at the last moment, he would not give up, but would somehow rally others around him in time to go into battle and win the day with all the odds against him. Few men possess more concentration of power, more nervous energy, more clearness of judgment, firm conviction and faith in his principles than he. He ought to be able to write more quickly than he can talk about what he is going to do. He is not a blustering kind of man but one who believes in action rather than pretence. He should know how to appreciate grandeur in scenery, and will never be afraid of large schemes of work. He is not a mere imitator of other

men, but will prove to be rather original and individual in his style and system of doing things. He will be entertaining as a writer, and will know exactly how to present his subjects in an interesting way. He has a good memory of special events, and can recall history or relate experiences with great vividness. He is a man of order, method, and system. He prefers to mark out his programme before he begins with a single line of work. He has the mind that can organize and set other minds to work. He is very critical, as well as apt in his comparisons. He knows how to get on with people of various nationalities, and can suit himself when travelling to various circumstances, manners, and customs. He knows how to adapt himself to a unique position, and is able to grasp the situation with versatility and precision. He has a kindly disposed mind with all his force of character. He possesses also a tenderness and sympathy with humanity. His hope stimulates him to act with the feeling that he is going to succeed in any enterprise he undertakes. He possesses considerable buoyancy and elasticity of mind which he is able to impart to others. He is something like a second Columbus. All things considered he is not a man who would quickly settle down into a back seat, and take life in an ordinary way ; but he must be up and stirring, for he is both enterprising and energetic, and likes to be where there is action required, a tough job to overcome, great precision, and determination of mind and tact, as well as diplomacy in working the machinery of life.

L. N. F.

PROGRESSION.

BY L. N. FOWLER.

THE tendency of stones is to remain unchanged, but the action of the atmosphere, of wet and dry, of cold and heat, is continually softening the surface of the earth and bringing out the treasures which are locked up in the stones. The land would remain stationary if it were not for earthquakes, volcanoes and rains, which greatly change the surface. The tendency of water is to remain quiet ; but if it were long quiet it would become stagnant ; so the air is set in motion to agitate it and that, together with the laws of gravity and evaporation, keeps it in continual circulation and thus purified. The air would remain quiet if left to itself, but change of temperature keeps it in continual circulation, purifies it, and

more thoroughly blends the gases of which it is composed, so that life and health are the result. The seeds would remain unproductive were it not for heat, moisture, and earth. Animals would remain quiet if hunger, love or anger did not stimulate them to action. The grain of corn is planted in the spring ; it progresses, it associates, it develops. Man eats it in the morning, at night it becomes part of the blood, flesh, and bone, and the next day a portion of the brain,—perchance a human thought, working out some patent reaping machine. The world is working on a wonderful system.

Man would remain inactive and undeveloped, and there would be no such thing as invention, improvement, and progress, were it not for the fact that in man's nature there are hungerings, thirstings, longings, and aspirations that cannot be satisfied without effort ; besides, there are such strong evidences around us and within us, of a power superior to ourselves, that our ambition is stimulated to become more powerful and perfect. Man tries to imitate God first in strength of body ; secondly in various ways in controlling the elements, in inventions and all kinds of creations and mechanisms, in educating and forming the characters of others. Put one man at the head of all men and he would aspire to something higher, because he has a consciousness of a superior. Man is not satisfied to attain excellence in one thing, but is desirous of excelling in other things as well. Some inventions will yet be made for this mysterious agency. Lightning may yet conduct away all disease from the home of man. The air itself may be controlled with as much facility as the navigator sails his ship on the waters.

Good comes out of evil. Astrology prepared the way for astronomy. Alchemy precedes chemistry, soothsaying foreshadows prophecy, and priestly traditions come before the wonderful realities of modern science. Electricity will perhaps conduct the locomotive at 200 miles an hour as easily as it now sends messages. Revelations are continually taking place all over the world. Our selfish, social, commercial, political, philosophical or theological views are constantly clashing with those of others, resulting in violent antagonisms at times between individuals, communities and nations.

Progress has been made when we consider the early ages, when the first men fought hand to hand, fist to fist ; then with clubs, then with bows and arrows, then spears, axes and swords. First of all, men fought on land on foot, then with horses and chariots, and scythes attached to them. Then by sea in row boats, then ships, then steamers and ironclads. It

was 600 years ago Roger Bacon, a monk, invented gunpowder. Since then all kinds of firearms have been invented and used, till at length the greatest strength and expertness have been arrived at, differing in size from the pocket pistol to shoot seven feet, to the cannon that will shoot seven miles off. Forts were once only logs, trees, stones and hills ; now they are huge earth and masonry or steel fortifications. At first, ships of war were so high as to be easy targets to hit. Now they are mostly below the water, and not easily damaged, because so difficult to hit or penetrate.

At first man gave the blow that laid the enemy dying at his feet, now he is killed five or seven miles distant without being seen at all. At first war vessels could be boarded and entered below, now they cannot get below and can be scalded with hot water as soon as boarded. At first personal courage and physical strength decided the fate of a battle, for men wore a heavy coat of mail and carried shields, now science and tactics more frequently decide them. Formerly it was thought that victories and a great amount of bloodshed were necessary, now great victories without blood are desired. At first spinning, weaving wares, and furniture were all made by hand, now they are mostly and much more rapidly made by machinery. Formerly the spade was used to dig the soil and the sickle to cut the grain, now the steam plough and reaping machine are used successfully. Formerly we went on foot and carried the mail on the back, now we travel by steam and send news by lightning. Formerly the pencil and brush did all the drawing and painting, now the sun's rays do a thousand times more and a hundred times quicker.

There are many causes for progress and changes. The world was not perfected at once. The gases of which the air is composed did not all amalgamate in due proportions at once. Man was created with something to do. One hundred years ago the cotton umbrella was first used, and the first man who used it was a subject of ridicule, for only women had previously carried them. It was thirty years before they were in general use, and a man who borrowed one returned it, saying he could not get it through the door. The progress of the mind is too often cramped in the beginning, and put into a strait-jacket, for many children are educated not according to their natural abilities, but according to the plan of the school, or the clique or circle the parents belong to. We make sectarians of our children to begin with, which tend greatly to cramp their minds and stunt their growth.

It takes a lifetime to do the work of life. It cannot be done in a day. Life is like a journey ; every step is necessary

to bring us to and prepare us for the end. So of education. Every power needs to be developed and properly directed in order to thoroughly prepare us for the work of life, and all require time. Real progress is slow. By understanding the natural excesses and deficiencies of our children, and the natural influence of different studies and motives for action, by way of expanding, disciplining, refining, systematizing, and energising the mind, we should soon have systems of education and apparatus adapted to each mind according to its individual needs, and thus greatly facilitate its development. The mind needs to be expanded by teaching general truths and laws of nature in dietetics, growth and increase, astronomy, physiology, phrenology and religion. It needs systematizing by becoming acquainted with the details of positive knowledge, by studying drawing, figures, and mathematics. It needs to be made practical by studying anatomy, geology, mineralogy, and agriculture. It needs to be taught to combine by studying composition, chemistry, mechanics, and colouring. It should be taught to think by studying grammar, language, philosophy, cause and effect, politics, jurisprudence, &c. It needs feeding by encouraging close observation of nature in all her departments, of persons and things, their uses, qualities and condition, by travelling, trying experiments, reading history and biographies, and in putting into practice what they learn and hear. It needs to learn to analyze, criticize, discriminate, and compare, by studying character, logic, medicine, rhetoric, prophecy, &c. It needs to be taught to combine by learning to use many faculties at once, and studying their combined influence and the general effect of combined truths. It should be taught its dependence on a higher power than its own to give modesty and humility.

The processes the human mind has to go through to bring it to its present state of perfection in all its various conditions and departments are very interesting. For man at first was a mere child in mental development. He rambled over the iron ore beds and coal fields. He hung the nuggets of gold around his neck or in his nose or ears. The children played with the diamonds because they were bright. At first they were content to roast their fish and bake their oysters on the coals, and pursue the wild beasts for their skin as clothing. Hence their living was in the rudest manner possible. Wants, wars and climate, with disciplines of various kinds, brought the mind forward until there began to be some manifestation of organized strength and combination of mental powers, and an approximation to an appreciation of comfort. In early days there were mighty men and great heroes whose spirits

were worshipped after death. But seeing there were some things they did not know and could not do, unknown spirits were worshipped, until finally one great Spirit King over all spirits was substituted. At first this Spirit was but a little higher than their own low standard, but as the mind became more elevated this Spirit rose in perfection, purity, and importance. All the faculties were rudely manifested at first, hence inferior objects of worship satisfied the organ of worship—as the organ is cultivated the object of worship becomes elevated. Sense of mine and thine awakened Conscientiousness and gave a sense of justice, law and obligation with its lower, then higher grades.

Consciousness of another life and of immortality arose from an unsatisfied state of mind, as connected with present existence; thus hope of a future began to awaken enterprise. Many things were seen to take place that could not be fully accounted for, stimulating the organ of faith, which leads to belief. While living men formed attachments, and after the superstitious habit passed away of burying all personal valuables with the dead, they were given to friends, which awakened the organ of Benevolence, and this has led to liberality, sympathy, and humanity. The bringing of the faculties into action in the coronal brain gave greater importance to man, and his life and actions began to be more valued and sacred. The lower animal nature is now becoming modified, and brought under higher influences. Lines began now to be drawn between right and wrong, truth and falsehood, purity and lust, sympathy and selfishness, ambition and patriotism, fact and fiction, philosophy and superstition, love and hatred, and so on. From this point society began to be organized. Laws and regulations began to be established in business, in government, in education, and in regulating human action. Man was now ready to start on the road to a higher, and more pure and spiritual life. Yet all mankind did not come forward together. Some were more favoured than others. Some were stunted by war, others by isolation. Some from climate, others from laziness. So that while the best qualities of some were encouraged, the worst or lowest in others were excited, and remain so to this day. The two extremes of society to-day show the greatest possible contrast. The one lives in the lowest strata of his nature, the other in highest outside of a spiritual life. The one in the base of his brain, the other in the top or crown of his. The one lives for self, the other for society as well. The mental operations and desires of the one are simple and single, the other are compound and complex. To give an epitome of the more

important progressive steps that have been taken since the human race started, would be to give a history of man, for almost every step that civilized and Christianized races have taken has been progressive, for all that man had to start with was an existence and a productive soil.

To follow him step by step up to his highest state of organization and perfection in every department of life, and every kind of contrivance, invention, and convenience ; to see the growth of the mind from simple to compound ideas ; from no knowledge or learning to great wisdom and scholarship ; from no huts or instruments to palaces and a world full of furniture, machinery, and works of art ; from fighting with clubs face to face to fighting with cannon and iron steamships five miles apart ; from no organized society or government to the present social and governmental machinery, would be one of the most interesting investigations man could make.

Nature is constantly developing and changing. Little things grow into large things. Young things grow into old things. Weak things grow into strong things. Short things grow into tall things. Unimportant things grow into very important things. Day breaks by degrees and night comes on gradually. Barbarism always precedes civilization. Mythology comes before theology. Superstition goes before religion. The ideal before the real. The natural before the spiritual. The superior follows the inferior throughout history. Association succeeds progression and development follows association. Creation is a study. Man is linked with everything in the animal, mineral and vegetable world. Good comes out of evil. Astrology first, then astronomy ; alchemy precedes chemistry, soothsaying foreshadows prophecy, and priestly traditions modern science. Man's progress comes from his wants, aspirations, and Divine revelations. These are all powerful stimulants for action and improvement, and have a constant bearing on the mind. Governments, superstitions, and sectarianism with ignorance may retard human progress, but as sure as the laws of gravitation are true, so sure, in time, will man break away from all restraints and move forward, and the more restraint that is brought to bear the more violent will be the breaking away, and the greater strides taken in the direction of progression. Man is on a journey, and he cannot very well remain stationary. Man's progress in this world is slow and steady, but onward and upward. Man began at the foot of the ladder, consequently can only travel one way. Many nations have advanced far on the road of civilization but have fallen back into barbarism with the exception of a few who migrated and started afresh.

The "keep-still" and the "motive-go-ahead" principle, or the conservative and progressive state of society, will always be antagonistic. The conservative is the result of a satisfied, quiet, and less active and ambitious state of mind. The progressive is the result of a young, bold, energetic, hungry, unsettled mind. The old and rich are conservative. Those who have everything to gain and nothing to lose are more liable to be progressive. Poverty is the mother of inventions and new movements. Action is always the result of a cause or motive, hence more or less agitation. The conservative element or condition is a dying one. The progressive element or condition is a living one. Some have more wants, and those are more distinct and urgent than others. So the movements of some are more violent and positive than others, hence comes radicalism.

Man was born an infant, and according to the order of nature he is to grow into the full stature of a man. He is born ignorant, and has everything to learn. He is born poor, and has everything to get. He is born meek and helpless, and dependent, and has everything to gain, and his position to secure. Man was placed in this undeveloped world full of qualities, laws and principles, to be used and worked out, and it is for man's interests to develop and apply them. His body requires food and clothing, and he is stimulated by necessities to put forth an effort; and where one condition of his nature does not stimulate him to action another does. Man has some ideas of perfection, has aspirations, has ideas of a being superior to himself, of angels, of a better life hereafter, all of which have a powerful stimulus, for all men want to be more than what they are, and the higher they get the higher they want to go. Every step man has taken from the days of Adam till now, and from the cradle to the grave, of an improving and upward kind, has been progressive; and there is a vast amount more development of the earth's resources, of scientific knowledge, and of the human mind, than there was to start with.

Human nature having begun to develop at the base of the human organism, it has had to work its way up the best way it could. Experience at first was man's only teacher. The necessities of his nature were his motive power. And they were very few and basilar, for man *can* live on a very small capital.

Man's first instinct was self-preservation, which extended itself in many directions and had a powerful influence in establishing the business, commercial interests, and the providing and protecting state of society. Man's second

instinct was to multiply his kind, which was the starting point for the development of man's whole social nature which has resulted in the formation of the home, domestic and social circle. Woman was first looked upon as a necessary appendage to man, but she is rising in his estimation and beginning to be valued as a help-mate, and as a companion.

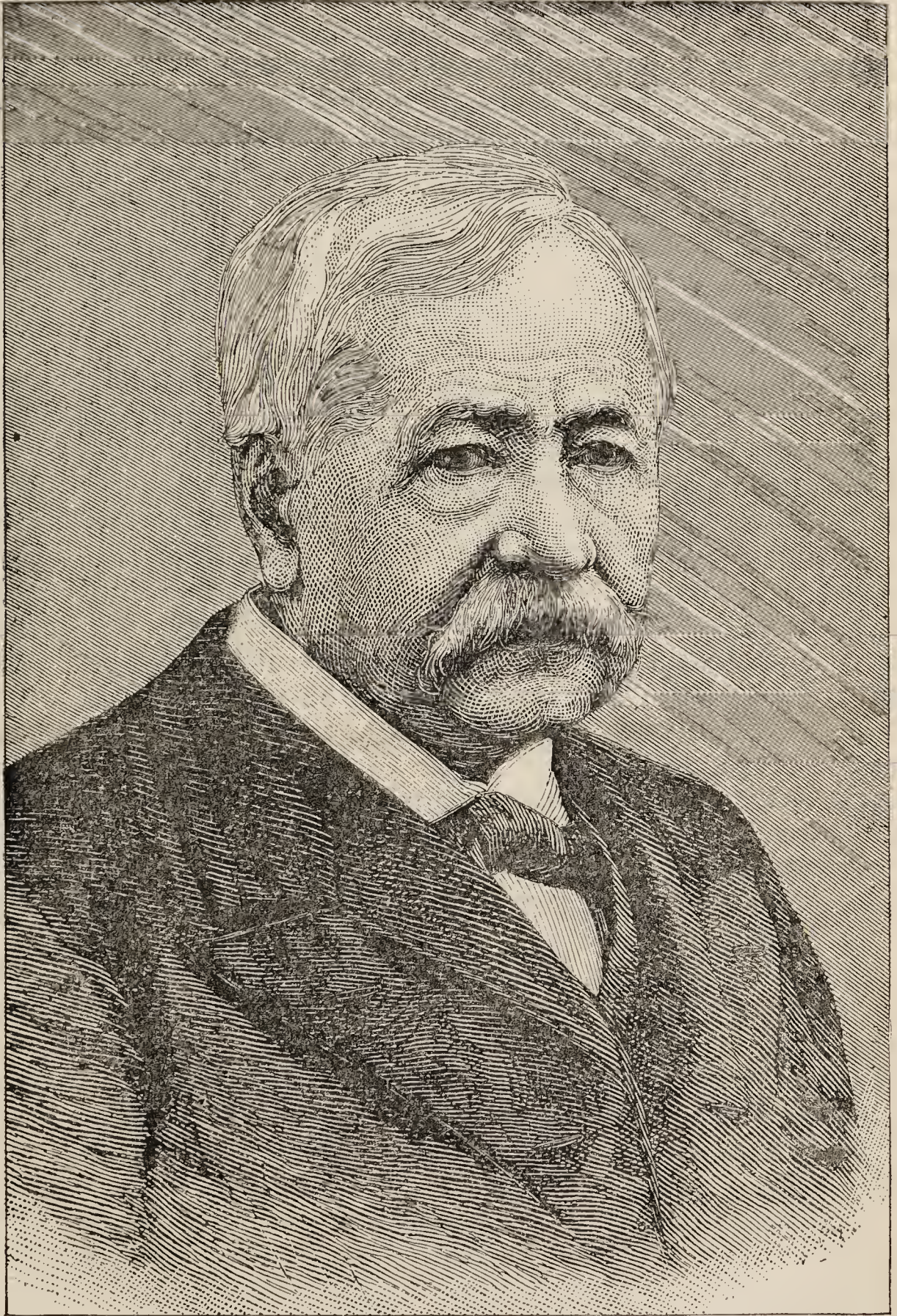
Love was first very much biased by selfishness, and was very fickle, but has become much more pure and steadfast. Family necessities brought fathers and mothers together into a circle of their own, and with habits joined to inclination, in time brought into use all the domestic qualities of mind, social feelings and family circle. Man's third instinct was to hunt, to kill wild beasts, and the roving, travelling, exploring, plundering propensity. The mind began to expand and to be hungry, to see and know ; it began to crave, to covet, and to monopolize and be master, and get into the front rank, and thus gratify his pride and ambition. The better class, the more gifted and more favoured by nature, separated themselves from the ill-favoured kind, and formed a society of their own, and left the rest of humanity to take care of itself. Here began the two great divisions of society, aristocracy and democracy, and these still remain intact. Some were found to be more observing than others, consequently more knowing. They watched the signs of the times, and became sagacious concerning coming events. They also watched the progress and effects of diseases with their probable cause and cure, and gave advice, and tried to cure, and were chosen as prophets and doctors. At first very few inflections of the voice were necessary, for ideas were few and simple, but as the mind enlarged, desires increased, and thoughts became complicated ; intonations varied, and utterance became more clear. Some had a greater eye for beauty than others, both in form, proportion, colour, and combination, and were able to imitate them which was the origin of art. Men began to mark and number their flocks, and men in their armies, and to count the number in their families, the trees on their land, and the stars in the heavens, which led to the science of numbers, and that to mathematics and astronomy. Observation led to investigation, and that to experiment, and that to thought and enquiry as to the origin of things—the earth, heavens, and all creation.

WHAT we would our children should be, we should be to them. The greatest gift we can bestow upon them is the memory of a good example.

SUBLIMITY.

BY JESSIE A. FOWLER.

(Continued from page 54.)



M. DE LESSEPS.—Large Sublimity.

EVEN if we err on the side of imagining beauties that do not exist in every respect, if we err at all, it is better to do

so on the side of a finer conception than on the side of cold reality. Like Nasmyth, who tells us in his delightful autobiography that he used to think one of his friends had a charming and kindly twinkle, and was one day surprised to discover that he had a glass eye.

Professor Huxley has ably illustrated why these faculties should be cultivated which teach us to appreciate the grandest and most ennobling knowledge of our age. "Suppose," he said, "it were perfectly certain that the life and fortune of everyone of us would, one day or other, depend upon his winning a game of chess. Don't you think we should all consider it to be a primary duty to learn at least the names and the moves of the pieces? Do you not think that we should look with a disapprobation amounting to scorn upon the father who allowed his son to grow up without knowing a pawn from a knight? Yet it is a very plain and elementary truth that the life, the fortune, and the happiness of every one of us, and more or less of those who are connected with us, do depend upon our knowing something of the rules of a game of chess infinitely more difficult and complicated than chess. It is a game which has been played for untold ages, every man and woman of us being one of the two players in a game of his or her own. The chess-board is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of nature. The player on the other side is hidden from us. We know that his play is always fair, just, and patient. But also we know to our cost that he never overlooks a mistake or makes the smallest allowance for ignorance. To the man who plays well the highest stakes are paid, with that sort of overflowing generosity which with the strong shows delight in strength. And one who plays ill is checkmated—without haste, but also without remorse."

It is the province of Ideality to give taste, a love of the beautiful and the exquisite. Cautiousness inspires with the sentiments of fear, and it could scarcely be deemed improbable that between these two an organ exists whose function partakes of the nature of each—the sentiment of the beautiful imbued with the sentiment of fear—which gives an appreciation of the grand, the awful, and the sublime.

The beetling cliff, the deep gorge, the lofty peak of the mountain, and the cataract thundering over a rocky precipice, excite in some minds peculiar emotions which can scarcely be referred to a combination of faculties which are already known. Therefore, the posterior region of the space once assigned to Ideality has been appropriated by the organ of Sublimity, with the function which has been indicated.

Sublimity and the Arts. Artists like Doré have a large share of Sublimity, and he represented it in all his works. Artists who have this faculty are given to depicting the grandeur of nature in the deep and terrible phases of human passion. Writers who have this faculty, like Danté and Bulwer, make great their subjects.

Sublimity is the Evolution Faculty. Rev. B. Brown says : " Everywhere in nature there is struggle and destruction with weakness and strength. The animate molecules dashing with deadlier purpose and direr ruin than the inanimate, the lower strata of creation furnishing the grandest hecatomb, while the upward procession of life treads on their dust. There is strife enough and pain enough all around us in the creation to justify this picture, but that the terror is wanting. This ceaseless clash and struggle is the method by which the Creator wills that stronger, purer, nobler forms of things shall constantly be brought forth."

Sad as may seem the aspect of the struggle which everywhere attends the evolution of nobler forms in the lower creation, we must use a darker word to describe the cost of human development. Yet we mark with profound interest the steps of human progress. In the building up of Nebuchadnezzar's golden empire, the Medo-Persian dominion, Alexander's splendid conquests, and the revolution of revolutions which placed the Cæsars on the world's imperial throne, millions of human lives were spilt like water. Read the history of the tremendous wars by which the Reformation finally upheld itself against Rome. And now in this nineteenth century we feel the full sunlight of progress shining upon us, the greatest step of human development which has marked any era, and it has cost perhaps the fiercest and most tremendous battles.

Neither men nor things would wait till nobler agencies could build up a fairer structure than can be built up by war.

Sublimity builds up and produces progress and a desire to see an onward and upward progress through the ages. Man develops continually new ideas and aspirations and Sublimity appreciates this progress. There is always something still struggling to the birth, something which, through all the pain and strain of life, is about being born. We catch the voice, we grasp the hand that seems to seek us from a higher sphere. We yield joyfully to the force that draws us upward, and we gain new and larger thoughts of the future developments of Being as we rise.

The most important secrets of Nature are often hidden away in unexpected places. Many valuable substances have

been discovered in the refuse of manufactories which Acquisitiveness and Sublimity have developed into noble uses. It was a happy thought of Glauber's to examine what everybody else threw away. What discoveries, innumerable, marvellous, and fruitful, await the successful explorers of Nature. No one can tell, and depend upon it Sublimity will have a hand in them.

One of the greatest American inventors has the organs of Sublimity and Spirituality more largely developed than Constructiveness, and his head with many other similar ones has led me to realize the important part Sublimity plays in giving expansion of thought. It will be a faculty that will be largely developed in the coming generations. Who would not give something for a science primer of the next century, in which will be found truths, facts, information that is now only known by the few ?

It is said that every Englishman loves the sight of the sea ; that is perhaps true, but to those who have large Sublimity the very atmosphere seems vivified, so that the sea-air is proverbial as a tonic, and the very thought of it makes the blood dance in their veins. The ocean gives an impression of freedom and grandeur more intense perhaps even than the aspect of the heavens themselves, especially if the elements are agitated.

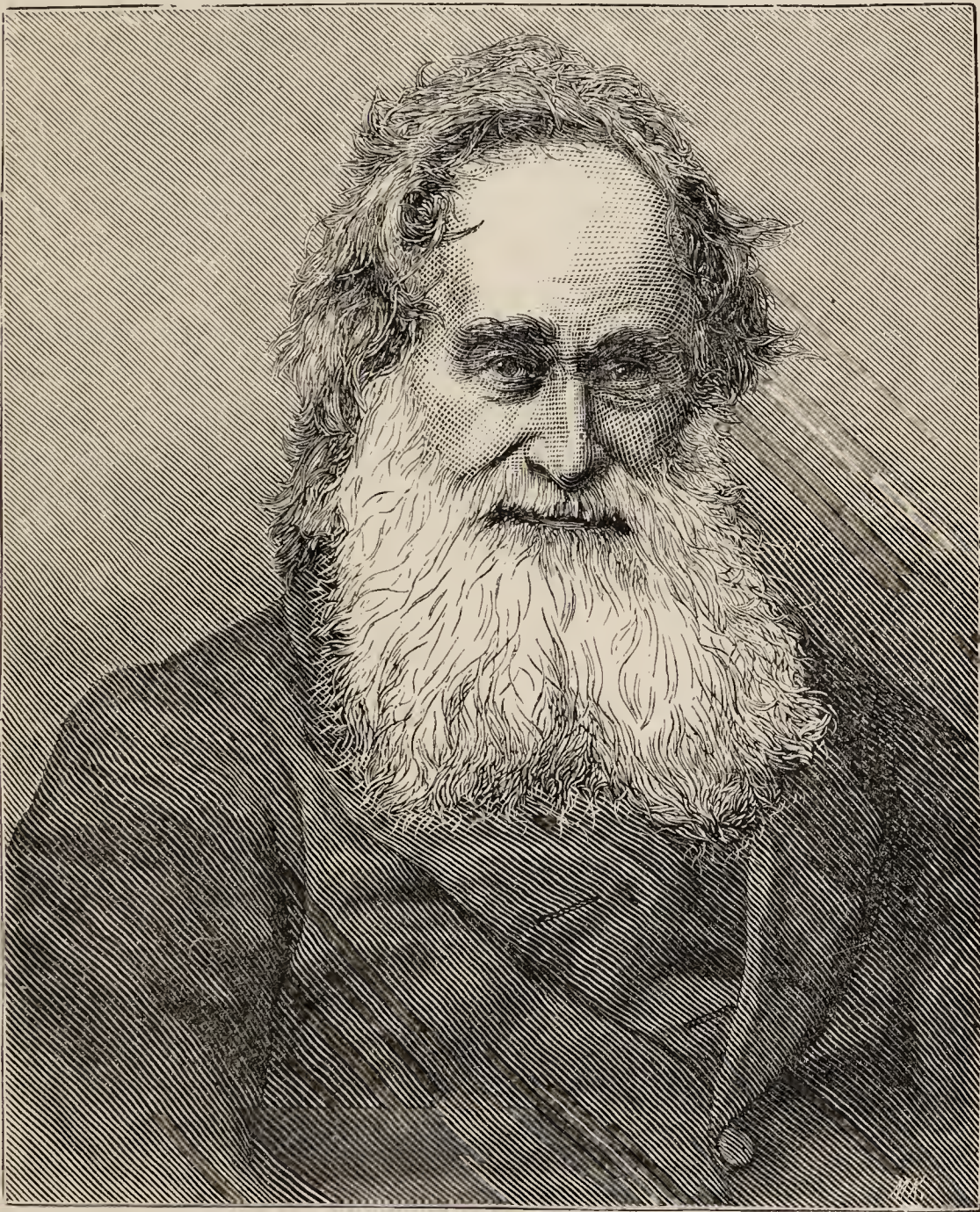
A poor woman from Manchester, on being taken to the seaside, is said to have expressed her delight in glowing terms on seeing for the first time something of which there was, she said, enough for everybody.

Mountains seem to have been built for the human race, in fact for Sublimity to appreciate, as at once their schools and cathedrals full of treasures of illuminated manuscripts for the scholar ; grand in simple lessons for the worker ; grand in their quietness, like cloisters for the thinkers ; and glorious in holiness for the worshipper. And of these great cathedrals of the earth, with their gates of rock, pavements of cloud, choirs of stream and stone, altars of snow, and vaults of purple, traversed by the continual stars, Sublimity takes delight in. Some people are like Archimedes, who once said, if you would give him room to stand on, he would move the earth. So some people feel through this organ of Sublimity that they can move the world.

Sublimity acts also with Tune ; it gives appreciation to the grandest strains of music on a magnificent scale. The power of music is universal, effective, and subtle—perhaps the most effective of all, the powers of the human mind.

There is music in all things if there is power to appreciate

it ; with large Sublimity, the mind is able to appreciate the magnificence of the softest touch as well as the thunder of the most powerful organ. Martial music inspires bravery, courage, hope. Sublimity works with small Hope in magnifying one's sorrows and troubles. Persons with these faculties thus developed will make great grievances out of



ROBERT MOFFAT.—Moderate Sublimity.

little matters which can be easily met if understood. Who has not seen and heard of the Sublimity of Love ? Truly there was some Sublimity about the nature of Grace Darling that made her delight in doing what the sailors of milder mind refused to do. She realised the magnitude of the undertaking and rose to the occasion. In some natures it gives courage. A man with large Sublimity will not fire if

there is only small game to be secured, but waits until he can display his skill and reap a large harvest.

This brings us to the point of advice that the organ needs the most careful training in childhood. Even in our common conversation, we use adjectives which greatly exaggerate our meaning by such words as tremendous, gigantic, awful. Eloquence is not an exaggeration but an appropriate use of words, yet how often the error is made that by "piling on the agony" we get people to accept a truism that would have been lost if expressed in milder phraseology.

The papers are an example of how large Sublimity is capable of being put to a base use by the extravagant language that is used to write up some tragedy, shipwreck, or railway accident; for instance, during a recent shock of earthquake near Bristol, the papers said that people were shaken out of their beds. A gentleman coming from the same locality said he had not heard of a single case of this kind. Of course, you say, this is to create a sensation, truly, but it is making a wrong use of a very beautiful faculty. In art and poetry Sublimity enhances, as well as Ideality refines. Goethe says, "Art is called Art simply because it is not Nature." It is not sufficient for the artist to choose beautiful scenery and delineate it with accuracy. He must not be a mere copyist. Something higher and more subtle is required. He must create, or at any rate interpret as well as copy. Turner was never satisfied merely to copy even the most glorious sunset. He moved, and even suppressed mountains.

A certain nobleman, we are told, was very anxious to see the model from which Guido painted his lovely female faces. Guido placed his colour-grinder, a big, coarse man, in an attitude, and then drew a beautiful Magdalen. "My dear Count," he said, "the beautiful and pure idea must come from and be in the mind, and then it is no matter what the model is." So we find the beautiful faculties of Ideality, Spirituality and Sublimity are brought into use in endless variety.

Mr. Sutro, the engineer, was once examined, and he was told that with his large Sublimity, Constructiveness, Executive-ness, Firmness, Self-Esteem, and Hope, with immense Perceptives, that he ought to be fond of engineering, blasting rocks, tunnelling mountains, or anything that would furnish an outlet for his grasp of spirit, which sought to master the ponderous and the resistant. After the examination, Mr. Sutro explained that he was the maker of the Sutro tunnel, which drained the great Comstock Mine, near Virginia City, Nevada.

It depends with which organ the faculty of Sublimity is

working, what its full character is, Sublimity is as good a name as can be found to express its normal function ; when acting with Ideality, as seen in Turner's great picture, "In a Storm at Sea," it takes the wild and terrific form in nature. It is said that Turner, in order to conceive the spirit of the raging storm, lashed himself to the main-mast while the billows rolled over him. When Sublimity acts with Combativeness, and both are very large, then we have the braggadocio. We knew a little fellow with this development so prominent, who was continually boasting of his achievements in the fighting line, how he had vanquished men twice as big as himself ! The greatest story-tellers I ever knew had immense Sublimity and small Conscientiousness, Cautiousness, and Secretiveness, and would tell the most exaggerated stories. A piece of weed becomes a sea serpent ; if a snail moves slowly across his path he has encountered a ten foot snake ; nothing is too big or too lofty. One, with large Sublimity, will never be satisfied to live in a hovel, or down in a valley, but prefers the hill-tops, where he can view the vast expanse. If his Approbativeness is large he has been the hero of endless encounters, and coped with greater obstacles than any other man. Such a one always uses high sounding words and relates his adventures with some prominent individual in a bombastic style. When acting with large Acquisitiveness in an abnormal degree it never talks of less than millions of pounds. In a normal condition it gives the power to cope with large enterprises. Workmen and little store-keepers seldom have this faculty large ; in a mechanical or commercial line a one-horse team or donkey-cart is quite enough for them.

Corbett and Sullivan, the pugilists, both have it large ; acting with large Destructiveness and Combativeness backed up with large hard bones and muscles, they feel competent to cope with any other human brute ; although Self-Esteem, which is large in both of them, has something to do with giving each self-confidence. Some men have wonderful talent, but being small in Sublimity have no breath of soul, no tendency to soar above the level ground, and certainly never feel capable of coping with large enterprises. One who is small in this organ will seldom be moved by anything great or vast. The big trees in California 350 feet high would not strike him as being anything particular. A sight of a Yosemite valley would not fill his poor narrow soul with emotion. Listening to the dashing torrents would not disturb his slumbers at night if just opposite ; a rainbow thrown across the sky has no more effect on him than a stained-glass window. He would never think of climbing

Mount Blanc or Ben Nevis. A vivid sunset is nothing to him ; it never fills him with admiration. He has no taste for Danté's "Inferno" or Milton's "Paradise Lost." He cared not when—

"The storm how'd madly o'er the sea,
The clouds their thunder anthems sang ;
Or billows, rolling fearfully,
In concert with the whirlwind rang."

These things are nothing to him ; he is as immovable as a statue.

If a study of Phrenology teaches one thing more than another it is this : All organs should be brought into harmonious action by cultivating those that are weak and restraining those that are very strong.

HOW TO TALK AND DEBATE.

PHILOSOPHERS HAVE endeavoured to define in what special manner man may be distinguished from the lower creatures. One has described him as a cooking animal, for man is the only creature that makes a fire. Professor Bell considers the hand of man to be the visible symbol of his superiority ; and Buffon thought his erect attitude a crowning proof of his superiority ; but the gift of speech seems to carry all before it. Man is the only animal that talks ! Birds sing and pigs grunt ; lambs bleat and lions roar ; while other creatures have their special modes of chuckling, barking, braying, and bellowing ; still, man is the only creature that talks, and the only creature that needs a varied speech to express varied sentiments, emotions and desires. The fact is, his mind ranges over too broad a sphere for any moderate number of sounds or articulations to represent his feelings ; and speech, in the broadest sense of the word, is a gift that distinguishes him outwardly, as much as his imperishable soul and vast desires inwardly distinguish him from his humbler companions in the flesh.

As civilization ripens and the social life improves, so language continually assumes new and higher forms, and conversation—which is a sort of radiation of the intellect—gives a lustre which no other form of expression can to the higher developments of our intellectual moral nature. Our language is not merely expressive of our wants—it is communicative of ideas and impulses that stand far above all material things—a streaming out of the soul of man to make common cause with his fellows.

To speak very practically, the conversation of a person marks the state that person has attained to in intellectual and moral culture. The merest word of the most taciturn is as expressive of the character as the prolix dialogue of empty wordiness ; and to talk well is everywhere the ambition of persons moving in refined circles, or aspiring to such circles for the qualification of honourable ambition.

It is a very educational age this—we are all bent on mutual improvement ; and if we can acquire something like accuracy in our written and spoken expressions, we feel a just pride in having subdued some of the roughnesses that beset our moral life, and having acquired in their stead the polish that bespeaks refinement.

THE LAWS
OF CONVERSA-
TION.

NOW, to make conversation at all times agreeable and profitable, certain principles must be kept in view by all the parties engaged in it, and these principles may very well be called the Laws of Conversation. It is ignorance of such laws that begets slander, rudeness, inaccuracy, and tediousness ; and in society we every day meet with those who cannot talk at all, “without putting their foot in it,” while they see others sail on with the easy grace of a ship in full canvas, delighting all around them—their aspect all grace, their dialogue all wisdom.

LISTENING. THE first condition of all conversation is that the speaker must have an audience ; hence those who aspire to a “feast of reason and a flow of soul” must learn to listen patiently, and without betraying an anxiety to speak themselves, or a patronizing condescension to the speaker. We are all a little egotistical, but in the moment we betray it we become obnoxious. No matter, therefore, what are your conversational talents, learn to listen, compel yourself to believe that what is said by another is entitled to be heard. Your turn will come, but it must not be sought, for the law which requires us to listen demands that we should also encourage a speaker—the more especially if that speaker be a stranger, and without fame as a conversationalist. Captain Sabertash, in his pleasant work on Conversation, says : “One clever, pleasant, cheerful speech, met in a proper spirit, leads to more such speeches ; whereas the best possible saying left unnoticed, or replied to in a false tone, must necessarily fall dead and still-born to the ground.”

SELF-POSSESSION MUST be cultivated by the conversationalist, that he may not run away headlong, and say many things that he may afterwards regret. This is the source of that gentlemanly reserve which distinguishes the man of refinement from the mere bore, and begets that patience in listening, and that generous spirit of appreciation, which makes a speaker feel as much pleased with his hearers as with himself. When you have learned to listen, therefore, treat your tongue as you do a spirited horse—give rein enough for graceful and energetic action, but be ever ready to check any tendency to boisterousness, impetuosity, and, above all, personal rancour.

THE BALANCE. CONVERSATION is like a game of see-saw, as one goes up another goes down, but the game is over in an instant if the two ends are up at the same time. The moment, therefore, that a person essays to speak, give way, no matter what good thing you may have ready at the moment. If, in the midst of a narrative which you are relating, some bore should break in with an interruption to displace you, let him have his way at once; suspend your dialogue, and let him go on, and he will, unless hard as granite, feel your gentlemanly forbearance to be a much greater blow to his rudeness than if you were to persevere. A person so breaking the thread of another's discourse deserves severe rebuke, and you will find none so severe, so salutary, as a gentlemanly yielding at once—not sulkily and with a frown, but with the fullest disposition to hear him patiently, and to enjoy his obtrusive nonsense.

CONVERSATION IS CONFIDENTIAL, BECAUSE it supposes a free communication between persons in private life. A speech made in a public place is public property, and may be quoted and criticised elsewhere; but whatever is uttered in the sanctity of private life is confidential in principle, and must not be repeated. It is the besetting sin of semi-cultivated people to retail all they hear and see—to repeat the jokes, the bon mots, the repartees, and the criticisms they have heard in company, giving each as the saying of "So-and-so;" but nothing can be in worse taste. It is even a dangerous practice, and those who adopt it will be shunned as soon as their sins find them out. The authority just quoted says: "The conversation of society is confidential in principle, because it is not to authorize you or any one to repeat a single word capable of causing pain, still less of proving injurious to others. But it does not in

practice prevent any one from repeating good sayings, good anecdotes, anything that may be pleasing, instructive or amusing, provided it is untinged by slander, and free from the seeds of mischief. For my own part, I never hear anything said in praise of a pretty girl without embellishing and repeating it as fast as possible ; and every individual is hereby permitted and enjoined to follow the good example."

APPRECIATION. HERE another law of conversation demands attention. We must appreciate all we hear, smile at the bad jokes, respond to the stupid questions, take interest in absurd remarks, but we must not pay the speakers back in their own coin : better be silent than talk twaddle — though if we consort with the talkers of twaddle, we must treat them as equals and give them attention. We meet to please and to be pleased, and it is an insult to the whole circle to manifest displeasure because things do not come up to our standard — for, after all, we may happen to be wrong in our estimate of what is right.

THE MATTER AND THE MANNER. DEAN SWIFT says : " Nature has left every man a capacity of being agreeable, though not of shining in company ; and there are a hundred men sufficiently qualified for both, who, by a very few faults that they might correct in half an hour, are not so much as tolerable."

PROPER SUBJECTS. NOW the first essential of conversation is that we must have something to say, and the next point is to say it well. To have something to communicate implies the possession of knowledge ; and he who would shine in conversation must be a reader of books and an observer of men. What subjects are best ? Plainly those that belong to the elegancies of life, and which are not likely to strike deep at personal prejudices, or to beget contentions on sectarian differences — Nature, as seen abroad and at home — the varied aspects of human society, as witnessed during foreign travel — History, in its various unfoldings of human character, and its record of the greatness and failings of nations — Science, in its applications to the wants of life, and its revealings of natural laws and economies — and, above all, Art and Literature — pictures, sculpture and books.

But to converse on these matters requires a knowledge of them, and to converse well requires a knowledge of something more than mere superficial details ; yet it is better to get the

merest smattering than to remain utterly ignorant of these staple subjects, because that smattering will fit you to understand the remarks of persons competent to express opinions and to deliver criticisms. Any one attempting to converse in good society without possessing, at least, the elements of general knowledge, must soon stumble and go wrong.

TRIFLES. BUT conversation is not to be hemmed in by the laws of philosophy, but must shape itself according to the mood of the company. Shallow people are the most apt to affect profundity; the truly wise can afford to relax at times, and sport in trifles. Even satire, flirtation, love and drollery may find exponents, and when the wheel spins rapidly round, none but the most leaden-brained would attempt to check it by the introduction of a serious subject.

But it is in the hour of general merriment that the greatest caution is required; for, when impulse is strong, many things may escape from the tongue that the speaker would afterwards gladly recall; and it is in high literary circles, where the most profoundly learned men and brightest wits assemble, that the perfection of nonsense is talked; like a display of fireworks, it dazzles with its myriads of many-coloured sparks, it delights all, makes the hours fly rapidly and joyously, and is only to be shorn of its glory when some abominable stick falls, and a sufferer is born away wounded; in other words, when some novice in such things oversteps the mark, lets a personality escape him, and strikes awe into the heart of the boldest. Though conversation of a solid kind, in which information is imparted, and ripe views of men and manners, arts, sciences, and literature are exchanged, is at all times the most ennobling, the most gratifying, and the most certain to increase the strength of friendly bonds, it is at the same time certain that when fun sparkles it should have free way, without the violation of the most delicate private feelings. There is never a want of subjects, the great art always consisting in introducing them gracefully.

OBJECTION-ABLE SUBJECTS. BUT there are certain subjects that should never be introduced in general conversation, however fit they may be for the consideration of friends *tête-a-tête*. Religious matters are at all times unfit, though it is common enough in middle-class life to find a whole company at loggerheads about some question of Popery or Protestantism, some refined point in church discipline, or doctrinal peculiarities. In a mixed assembly it

is next to impossible to express an opinion on any religious topic without stirring up the bile of some dogmatist, or wounding the most sacred feelings of some devotional heart. Leave the Pope alone ; let Dr. Cumming have his way ; never mind the " Eclectic Review " and the " Hymn-Book " controversy. We want to be happy, and we cannot when our deepest and most cherished sentiments are assailed, or when some one would convince us that his opinion is the soundest. Of course, in little family circles, where the parties are old friends, the case is quite different.

POLITICS. POLITICS are dangerous, and should be avoided as much as possible, because there are no more certain means of setting people by the ears, or of tempting talkers into hot debate than to introduce questions on which different people feel so strongly. Beside this, there is another objection to politics—ladies are not generally politicians, and we treat them unkindly—nay, ungallantly, to intrude upon them matters in which they do not take as much interest as ourselves.

PHRENOLOGISTS AND SCEPTICISM.

How easy it is in these days of rush and drive to take everything one hears as law and gospel, or else to doubt everything as being something averse to what it is represented to be. Perhaps there are few people who are responsible for more mischief, error, and scepticism than the one known so often as " They." Certainly the mischief cannot come from the need of work for idle hands or tongue, for they must be the busiest individuals alive if they accomplished half the work that is credited to them.

Now, why should Phrenology be considered to lead to scepticism and unaccountability ? Why, I ask, should the science of Phrenology be objected to, because " They " say it leads to scepticism ? This question is easily answered : it is not the science which is at fault, but some of the advocates of it, those whom we look to, to support and strengthen it. We may as well ask, Why do people ever disbelieve Christianity ; it is not the religion that it is at fault, but the professors of it ? We find people, who criticise Phrenology as well as other subjects, seldom take for their example those who are out-and-out in earnest, or those who really have their subject at heart and to whom it is part

of their very lives, who would rather die than let their cause suffer, and would exercise any amount of self-sacrifice rather than let the shadow and doubt of their misdoings fall on the subject so dear to them. No, I repeat, our critics do not see these men, or if they do they never drag them to the front, because they cannot; for if they did, their own lives would stand as a proof of the truth of their subject: so it is the professing man who comes to the front, the man whose one aim is to be thought clever, and to prove his power. Who has ever heard the Atheist bring as his example against religion the man who, to all the world, is the man in whose face, manner, and life, the spirit of Christ is clearly written in unmistakable characters and clearness? The Atheist brings as his proof the man who professes to be a Christian in his manners, while in his soul he knows he has never in his life suffered one hour's pain for the cause of Christ. So we shall find in the scientific world as in the religious world, the fault is in ourselves not our science. I maintain that if the science of Phrenology is taken up with the intent to study it, on a scientific basis, to thoroughly understand its basis and origin and its practical working, no man can help believing in it; and further, if the student who undertakes this study, be he a Christian man, or one who is in his heart desirous of leading the higher life, and of daily improving his own character, and helping others to do the same, that man will find in Phrenology, not the root of scepticism, but the fruitful germ of higher life.

Because a man becomes conscious that he has allowed one of the faculties of his mind to have a greater sway over the higher powers of his mind than he should have, is that any reason why there is no God? Because he discovers that he has a large organ of Self-Esteem, which he has been too selfish to restrain, and it has made him proud and conceited, is that any reason why Phrenology leads to unaccountability? or because a man, who has small Veneration and not enough Combativeness and Destructiveness to make it easy for him to fight against this weakness, without an effort, is that any reason why he should be exhibited as a specimen of God's neglect? No! he is simply a specimen of self-worship and idleness. God has given him a task to do and he refuses to take the trouble to do it. Don't blame Phrenology but blame the Phrenologist. If you suffer from headache and the doctor gives you physic to cure it, and you are foolish enough to waste it by throwing it away, don't say that the science of medicine is at fault and useless because your head still aches, but openly confess that you are the one at fault.

As a Phrenologist, I believe that if the study of Phrenology is taken up in the right spirit, it is one of the most effectual means of bringing about the conversion of the world to a higher mode of life ; in other words, of proving the existence of a God and the reasonableness of Christ as a Mediator, because of the proof of divinity and superiority of the Supreme Being, showing a power which cannot be equalled by the creation of anything in nature. In the first place, to know where one's fault is, is half the battle, and to learn how to overcome the difficulty is the other half of self culture. But the Phrenologist, to be the teacher, leader, physician and guide, should be, must be, an unselfish man : a man of culture and refinement, having delicacy of feeling and gentleness of manner, thought, sympathy, and exquisiteness of organization ; and I ask, Who ever saw a man with these high qualities of mind who was void of that element we call love ? What so refines and beautifies a life like the spirit of Christ ? If you want bounce and power then close your life against religious influence and also against Phrenology, but if you want a high-minded, intellectual, conscientious teacher and guide seek the man who is a believer in Christ and a student of Phrenology ; he is the man who will be able to understand your character, the working of your mind, the difficulties you have to contend with, and he is the one who for the sake of his cause, his love for humanity, and his desire to impart to others the happiness, contentment and peace of his life will by his gentleness and tenderness lead you and advise you aright. The trouble is, few men are whole-hearted enough to thoroughly sift the matter. It is easier to take for granted what "They" say, and to let the first man who turns up figure as an example, whether he be a quack or a practicing practitioner, than to stay to enquire.

It appears to my mind that the man who has studied Phrenology with a pure motive, must come out of that study a wiser, purer man than he entered it. The mere fact of studying the beautiful adaptation of the delicate structure of the human brain (as every true Phrenologist should have studied it) has in itself a strong plea for the existence of a God, and the mellowing of the character. What human being has ever shown any equivalent structure to the delicacy of the human mind ? and surely we may argue that the originator of such a piece of machinery capable of so much intensity of thought, feeling, longing, desire and aspiration, would not in the common order of things abandon such a creation without supplying food suitable to supply its need. Should we,

in our human littleness, manufacture an article so sensitive to impression merely to break it up, it is altogether against our sensible reasoning, and if as we are all conscious, we are so capable of suffering of mental hunger, what I ask (after all our arguments and theories) is capable of satisfying our cravings like the Life of Christ?

A Phrenologist holds a power no other man ever dreams of, of influence for good over others; and how much more intensified is that power if kindled and fed by the spirit of the Gospel of Christ. Cling to the teachings and promises of Christ, and search His teachings as earnestly as you apply yourself to prove Him a mistake, and the scepticism of Phrenology will soon disappear in the ecstasy of having gained another means of proving the divinity of Christ, and thankfulness in having found another channel in which to so effectually help his cause.

F. F. I.

REPRESENTATIVE SKULLS.

ARTICLE No. II.



THIS is a good type of an English female, and a decidedly feminine head. It represents all the qualities that belong

peculiarly to woman. The social brain predominates and indicates that the lady must have been remarkable for her domestic feelings. The skull measures above the average from the opening of the ear to the occipital spine, and all the occipital portion is particularly well represented. It was of peculiarly fine quality joined to great susceptibility of mind. She must have shown superior love for children and devotion to the young. She was well qualified not only to care for very young children, but to manage, instruct, and train them in youth, and must have been a wise and prudent friend when years of discretion were reached. She must have been dearly attached to places—the old homestead and her native country. It was probably with some difficulty that she was induced by her friends to visit them away from her home and family. She was one to centre her affection in a home of her own, and liked her friends to come and see her rather than to go much into company. The cerebellum appears to have been well developed, which must have added warmth and geniality to her character, and charm to her personality. Her executive brain was well represented. She must have been known for her industry, economy, and tact. The full development of her gustatory centre gave her enjoyment of her food, and joined to her intellectual powers, she should have been able to prepare very acceptable food for others. Her moral brain was distinctly marked, which made her keenly sympathetic in all philanthropic reforms, and in the amelioration of distress. She was well qualified to understand the profession of nursing, and must have been keenly alive to all the requirements of the sick. She possessed a keen sense of justice, and regard for duty and all moral obligations. The centre of the parietal bone, it will be noticed, is very prominent, showing that there must have been a marked degree of caution in her character; in fact, this characteristic must have amounted to over-anxiety and worry. Her intellect must have been a wide-awake one, especially in practical sagacity, thoughtfulness, critical ability, and intuitive insight into the character of people and things. She was probably seldom mistaken in the conclusions she came to. She was not deficient in Veneration, but Benevolence was a dominating quality in the superior faculties of her mind. She must have possessed a very sensitive regard for praise and the good opinion of others, and have put herself out of her way considerably to please her friends and excel in whatever she did.

Much in detail might be said of such a skull, but the above are the salient points and characteristics. It is one of the finest specimens of quality in the collection. L. N. F.

LONDON,

IMPERIAL BUILDINGS, NEW BRIDGE STREET,

LUDGATE CIRCUS, E.C., MARCH, 1893.

BRAIN CURIOSITY. OWING to individual peculiarities in the shape of the skull, the amount of hair, and the mode in which the hat is worn there may be a very wide divergence between the size of the hat and the cranium. In Mr. Grote's case this difference was $1\frac{1}{2}$ in. His brain and skull showed distinct marks of atrophic changes, but those due to age cannot be separated from those due to disease. Moreover, we possess no data showing how the weight of the brain is influenced by various forms of disease, nor, as Professor Marshall points out, do we know how it is affected by stature, for Parchappe's opinion that tall persons have not only absolutely but relatively larger brains than short ones is more than doubtful. The brain weight of fifteen eminent men collected by Dr. Thurnam, when corrected for age, varies from 66 oz. in Cuvier's case to $45\frac{1}{2}$ oz. in Haussman's, and Grote's position would be between the tenth and eleventh on that list. But that list comprises men of eminence from different countries, and we have another comparison which is far more interesting. The absolute weight of the brain of Thackeray was $58\frac{1}{2}$ oz., of De Morgan $52\frac{3}{4}$ oz., of Grote $49\frac{3}{4}$ oz., of Babbage $49\frac{1}{2}$ oz., and of Professor Grant $45\frac{1}{2}$ oz. When corrected for age Grote comes below Babbage and is the fourth in this series of well-known Englishmen who have recently died. Like the brains of Dupuytren and Whewell, to which it closely approximates in weight, it cannot be said to be a very large brain. Compared with Cuvier, Abercrombie and Thackeray Grote's brain seems small, but Cuvier's brain was probably abnormal, and Abercrombie's (63 oz.) surpassed the maximum weight of $60\frac{3}{4}$ oz., recorded in Dr. Boyd's tables, which give the weight of 700 adult sane male brains. The relation of the weight of the cerebrum to the cerebellum was investigated after the brain had been partly hardened in spirit and its membranes removed. In this state it weighed 39 oz.; the cerebrum being $34\frac{1}{4}$, the cerebellum 4, the pons varolii with the medulla oblongata $\frac{3}{4}$ oz. This gives a ratio of 8.5 to 1 in Mr. Grote's case, which is about the average proportion of 8 to 1. But here considerations of height must be regarded, if we would be safe against an evident source of fallacy. From some interesting calculations on sixty-seven persons,

between 5 feet 10 inches and 6 feet, thus including stature as well as age. Professor Marshall concluded that the average proportion of cerebrum to cerebellum was 7·6 to 1 at this height, whilst in Mr. Grote's case it was 8·5 to 1. No doubt it would have been very satisfactory to Mr. Grote, as it will be to his numerous friends, to have learned with scientific accuracy that in his case in proportion to the cerebrum the cerebellum was deficient: although this relative deficiency was due to an absolute increase of the cerebrum, rather than to any important diminution in the cerebellum. The consideration of the bearing of other important questions suggested by the shape of his cranium and of the cerebrum, the asymmetry of certain lobes, their relative weight, and the proportions between the grey and white matter, must be deferred to another occasion.

BRAIN
ACTIVITIES. WE all know that Mr. Gladstone finds a change of occupation the best means of rest and recreation. In this connection the Rev. George Jackson told an Edinburgh audience the other day an anecdote of the Premier which, he said, had never been published. A gentleman asked Mr. Gladstone the cause of his astonishing activity. Mr. Gladstone replied that many years ago he heard there was a road leading out of London which killed more horses than any other road. Now, this particular road was a dead level, and accordingly only brought one set of the muscles of a horse into play. Applying the moral, Mr. Gladstone thought that what was good for the horse was good for him.

BUTLER'S BIG
BRAIN. GENERAL BUTLER'S brain, as has been announced, weighed four ounces more than that of Daniel Webster. Daniel Webster's brain weighed 58 ounces, but physicians estimated that six ounces had been destroyed by disease and the use of alcohol. If compared with the weight of Webster's brain at death, General Butler's brain is next to the heaviest on record. If compared to the estimated normal weight of Webster's brain, General Butler's would be first among the brains whose weight has been recorded.

The average weight of the brain in men is about 49 ounces. The brain of Edward B. Ruloff, the classical criminal, who was hanged on May 19th, 1871, for one of his many murders, weighed 59 ounces. Its great weight was due to an enlargement of the lower part, the upper part, where the moral qualities are supposed to reside, being very deficient. Ruloff

is the man who united a love for philology, an intimate knowledge of Greek, and not a little learning of various sorts, including acquaintance with law, with a propensity to kill people who stood in his way.

MR. JOHN MORLEY'S NERVOUSNESS. To Mr. John Morley, according to Mr. Lucy in the new number of the *English Illustrated*, the delivery of a speech is a serious business, carrying with it an amount of responsibility not to be lightly or unnecessarily undertaken. "He is conscientiously concerned not only for the matter of the speech, but for the selection and proper sequence of every word that composes it. To his almost ascetic literary taste the looser style of expression which passes with a public audience is shocking." Mr. Morley, curiously enough, has not yet got over his tendency to House of Commons fright. "Probably he never will," says Mr. Lucy; "but it is a mental condition that carries no reproach, since up to the last it beset Mr. Bright. Other eminent men know it not. No one familiar with the House of Commons would find it possible to associate Sir W. Harcourt, for example, with this occult influence." "People not admitted to the intimacy of Mr. Morley's friendship regard him," Mr. Lucy adds, "as an austere man, whose talent, if he bestow it on you, it were well to wrap in a napkin in readiness for the day of reckoning. His manner is certainly not flamboyant. But its occasional aloofness, of which complaint is made, is simply the reticence of a highly sensitive nature, quickly shocked by anything coarse or mean. This sometimes obscures, but never hampers, the impulse of the keenest and most generous human sympathies."

Fowler Institute.

MEMBERS' NOTES.

"The truly strong and sound mind, is the mind that can embrace equally great things and small. I would have a man great in great things, and elegant in little things."—DR. JOHNSON.

ON Monday, Feb. 13th, Mr. Baldwin gave a lecture entitled "Heads and Faces," which was illustrated by a large number of suitable lantern slides. Each of the features was dealt with separately, and its peculiarities noted. The lecturer impressed upon his hearers the importance of studying Physiognomy along with Phrenology. After

several questions had been asked by various members, a vote of thanks was accorded to Mr. Baldwin.

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THE following is extracted from an entertaining letter from Miss A. M. Fowler : "I received with much pleasure your letter in which you conveyed to me the good wishes of the Institute members, and I thank them through you for their kind greeting. It is pleasant to be remembered when so far away from home and loved ones. Will you please give my best wishes to the members, and say that I am well and as happy as I could expect to be away from Ludgate Circus and that one particular little spot in Kent which I still call home."

* *

MR. H. J. TOMPKINS sends an observation on the head of a quarry labourer (Prussian) which was stated to be 33 inches round. The man was 6 foot $2\frac{1}{2}$ inches, weight 27 stones. This size of head is only $1\frac{1}{2}$ inches less than that of J. Cardinal, who had a hydrocephalic head ; but the labourer possessed a healthy brain and sane mind. The information was taken from *Chambers' Journal*, Dec. 20th, 1890.

* *

MR. RAMSEY forwards the following information : "A village of criminals is said to have been discovered in Italy. It is the village of Artena, the inhabitants of which are robbers or assassins. In the Italian Chronicles of the middle ages Artena possessed a bad reputation, and a search through the judicial records shows the same names continually appearing—a testimony to the hereditary character of the criminal impulses. I think however, that Phrenology, being true, can account for this state of things, and should be a help to the poor moral cripples under the fearful influences from which they suffer."

* *

How impossible it is to estimate the benefits that would be derived by us individually and collectively if we could rest when rest was needed, and find the most suitable form of recreation before having to resume work. This is essentially an age of increased activity, and consequently of increased exhaustion, therefore sufficient time for recuperation is perhaps more important than ever. If those geniuses, such as Chatterton, Hugh Miller, and others, who terminated their own career so suddenly, had practically realized this fact, the world would probably have been richer and better. Among other great men who attempted or admitted they had contemplated suicide might be mentioned Dupinghen, the distinguished anatomist and surgeon ; Cavour, the regenerator of Italy ; Lincoln, the martyr-president ; George Sand, Goethe, Comte, Shelley, and Byron. It would seem that Seneca was right when he taught centuries ago that there was no great genius without a tincture of madness. This subject of work and exhaustion has recently been investigated by an Italian, A. Mosso, who has constructed an apparatus by means of which he has shown "that the work of the brain is far more exhausting than the work of the muscles, for chemical decomposition operates much more powerfully in the former than in the latter. Mosso further shows that brain exhaustion decreases

the strength of the muscles, and *vice versâ*, and the law of moderation in these changing relations is not to be mistaken. It has thus also resulted that we are mistaken when we believe that we will recover from mental work by physical work."

* *

PROFESSOR VICHOW, of Berlin, in an address delivered at the opening of the International Congress of Prehistoric Archæology and Anthropology, at Moscow, remarked :—"It was generally believed a few years ago that there yet existed a few human races which still remained in the primitive inferior condition of their organisation. But all these races have been objects of minute investigation, and we know that they have an organisation like ours, often, indeed, superior to that of supposed higher races. Some races have the same skulls very small, of about the same volume as the microcephalous skulls; for example, the inhabitants of the Andaman Islands and the Veddahs of Ceylon have been regarded as microcephalic. A more exact study has, however, shown a difference between them and the real microcephalic races. The head of an Andaman islander or of a Veddah is very regular, only all its parts are a little smaller than among men of the ordinary races. Nanicephalic heads (dwarf), as I call them, have none of those characteristic anomalies that distinguish really microcephalic heads. A single race, that of the Orang-Simaings and the Orang-Cekai of the peninsula of Malacca, still remains unstudied. The single traveller who has penetrated into the mountainous countries inhabited by them, the bold Russian, Miklukho Maklai, has ascertained that certain isolated individuals among Simaings are small, and have curled hair. A new expedition has been sent into that country to study the anthropology of the Orang-Cekai, from which I have recently received a skull and a few locks of hair; the stock is really a black race with curly hair, the brachycephalous head of which is distinguished by very moderate interior volume, but it does not offer the most trifling sign of bestial development. Thus we are repulsed at every line of the assault upon the human question. All the researches undertaken with the aim of finding continuity in progressive development have been without result. There exists no *proanthropos*, no man-monkey, and the "connecting link" remains a phantom. Scientific anthropology begins with living races; and the first step in the construction of the doctrine of transformism will be the explanation of the way the human races have been formed, and of the means by which they have acquired their specific peculiarities while still preserving hereditary transmission."

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THE third Annual Meeting of the Institute will take place on Wednesday, March 8th, when the diplomas and certificates will be awarded to successful candidates in the recent examination.

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ONE often comes in contact with people who are naturally head-strong, but seldom do we meet with an individual who can boast of an iron skull. The experiments of Dr. Luys, mentioned recently, are similar to those of M. De Rochas, who charges a plate with the sensi-

bility of the person to be photographed before placing it in the camera, and by "touching the image of the person photographed localizes the sensation in the person himself. By scratching the gelatinous film on the hands of a photograph the original of the image, at a distance of thirty-five mètres, feels a sensation of pain, and red subcutaneous marks are formed on the hands corresponding exactly with the scratch on the photograph. These experiments have been repeated by Dr. Luys in the presence of Government functionaries. They are effective not only immediately after the photograph has been taken, but three days afterwards, when the photograph has been fixed. The experiment is not successful unless the photograph is in the neighbourhood of the subject, and the sense of touch only is 'exteriorised,' so that the dreadful possibility of inflicting serious injury is happily eliminated from the operations. The theory that it is the result of what is known among hypnotists as 'suggestion' is not tenable, for M. De Rochas operates without concentrating his attention upon, or seeing, the subject. If he and Dr. Luys, and other experimenters, are not the victims of an erroneous interpretation, we are opening a door which will lead to the knowledge of a group of natural laws of which we have hitherto been in ignorance, and which may lead to the extraordinary results."

G. B. COLEMAN.

Hygienic and Home Department.

HOW POOR BOYS BECOME SUCCESSFUL MEN.

You want some good advice. Rise early. Be abstemious. Be frugal. Attend to your own business and never trust it to another. Be not afraid to work, and diligently, too, with your own hands. Treat every one with civility and respect. Good manners insure success. Accomplish what you undertake. Decide, then persevere. Diligence and industry overcome all difficulties. Never be mean—rather give than take the odd shilling. Never postpone till to-morrow what can be done to-day. Never anticipate wealth from any source but labour. Honesty is not only the best policy, but the only policy. Commence at the first round and keep climbing. Make your word as good as your bond. Seek knowledge to plan, enterprise to execute, honesty to govern all. Never overtrade. Never give too large credit. Time is money. Reckon the hours of the day as so many dollars, the minutes as so many cents. Make few promises. Keep your secrets. Live within your income. Sobriety above all things. Luck is a word that does not apply to a successful man. Not too much caution—slow but sure is the thing. The highest monuments are built piece by piece. Step by step we mount the pyramids. Be bold—be resolute when the clouds gather, difficulties are surmounted by opposition. Self-confidence, self-reliance is your capital. Your conscience the best monitor. Never be over-sanguine, but do not underrate your own abilities. Don't be discouraged. Ninty-nine may say no, the hundredth, yes; take off your coat, roll up your sleeves, don't be afraid of manual labour! The best letter of

introduction is your own energy. Lean on yourself when you walk. Keep good company. Keep out of politics unless you are sure to win—you are never sure to win, so look out.

DON'T BE TOO CRITICAL.

WHATEVER you do, never set up for a critic. I do not mean a newspaper one ; but in private life, in the domestic circle. If you don't like any one's nose, or object to any one's chin, don't put your feelings into words. If any one's manners don't please you, remember your own. People are not all made to suit one taste, recollect that. Take things as you find them, unless you can alter them for the better. Continual fault finding, continual criticism of the conduct of this one and the speech of that one, and the dress of the other, will make home the unhappiest place under the sun.

THE NEED OF EDUCATED MOTHERS.

THERE seems to be a somewhat prevalent opinion that a college education fits a woman for almost any position she may wish to occupy, but that of wife and mother. She may with propriety be a teacher, or perhaps a physician ; but if she uses the same qualities that so well adapt her to be the guardian of the minds and health of the children of others in rearing her own children, her education is deemed as lost or worthless.

The same opinion also exists in regard to girls who, although not college-bred, have received the advantages of a so-called liberal education. Public opinion finds expression in such phrases as "How much better off is she than such-an-one who never had any education?" "She'd better have done something with her education before she settled down."

SITTING UP STRAIGHT.—Grown people and children are alike inclined to fall into the very bad habit of sliding down into a chair and sitting for hours with the spine bent almost in a half circle. That this is injurious thousands of people who indulge in it never so much as dream, but that it is the cause of many serious ills those who have investigated the subjects are well aware. The continual strain upon one side of the spinal column with the corresponding compressions on the other, give rise to nervous difficulties and affections of the brain. Dizziness, nausea, and blind spells are not infrequently the result of this practice. While the strictly upright position is undoubtedly the most healthful, it seems rather hard work to persuade the young and indolent to maintain it. Lazy people, and those who love luxury, have a habit of "slumping," so to speak, into their chairs and remaining in a semi-recumbent position, with the spine as nearly telescoped as may be. That portion of the human anatomy generally known as the backbone was intended to be worn in an upright position, and the constant pressure of the vertebræ upon each other is productive of various ills. Children should be taught to sit erect, especially if they are growing rapidly. When tired, or in a position to rest, let them

lie down and entirely remove the strain from the muscles of the back. If youngsters who suffer from dizziness and headache are carefully observed, it will frequently be noticed that their position is faulty. The curved form of the spine results in a pulling of the muscles at the back of the neck, and the difficulty is quite certain to be removed by correcting the habit of sitting.

NO SCHOOLING BEFORE SEVEN.—The Rev. Norman McLeod, the famous Scotch divine, was allowed to run wild among the brackens and the heather of his native rugged hills before he was brought under the scholastic lash and tamed by Conjugations and Imperative moods. As a scholar and a preacher no abler man flourished in his day. The sound constitution, strengthened by the invigorating play of boyhood, fitted his brain with an infinite capacity for hard work, thinking, writing, and preaching in after life. Children should not be sent to school before they are seven or eight, or even taught at home, anything which cannot be conveyed by example, conversation and play. Health is more important than education, and education without a good physical basis in health is simply thrown away, as the subject of it is never likely to be anything. If parents only knew the injury of early cramming they would hesitate to send the little ones to school before seven. Let them aim in giving the children a healthy physique, a sound brain, and more or less thirst for information, by judicious answers to their numerous questions, before seven, then they may with greater safety, and hope of better results, let their children go to school after seven.

Notes and News of the Month.

THE Institute is open for Phrenological Examinations every day from 10 a.m. to 5 p.m. Saturday 10 a.m. to 6 p.m. Evenings from 7 to 9 p.m.

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THE April number of the Magazine will contain a forcible article by W. T. Stead, Esq., Editor of *Review of Reviews*, on "The importance of Phrenology in the Police Court, Industrial School and Jails which have to deal with the failures of Society." He says: "In dealing with a confirmed criminal, or a confirmed truant, the phrenologist might give us a hint."

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MR. AND MRS. JAMES COATES, of Glasgow, have just purchased "Glenbeg," a commodious villa which is situated at Ardbeg, West Bay, Rothesay, close to the sea, and which is to be opened according to present arrangements in May. The grounds are well sheltered, so that the residence is adapted for a winter as well as a summer resort. Rothesay is the Maderia of Scotland, and is noted for pleasurable outdoor sports. Gentlemen worn out with city fog, who are not actually ill, will be greatly benefited by the comforts of home at such a retreat.

Treatment in Massage, Electricity, and Swedish Movement Cure will also be given.

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THE first American Bishop, Phillips Brooks, has passed away, and with his death he takes from the country something more than a simple bishop of an individual creed. He was an American of Americans. Large in every way, head, heart, physique ; to him the world was a vineyard of opportunity. Men of whatever faith found in him a brother—helpful, earnest, conscientious and faithful.

* * *

IN the May number of *Great Thoughts*, 1885, it was stated that Prof. Donders, of Utrecht, has an instrument called a noemaclograph, by which he can ascertain the time required to perform a single thought. Also that Mosso has an instrument called the plethysmograph, ~, which he can ascertain the relative quantities of blood in the brain during mental action, either sleeping or waking. A member of the Fowler Institute desires to secure fuller information respecting the principle or formation of these two wonderful instruments. Can any of our readers help him in this matter ?

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.]

JUST recently Miss J. A. Fowler gave the third of the series of Lectures on the "Four Great Leaders of Thought," when the character and works of Emerson were considered. Miss Fowler said :—It was the close study of character that gave Emerson's writings such a naturalness—a life—reality. The love of truth for its own sake was the particular and individual note of Emerson's genius. He did not trouble himself as to the effect of what he said on theological dogmas or on social and political opinion, but said exactly in a clear and beautiful way what he thought and felt on matters which appeared to him to be important. He looked into his heart and dipped his pen there, then wrote. His style is manly, clear and direct, full of verve and poetic energy—it reflects the writer. His gift of luminous and stimulant speech in single dicta one cannot readily parallel in all literature. Multitudes of his sayings are as true and valuable as they are brilliant. He did for the mind what the sea air does for the body—braced it. It is his glory, and a glory not easily won, to have convinced men that every age must find its highest inspiration in itself, if it is ever to be capable of giving inspiration to others. Some passages in his writings prove Emerson to be quite upon phrenological ground. He says, "There are innocent men who worship God after the tradition of their

fathers, but their sense of duty has not yet extended to the use of all their faculties." His thought on the duties of a thinker is also appropriate to our study of mind. "The office of the scholar is to cheer, to raise, and to guide men by showing them facts and appearances. He plies the slow, unhonoured, and unpaid task of observation. Flamsteed and Herschel, in their glazed observatories, may catalogue the stars with the praise of all men, and, the results being splendid and useful, honour is sure. But *he*, in his private observatory—cataloguing obscure and nebulous stars of the human mind, which as yet no man has thought of as such; watching days and months sometimes, for a few facts; correcting his old records—must relinquish display and immediate fame. Let him not quit his belief that a pop-gun is a pop-gun, though the ancient and honourable of the earth affirm it to be the crack of doom. In silence, in steadiness, in severe abstraction, let him hold by himself; add observation to observation, patient of neglect, patient of reproach, and bide his own time—happy enough, if he can satisfy himself alone, that this day he has done something truly. He then learns that in going down into the secrets of his own mind he is descending into the secrets of all minds. He learns that he who has mastered any law in his private thoughts is master, to that extent, of all men whose language he speaks, and of all into whose language his own can be translated." He who reads Emerson should read and think. It is said, "The eye sees what it brings the capacity to see." That is specially true of the mind's eye. Therefore, the more we study, think and feel, the better able we shall be to comprehend and love the spiritual and heaven-scaling genius of the American Plato.—Lowell's comparison between Carlyle and Emerson was also referred to.

THE Aberavon Annual Meeting will be held on March 16th.

PHRENOLOGY DEFENDED.—At the St. Saviour's School, Leicester, on Jan. 17th last, a lecture was delivered by Professor Timson, Dp. B.P.A., in reply to Dr. Neal. Councillor Vorley presided. We make the following extracts: Phrenology, like other discoveries, met with antagonism from the medical profession. An M.D., in face of the advancement of physiological research, recently claimed that "There is absolutely no relation or resemblance between the bumps and prominences of the skull and the shape of the brain beneath, and that Phrenology was but a relic of the Dark Ages, as was also Astrology, &c." Mr. Timson said he would allow one of their own authorities (of no mean position in the profession) to answer the assertion of Prof. David Ferrier, M.D., LL.D., F.R.S., F.R.C.P., &c. The determination of the exact relations of the primary fissures and convolutions of the brain to the surface of the cranium is of importance to the physician and surgeon as a guide to the localization and estimation of the effect of disease and injuries of the brain and its coverings, and may prove of great service in anthropological and cranio-logical investigation. He gives four illustrations (pages 483, 486, 490,

491), to assist the student, of the "Relations of the Convolutions of the Brain to the Skull." The lecturer claimed that here was an example of absolute and authoritative contradiction of Dr. Neal's assertion. As this unprovoked opponent had charged the profession with quackery, and Phrenology with being "useless and unscientific," he would refer to medical authorities, and their denunciations of their own profession, and thus show that "people living in glass houses should not begin to break windows over the way." Sir Astley Cooper : "The science of medicine is *founded* on conjecture and improved by murder." Sir John Forbes, late Court Physician to the Queen : "In a large proportion of cases treated by allopathic physicians the disease is cured by nature, and not by them, and in many instances in spite of them, and his experiences of a professional life brought him to the conclusion that it would fare *better* with the patients if drugs were especially abandoned. Physics had come to such a pass they must either mend or end." Adam Smith : "The great success of quacks in England has been altogether owing to the *real quackery* of the regular physician." Professor Evans, Fellow of the Royal College, London : "The medical practice of our day has *neither philosophy nor common sense* to commend it to confidence." Many more quotations from medical works were given, and on the other side testimony of men and women in every rank of society, confirming the usefulness and accuracy of delineations received through Phrenology. Mr. Timson dealt with the hostility displayed by a large portion of the medical fraternity, not only towards material sciences but the psychical, and quoted the harsh treatment Harvey received for his discovery of the circulation of the blood, but now children are taught the same in public board schools. The treatment of Mesmer, and the re-christening of Mesmerism, was exhaustively explained, and also the present strife for the supremacy of facts relative to modern spiritual research, and the materialistic assumptions of the day. He then gave illustrations of the capability and utility of Phrenology in its application to the revelation of character, mental, moral and psychical. The worthy chairman submitted to the ordeal, and with many others confirmed the accuracy of the delineations. Hearty thanks were accorded the lecturer.

ENDERBY.—To a good audience at the Primitive Methodist School-room on Tuesday evening, Feb. 7th, an interesting lecture on "Heads and Faces" was delivered by the Rev. J. H. Saxton, of Leicester. The proceeds were given towards the expenses of a new harmonium recently purchased for the Sunday school.—B.P.H.

At the last meeting of the British Phrenological Association, a paper was read by Mr. J. H. Hubert, on "Some Suggestions for Aggressive Work." An interesting discussion followed.

On March 1st, the B. P. A. Annual Conversazione will be held at Cavendish Rooms, at 8.30. On March 7th the Annual Business Meeting will be held.

Poetry.

FIFTY years ago the following lines were found near a skeleton of unusual beauty and colour in the museum of the College of Surgeons. Lincoln's Inn. They were sent to and published by the *Morning Chronicle*, but who was the author was unknown :—

Behold this ruin ! 'Twas a skull,
Once of ethereal spirit full ;
This narrow cell was life's retreat,
This space was thought's mysterious seat.
What beauteous visions filled this spot !
What dreams of pleasure long forgot !
Nor hope, nor joy, nor love, nor fear,
Have left one trace of record here.

Beneath this mouldering canopy
Once shone the bright and busy eye ;
But start not at the dismal void ;
If social love that eye employed—
If with no lawless fire it gleamed,
But through the dew of kindness beamed,
That eye shall be for ever bright
When stars and sun are sunk in night.

Within this hollow cavern hung
The ready, swift, and tuneful tongue ;
If falsehood's honey it disdained,
And, where it could not praise, was chained ;
If bold in virtue's cause it spoke,
Yet gentle concord never broke :
This silent tongue shall plead for thee
When time unveils eternity.

Say, did those fingers delve the mine ?
Or with its envied rubies shine ?
To hew the rock or wear the gem
Can little now avail to them ;
But if the page of truth they sought,
Or comfort to the mourner brought,
These hands a richer meed shall claim
Than all that wait on wealth or fame.

Avails it whether, bare or shod,
These feet the paths of duty trod ?
If from the hall of ease they fled,
To seek affliction's humble shed ?
If grandeur's guilty bribe they spurned,
And honour to virtue's cot returned :
These feet with angel's wings shall vie,
And tread the palace of the sky.

Book Notices.

How to Thought Read.—The fourth of the Mental Science series, by Jas. Coates, of Glasgow, will be issued on the 1st of March. Orders received at the office of this Magazine. 1/2 post free.

The Ethics of Vivisection, by Mary McKinnel. London : Stewart and Co., 41, Farringdon Street, E.C. Price one penny. This is a pamphlet with an appropriate title both for the subject treated and the manner of treating it ; though one might have been chosen more likely to arrest the eye and induce a larger sale among those who are led away by “catch-penny titles.” The author shows herself to be no mere theorist, but a woman of practical common-sense, yet, evidently, her soul has been more centred in the subject treated of, than in catering by mere superscription for that extensive circulation which the merit of her work deserves. We remember once hearing a quaint divine remark that “it was only by way of courtesy that some people could be said to possess a soul.” *The Ethics of Vivisection* shews Mrs. McKinnel to be full of soul, and soul of exquisite sensitiveness and sympathy, not only for humanity but for the lower orders of creation ; and it is in defence of the latter that her soul fills to overflowing with tender emotion which she pours out in overwhelming streams. Yet she is not of “the shrieking sisterhood” order, but calm, logical, potent in argument, convincing the intellect, while, at the same time, she stirs the emotions to their core. She is an out-and-out anti-vivisectionist, and shows that she is well read in vivisection literature, and has weighed well its *pros* and *cons*. She expresses her views with remarkable force, as regards the inutility of vivisection and the inhuman cruelty of torturing inoffensive animals under the plea that the ends justify the means. Ends, which she goes on to shew, have not only not been attained, but are unattainable by means of vivisection. Her quotations from the reports of vivisectionists are apposite, and strikingly support her views, which is further supported by extracts from the opinions of medical authorities against the practice, and demonstrating its utter worthlessness for good in any respect whatever. The whole brochure is well written, clear in expositions, forcible in fact, and an admirable contribution to the literature of the subject, and we heartily recommend it, feeling assured that few, if any, will lay it down after perusal without a strong revulsion of feeling against the animal torturers who pose as public benefactors, and of deep sympathy for the poor tortured brutes.—N.M.

The Well-dressed Woman, by Helen Gilbert Ecob. London : L. N. Fowler, Imperial Buildings.—This is an interesting work on the various relations of dress to health, art and morals. It shows that immunity from disease is not impossible for woman, but that a normal condition of health is attainable. Physical reformation is an important step in attaining to true womanhood, and physical and mental cultivation need to go hand in hand. Unhygienic dress is shown to be the original cause of many diseases, and the effects of compression, as weak-

ness of muscle, curvature of spine, costal breathing, &c., are dwelt upon, also the hereditary influences resulting from the fashionable and prevalent mode of clothing the body. Graceful action, beauty of form, strength and purity of voice, brain capacity and nobleness of character, the writer considers, are all closely associated with, and affected by, dress. Conventionality has to a great extent prevented the application of the principles of art in dress, and the aim of the writer is to induce her readers to study it from a healthy, artistic, and moral point of view. Many practical suggestions are made, and the book has several illustrations of artistic dress, and physiological diagrams.

The City without a Church is the title of a booklet published by Messrs. Hodder and Stoughton, of Paternoster Row. It is a short and pithy attempt by a practical mind to bring Christianity nearer to the people, and its chief worth lies in the fact that its aim is in making religion real, and of bringing it in touch with everyday life. It has a genuine tone and will do much good. The author seems to understand the necessity of the times, and, though it will have its objectors, it has a life in front of it. Whatever touches life, touches phrenological aims and principles.

Answer to Correspondent.

DAVIES TARPORLEY.—Irving has small Imitation, hence the last writer you mentioned was mistaken in his statement, and the first one correct. Irving never imitates any actor. He brings his own conceptions of character to bear upon all his representations. He is unlike most actors, and is known for his originality of character and individuality of mind.

The Employment Bureau.

[The Employment 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 employées. This department has already become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C. Principals requiring special Teachers, Students (certificated) requiring employment either in schools or families, Type-writers, Skilled Artists, Musicians, Literary or Journalistic Workers, Builders, Architects, Decorators, Phrenologists, Shorthand Clerks, Secretaries, good Readers, who have satisfied L. N. Fowler as to their abilities, may find a medium through which to be successful in obtaining suitable positions.]

A STUDENT in Phrenology desires to travel with an experienced Phrenologist.

A GENTLEMAN desires the position of Secretary, Librarian, or Curator.

A GENTLEMAN desires a position as Parliamentary Agent or Organizer.

A LADY desires a position of Amanuensis or Secretary.

A LADY desires a position of Lady Companion.

AN ARTIST is wanted who can make pen and ink sketches, and also reduce pictures to 2 × 3 in.

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 photograph; 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 6s., for twelve 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.]

JAMES LEE (Stockbridge).—The photos of this gentleman indicate a practical cast of mind; he has a fair share of brain power, and his abilities are good. He is adapted for a business and has a commercial brain. His powers of application are fair, and his will is ample to ensure success if he exercises the necessary patience. He is not so prudent and cautious as he should be. He is quite energetic and positive; he needs to think twice and look around, making sure of his ground, before he acts. He has strong acquisitiveness, and will be careful and thrifty. He is sharp and quick to see and to take notice of things. His memory generally should be good; he needs to study the motives of persons and take a deeper view of things generally. He is apt to be deceived. He has a strong love of pets and animals, and would take good care of them. His memory of faces is very good. He will improve very much as he matures. He will do well in a clerkship, or in a business line as a stationer, &c.

J. O. (Bolton).—The photo of this lady indicates that she has a good development of the vital temperament. She has a zealous and enthusiastic disposition. She has strong sympathies, and an active mind. She is more intense and susceptible than tough and hardy, and is strung on a high key. She has a fondness for action and physical exercise, but she is not so continuous or plodding as one with a stronger constitution; she is quickly resuscitated and her strength is soon renewed. She is very impressible and of a friendly nature; is emotional and not disposed to take things quietly; she feels all she does, and must enjoy or suffer to the utmost as the occasion suggests. She is energetic and quick at action, rather cautious and forethoughtful; she has large veneration and the moral organs are well represented. Her general memory is good, and especially that of faces, and of persons and things generally. She has a systematic and orderly disposition, is very neat; she is very prudent and a quick observer. Her understanding of human nature and her judgment are good; she has large friendship and love of children.

VENUS (Bradford).—The photo of this gentleman indicates a lively and sensitive nature; he is of a hopeful disposition, and generally takes a bright view of life. He is not easily discouraged, and quickly gets over his disappointments. He is more quick in forming his judgments than cautious and prudent, and does not take things into account sufficiently; hence he has often to go over the ground twice. He does not give himself sufficient time to do things well. He is rather disposed to

turn from one thing to another, and not go through with things that he undertakes ; he quickly tires, and his mind easily turns from one thing to another. He is candid and outspoken, very free and too easy-going. He has mechanical skill, and considerable constructive abilities ; but he lacks patience, cautiousness, and prudence which are so necessary to a worker. He has a friendly and social disposition, and shows a strong, loving, and affectionate nature. He is active and lively ; he has good imitative powers, good memory of faces, and fair general memory. He is rather sharp and sensitive, and is quick to adapt himself to circumstances.

H. C. G. (Landport).—The photo of this gentleman indicates that he has a favourable development of both body and mind. The head is well rounded out, which gives him a fulness and completeness of character. In disposition he is very sensitive, has a strong sense of approbation, and will do much for his friends. He is fond of praise and is easily stimulated, forms strong attachments and has a friendly disposition. He is full of hope and anticipation, he quickly gets over troubles. He has caution and prudence, is not hasty or inconsistent. He is very conscientious, and has a strong sense of right and wrong. He has a sympathetic nature, and is very kind-hearted. He has good powers of calculation, and of estimating. He is very particular, neat, and systematic in his work. Has good taste and appreciation of the beautiful in art, &c. He likes to have everything done well, and is very particular. He has plenty of energy and spirit, and has good insight and judgment of things generally.

G. P. (Ulverston).—The photo of this lady indicates a positive and forcible character ; her peculiar powers of mind are energy, perseverance, and stability of mind. She has a strong hold on life, and has good powers to resist illness of all kinds ; she has good powers of endurance, is capable of getting over much work. She is rather determined, has a strong will, and is not wanting in pluck or spirit. She is friendly and social, but requires to be known before she will allow herself to be understood. She is rather reserved and cautious. She is economical and thrifty ; she knows how to manage, and make a good appearance out of a little stock ; she has large order ; is neat and systematic, and has good observing powers. She is rather sharp and shrewd, and has a good, practical brain ; she can tell what she knows, and speaks to the point ; she is a good planner, and has an intuitive mind.

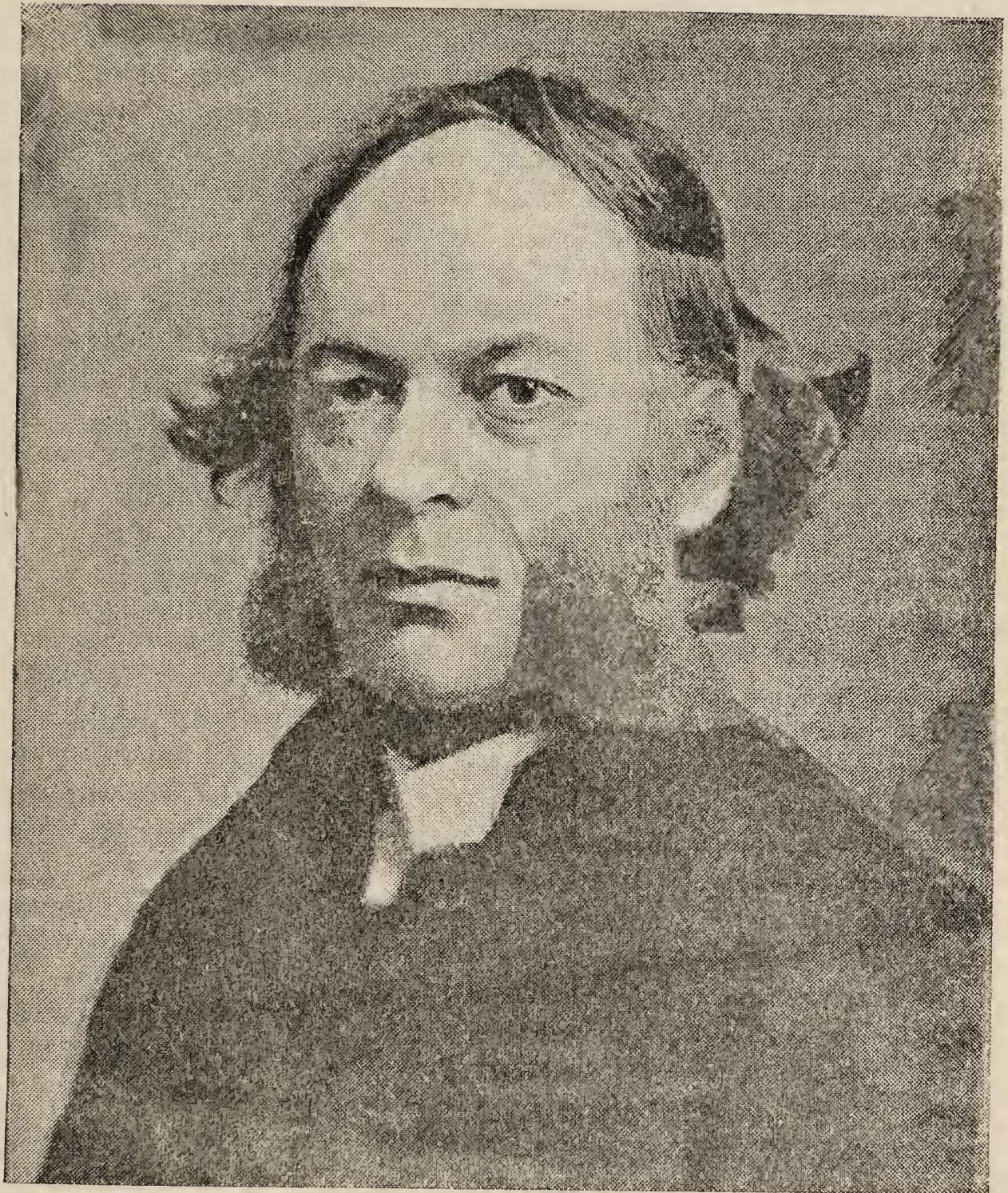
A. E. E. (Leeds).—The photos of this gentleman indicate a very fair organization and an active mind. He is very quick and sensitive, and has rather an impulsive nature. He is very enthusiastic and lively, he has good conversational powers, and if they were cultivated they would qualify him for a speaker. He has an observing mind, is very quick to see, to examine, and to compare, and he is a fact gatherer. He is a practical man and would put his powers to the best use ; he is quick to see and take advantages of opportunities. He has a strong social nature, is warm-hearted and affectionate. He has a strong love of order, is systematic, and very neat in person and work.

R. C. (Sydenham).—The photo of this lady indicates a good vital organization. She has a strong hold on life, and is able to resist foreign influences, changes of weather, climate, &c. She has an energetic cast of mind, is full of vital force, and is capable of sustaining herself in whatever she undertakes. She is full of spirit and determination, and does not readily give up. She has a strong love of variety and change, and there is indication of a restless disposition ; she must be doing something. She is rather reserved, and not disposed to take many into her confidence. She is cautious, and protects her own interests in every way possible. She is prudent and economical ; her social faculties are well developed. She is warm-hearted ; has a strong love-nature ; she makes a good friend. She is fond of children, and has a good memory—especially of faces. She is not a fluent speaker, but says what she means, and does not hesitate to speak what she feels. She has a strong love of order ; she is very neat in her ways ; she is methodical, and disposed to plan and shape her work by routine.

A. R. T. (Upper Norwood).—This gentleman is adapted to a variety of work. He is fond of change, and would prefer to do many different things in the day. It is difficult for him, unless very interested, to concentrate his attention upon any subject for long together. He generally takes life easily, and is not particularly energetic unless aroused by some strong motive. Opposition calls him out, and he shows to better advantage than under ordinary circumstances. He has not a quarrelsome or contentious spirit, neither is he quick to resent personal injuries. He needs more self-appreciation and self-reliance. Others have a higher opinion of his abilities than he has himself. He is particularly kind-hearted and benevolent. His sympathies are easily called forth, and one of his greatest desires is to benefit others. He will make many sacrifices in order to help the poor and suffering. His religious nature shows itself more in doing good than in adherence to forms and ceremonies. He has respect for intellectual and moral superiority, but is not a man-worshipper. He has not Hope enough to give him that buoyancy and elasticity of mind which would lead him to be very sanguine of success. He does not build many castles in the air, but is generally prudent and careful in what he undertakes ; sometimes he may hesitate almost too much, but he can be decided and persevering when his mind is thoroughly made up. He has the ability to imitate and copy and can easily adapt himself to different circumstances. He can judge correctly of forms and outlines, and has a good memory of faces. He is very fond of walking and is not easily tired with long distances. He should be known for his keen criticism, ability to analyse, compare, and use apt illustrations in conversation. Also for his power to reason, think, plan, and understand the principles of a subject. He appreciates beauty in all its forms and likes things around him arranged with good taste. He appreciates order and neatness in work, and if he has not too much on hand he will show it in everything he does. He would succeed as an architect, as a professor of mental philosophy, or in the ministry ; and had better devote his time to study and fit himself for the latter.

THE
Phrenological Magazine.

APRIL, 1893.



(From Photo by Messrs. Russell & Sons.)

THE REV. R. HAWEIS.

THIS gentleman has a very favourable organization, and there is a good proportion between head and face, the one fully represents the other. His face indicates that all the powers of his mind are active. He shows not only an intelligent expression, but well formed features,

and also indications that there is harmony of action throughout. His large chin indicates health and long life ; his nose, that he has good lung power and capacity to breathe ; and there are no signs of dyspepsia in the general expression of the face. The head is comparatively large round, and well developed throughout. He has good powers of observation, and insight into positive knowledge, takes great delight in gathering facts, and says accurately and earnestly whatever he does say. He is able to retail to others his observations. He has a very keen intellectual curiosity, scarcely anything comes amiss for him to use. He is particularly good at comparing one thing, fact, or person with another, for Comparison being large gives him the power of association. He discriminates well between one thing and another, and makes all his speeches tell to the conviction of others. He may not be particularly abstract and theoretical, but he is very practical, and shows much common sense in all his conversation. He is just the man to teach and explain to others so that they readily understand. According to the general make-up of face and head, he must have a clear, distinct enunciation, and a ready tongue to tell what he knows. He is mirthful in disposition, and quite strongly developed in Ideality, in sense of beauty, style, perfection, and finish in speech. He has a spiritual, emotional nature, and is disposed to make the most of his senses, and his knowledge. His moral brain has a powerful influence in toning his mind. He is full of mirth, almost too much so. He makes the course of others his own, is happy with those who are happy, and sympathises with those who are not. He differs from men generally in giving liberal interpretation to spiritual subjects, and is prepared to recognise the spiritual as from mind. His manner is exalted and refined ; he has nothing to do with the coarse or vulgar in speech or thought. He communes with the spiritual as well as with the physical, and his universal habit is to act upon the mind so as to elevate thought and feeling.

L. N. FOWLER.

“ LIFE is real, life is earnest ; ”

“ Dust thou art, to dust returnest,
Was not spoken of the soul ; ”

“ Act, act in the living present,
Heart within and God o’er head ; ”

Are words which repeat themselves to us to-day.

THE IMPORTANCE OF UTILIZING PHRENOLOGY
IN PUBLIC INSTITUTIONS.BY W. T. STEAD, EDITOR OF *Reviews of Reviews*.

MISS FOWLER has asked me to state in a little more detail my views as to the importance of utilizing Phrenology in Public Institutions.

Ever since I have been in jail, I have always lamented the extraordinary waste of opportunities that is to be observed in every prison. A man of science takes endless pains in observing the habits of earth-worms, and in studying the development of black-beetles, but the human individual, even when he is carefully stored up as if for the purpose of examination and investigation, in a prison cell is disregarded. Every criminal ought to be regarded as a specimen of social disease, and investigated by every permissible means ; among these means, Phrenology ought to occupy the leading place. Prisons, however, are under the care of the Government, and Governments are slow, dull, and difficult to move ; something, however, might be done if the importance of phrenological observations could be brought home to the attention of the doctors of our prisons.

If I were to be entrusted with the duty of directing, what might be called the Phrenological Propaganda in this country, I should get a small tract written, if possible by a medical man, addressed to the medical officers of our prisons and convict establishments, I would call attention to the increasing interest that is being paid by the most advanced phrenologists of the Continent, and the United States of America, to the predisposing physical causes of crime. In this preliminary tract I should, so far as Phrenology is concerned, lie very low indeed, and never breathe or hint to our medical officers that I was endeavouring to get in the thin edge of the wedge of Phrenological Science ; I would use the facility of Lombroso and Mantegazza ; I should refer to the wonderful book published recently by Dr. Macdonald, who is attached to the State Department of prisons, in the Government of Washington ; and I should endeavour to make every medical officer feel that it was both his duty, his interest, and his pleasure, to make a careful scientific examination of the crania of all persons under his charge. There is no need, in such a tract, to insist upon any of the distinctive doctrines of Phrenology, all that we need to do is to drive home to the conviction of the prison doctor the fact that he is not up to the mark, and that he is losing his oppor-

tunities, if he has not measured and scientifically observed the cranial development of every criminal under his charge. Familiarity with the outside of the skull, and the intelligent observation of the shape and position of the various regions of the head will inevitably predispose him to take an interest in Phrenology. He may blaspheme but he will study, and the great thing is to get him to study—for blasphemy does not count, being only the sin of the lips outward. If even one half of the prison doctors of this country could be induced to draw up for their own use reports as to the shape of the criminal head, we should acquire a data that would enable us to deal more intelligently and more sympathetically with many of those who come under the bane of society.

Henry Ward Beecher used to say, "that whether a man was a Calvinist or Arminian, depended more on the shape of his head when he was born than any difference in the catechism to which he was subjected after he learnt to read," and if it were found, as it probably would be found, that a certain cranial development was so invariably followed by criminality as to justify its acceptance as the normal criminal cranium, we should know where we were, in dealing with those individuals towards whom the State has to stand *in loco parentis*.

In dealing with prisons, the phrenologist must go warily to work, and feel his way with great caution. There is a fairer field for action in Industrial Schools and Truant Schools, and also on the Training Ships and in the Workhouse Schools. These Institutions are, for the most part, under the direction of local representative bodies, and it would not be impossible, if Phrenology were believed in, with the necessary amount of fanaticism, for the Phrenological Propaganda to have a representative on every Board ; he would not be elected, of course, as a phrenologist, but it should be the duty of convinced phrenologists to see that some one holding sound views as to phrenological truth, should be in a position to bring the phrenological key to the solution of the sociological problems with which his Board has to deal. In the direction of studies and in the choice of occupation, the State, or rather the local authorities, might well take a hint from Phrenology. It is much more important that Phrenology should be used in Public Institutions than that it should be used in the home, although even in the home parents would be ill-advised if they did not avail themselves of its aid in discovering the true inwardness of their children's characters. But in the home, the love of mother and father gives them an intuitive insight into the secret of their children's disposition. In most cases a

phrenologist can only form the conclusion at which a loving and intelligent mother has arrived before Phrenology was appealed to; but the children of the State who are brought up in Public Institutions, without any foster parents, other than master and matron, the school-master and the guardians, have no such advantage. The children have no one to whom they can pour out the troubles of their little souls, nor have they anyone who will suffer and be sad, unless the matron can define the hidden thought, or the instinctive inclination of the child. The State, therefore, as it has not the key of love to unlock the secret chambers of the child's heart, should be all the more careful to seize the clue which is provided by the phrenological delineation. Very many times an intelligent school-master or a reflective guardian might discover in the delineation, a hint as to the stupidity of one child, or the perverseness of another.

A phrenological delineation enables the observer to see the gate through which he can develop an idea which is in the child's mind. Often, when a teacher has been trying to drive an idea into the head of her pupil, and has utterly failed, another teacher who knew the nature of the child's brain development, has been able to plant the idea without the least trouble. It is just as if two men were trying to get a horse into a pasture, one of whom had eyes to see where the gate was, while the other was blind. The blind man might drive his horse as furiously as possible up to the quick-set fence or the barbed wire rail, without ever being able to force it into the field, while the other will simply deviate a little to the right or to the left and so be able to accomplish his object. The developments of a child's head are so many keys or clues as to the avenues by which you can get into the inside of his mind. Take, for instance, two children, one in whom Veneration is abnormally large and in the other abnormally small; the child whose Veneration is high might be induced to learn many things by the mere exercise of the authority of the teacher, while ten times that authority exerted upon the other would utterly fail to impress upon his mind the lesson which it was sought to teach: that is equivalent to saying the dimensions of the faculty of Veneration indicate whether you can get "on the inside track" of the subject best by the power of authority or by argument. Similar illustrations might be multiplied, but that will suffice.

The Phrenological Propaganda should issue tracts, pointing out these things, and if possible, illustrating them by concrete incidents drawn from experience gained in Public Institutions,

and these tracts should be judiciously introduced to all those who are in authority over them, especially to masters and matrons of all Workhouses and Training Establishments. It would make all the difference to the life of many a child if this open key to his inward mind were in the hands of those who have to decide to what he is to be apprenticed, or to what business he should be put.

May I conclude this very fragmentary and imperfect attempt to explain what seems to me the future of Phrenology in Public Institutions, by saying how valuable I have found it in interpreting characters that were subtle, mysterious, and profound. I have one case in my mind in which Miss Fowler's delineation would have avoided an immensity of friction and would have occasioned a good understanding, had I possessed it years before I had the sense to ask for it.

Hans Anderson's fairy story of the "Ugly Duckling" is continually reproducing itself in real life. The poor cygnet that is born among ducks is scoffed at and persecuted by those who do not understand that it differs from them, not because it is worse, but because it is better. In the fairy story the cygnet had to grow up a swan before the ducks realized what it was they had been tormenting. In real life a competent phrenologist might often discern a swan before it emerged from the state of the cygnet. This is at least an immense boon for the swan.*

IS THOUGHT-READING POSSIBLE ?

THE Committee on Thought-transference of the Society for Psychical Research concluded its report, not long ago, with the words: "There *does* exist a group of phenomena to which the word 'thought-reading,' or, as we prefer to call it, 'thought-transference,' may be applied; and which consists in the mental perception, by certain individuals at certain times, of a word or other object kept vividly before the mind of another person or persons, without any transmission through the recognised channels of sense."

Dr. Carpenter, though a sceptic in many respects, remarked that every one who admits that "there are more things in heaven and earth than are dreamt of in our philosophy" will

* The above suggestions, our readers will be glad to hear, are being carried out.—ED. P.M.

be wise in maintaining a reserve of possibility as to phenomena which are not altogether opposed to the laws of physics or physiology, but rather transcend them. His own experiences, he acknowledges, have led him to suspect that a power of intuitively perceiving what is passing in the mind of another, which has been designated as "thought-reading," may, like certain forms of sense-perception, be extraordinarily exalted by the entire concentration of attention.

The experiments made by the Society for Psychical Research have proved that not only thoughts and visual impressions, but tastes and pains may be transferred from one mind to another by concentration of thought. As to the process by which thought is transferred from one brain to another it is impossible at present to determine. Possibly there is for every thought a corresponding motion of the particles of the brain, which vibration of brain-molecules may be communicated to an intervening medium, and so pass under certain circumstances from one brain to another, with a corresponding simultaneity of impressions.

The late Sergeant Cox, President of the Psychological Society of Great Britain, considered the phenomena of "thought-reading" overwhelming. In his opinion, no supernatural power need be invoked to explain these phenomena. Physiology will assist Psychology to a solution of the problem. "The brain is the material organ by which the operations called mental are conducted. This brain is constructed of a countless multitude of fibres, so fine that many millions of them are contained within the compass of a sixpence. These fibres are instruments of infinite and inconceivable delicacy. They vibrate to waves of the atmosphere, and respond to vibrations of other brain fibres that are imperceptible to sense. Even the vastly coarser strings of a harp take up waves of the atmosphere that our senses do not perceive, and echo the sound made by other harp-strings in motion. But the atmosphere is not the only medium for transmitting motion." Sergeant Cox refers to the more pervading fluid: the ether. Impressed by the experiments of Prof. Tyndall with sensitive flames, showing how the atmosphere in a large room cannot be stirred so slightly that the flame will not betray the motion, he felt that he could understand how the vibration of brain-fibres may be communicated to other brain-fibres. Of course, the telephone is a still more startling illustration of the multitudinous atmospheric waves imperceptible to our very obtuse senses. Still more so the microphone, which is to the ear what the microscope is to the eye. Infinitely more delicate must be

the waves of the ether. They must penetrate the most compact substance.

The principle on which Sergeant Cox explains thought-reading is this : when any mental act is done, the fibres of the brain are set in motion, and of these motions the conscious self takes cognizance. The psychological conclusion from this physiological fact will be at once apparent. An idea or thought in my mind is attended with certain molecular movements of certain fibres in my brain. The motion of these fibres in my brain is communicated by ether waves to the corresponding fibres in your brain, setting up in them a similar motion precisely as the harp that is played upon evokes the same tone from the strings of the untouched harp. These motions of my brain impart to your brain identical impressions, and consequently we think and feel in unison, not, of course, always in concert, but in the same direction. These impressions, communicated from brain to brain, are not perceived at all times, because we are constructed to be conscious of one impression only at one instant of time, and, for the most part, consciousness is engaged in taking cognizance of some other more vivid impressions. Moreover, some brains are less sensitive than others—have coarser fibres—and therefore are more slow to catch the finer impulses.

Al Hassan did a great service when he demonstrated that the ray of light does not pass from the eye to the object, as all the philosophers had taught, but from the object to the eye. Rays of light flowing from an object into the eye shake the optic centres of the brain, and we see—not the object but a representation of it. Now, if any other force could affect the optic lobes of my brain as light affects them, I should see, although in utter darkness ; and if any other force could shake the auditory centres as sound shakes them, I should hear, although in the silence of an Arctic night ; and if, my brain being quiescent, any other mind could induce in it those motions which my own thoughts induce, I should act and speak the thoughts of that mind as if they were my own.

That the cerebrum may act upon impressions transmitted to it, and may elaborate intellectual results, such as we might have attained by the intentional direction of our minds to the subject, without any consciousness on our part, is only the psychological expression of a doctrine that originated with Leibnitz and has been almost universally adopted by metaphysicians in Germany. The mental condition to which the appropriate name of unconscious cerebration has been given may be thus described. In certain conditions some of the mental faculties work without consciousness by ourselves of

their action. The brain, or some portion of it, thinks, feels, has ideas, goes through complicated and elaborate courses of thought, and even prompts to action without consciousness of the operation of the individual, who, at the same moment, is consciously employed in some other mental work.

Dr. Carpenter showed that much of our highest mental activity is to be regarded as the expression of the automatic action of the cerebrum ; and that it may act upon impressions transmitted to it, and may elaborate results such as we might have obtained by the purposive direction of our minds to the subject, without any consciousness on our parts. Looking at all those automatic operations by which results are evolved without any intentional direction of the mind to them, in the light of "reflex" actions of the cerebrum, there is no more difficulty in comprehending that such reflex actions may proceed without our knowledge, than there is in understanding that impressions may evolve muscular movements, through the reflex power of the spinal cord without the necessary intervention of sensation.

This theory of brain waves for the explanation of thought-reading is not new, but is receiving more attention now than it used.

Let it be granted that whensoever any action takes place in the brain, a chemical change of its substance takes place also, or, in other words, an atomic movement occurs. Let it be also granted that there is, diffused throughout all known space, and permeating the interspaces of all bodies,—solid, fluid, or gaseous,—a universal, impalpable, elastic "ether," or material medium of surpassing and inconceivable tenuity. But if these two assumptions be granted, and the present condition of discovery seems to warrant them, should it not follow that no brain-action can take place without creating a wave or undulation in the ether ? for the movement of any solid particle submerged in any such medium must create a wave. If so, we should have as one result of brain-action an undulation or wave in the circumambient, all-embracing ether. We should have brain-waves proceeding from every brain when in action. Each acting, thinking brain, then, would become a centre of undulations, transmitted from it in all directions through space. Why might not such undulations, when meeting with and falling upon duly sensitive substances, as if upon the sensitized paper of the photographer, produce impressions, dim portraits of thoughts, as undulations of light produce portraits of objects ?

B. HOLLANDER.

HOW TO TALK AND DEBATE.

*(Continued from page III.)*RIGHTS OF
WOMEN.

A MAN who does not treat a lady as his equal or superior in conversation deserves to be banished for ever from their smiles. How often do we see men who pretend to good breeding running together into a little knot, and getting up a conversation on a subject of their own, leaving the ladies to such



A GOOD SPEAKER.—MRS. ORMISTON CHANT.

as they can find in contemplating these wise-acres from a distance. Wherever ladies are present, gentlemen are bound to pay court to them, to show some graceful attentions, and to entertain them and appreciate what they say.

“With the English conversation is a languid silence, broken by occasional monosyllables, and by the water flowing every quarter of an hour from the tea-urn.” Such is a French opinion of English social life, founded on an observation of the heaviness that too often characterizes our gatherings. Why is

it so ? Because the sterner are arrogant, and women take refuge in muteness through a spirit of resignation.

WIT AND HUMOUR. WIT and humour make a sunshine wherever they are found in a genuine form ; but forced wit, or humour out of place, is as bad as a mountebank capering at a funeral. The so-called wit, who is always expected to say something funny, whose most casual remarks are caught up as if they were all wonderfully comical, is a nuisance against whom every door ought to be shut. Let any man who has gained a reputation for pleasantry take every proper opportunity to show that he can be serious, and check, by preserving a consistent deportment, any likelihood of his becoming a popular jester. No sooner is a man accepted as a wit, than the respect for him declines ; people laugh while they inwardly despise him, and unless he has some rare grace of manners, and a full store of knowledge to fall back upon, for the preservation of his dignity, he is in danger of being elected as a buffoon. It is the bane of English society that a man cannot well be witty without incurring the penalty of being thought destitute of solid attainments. Yet merriment, softened with kindly feelings, is to be encouraged, and none but the most vulgar egotist, anxious to distinguish himself, would attempt to check it by the introduction of a topic of an altogether different character. A man who will be serious when everybody is glad, is like a corpse sitting at a banquet.

ASSIMILATION. YOU must assimilate to the group that surrounds you, because a social gathering is intended for mutual enjoyment. Suppose the folks talk nonsense that disgusts some one, and he retaliates by staring with cold surprise, expressive of contempt—is it not a breach of the good feeling which should animate a party, and does it not mark him out as a vapid exquisite, who ought to be associated with a few others like himself, that all might run together like quicksilver, being already as heavy ? Yet a forced laugh is no better than a grimace—rather worse, for it gives pain to the beholder. Where others are merry, you may at least seem pleased, for good manners will teach you not to spoil their enjoyment ; but you are not to be expected to put your features into false contortions for anybody.

TIMELY REMARKS. TIME your remarks, and make them fit, and they are sure to tell. Appropriateness must never be forgotten. Who has not seen many a good conversation marred by the introduction of

irrelevant matter by a speaker possessed of an idea that he could "astonish the Browns?" Pleasantries of all kinds need timing, for unless a bit of merriment is accepted in a proper spirit, it has very much the appearance of a bit of stupidity.

VAMPIRES. VAMPIRES are to be guarded against by all who possess a store of information and a gift of speech. There are hundreds of folks who cultivate a smattering of book knowledge, who get what little they are capable of remembering from reviews and newspaper critiques, but who invariably pretend they have read the work themselves. Beware of these, and yield information to them not too freely, for they will listen, agree with all you say, draw you out skilfully, and afterwards use what they gather as their own. In the openness of your heart you may impart to them an original idea, or communicate knowledge that may have cost you many years of laborious study; these they will seize upon without surprise; affect to know already what you are stating, so as even to denude you of the credit due to originality, and at the first opportunity they will make use of all they have gathered from you, without acknowledgment of its source. These vampires are soon known—they are very agreeable fellows, and know just a little of everything, but nothing complete.

SETTLING PRETENDERS. A SETTLER for pretenders of the sort just noticed is easily hit upon by a man of ability, without the breach of any law of politeness, and without any want of good feeling. If one of these review-quoters displays his surface knowledge of some subject, cleverly lead him on, and take it for granted, at once, that he thoroughly knows what he is talking about. If he quotes some second-hand portion of a poem or a play, at once put to him a question, such as what is his opinion of the author's meaning in such a passage; or how can such a line be considered to harmonise with the tone of the passage in which it occurs, and leave him to explain the matter. He will at once fall back on deficiency of memory—he does not remember the passage referred to. Keep him to the mark, but in a very polite way, on the full strength of his assumption, and he will be careful how he inflicts upon the company any more platitudes, but take the place which belongs to him. Anyone has a right to gain information from another, and we meet to receive and impart it, but it must never be accomplished under false pretences; and if a man has not

read a book which may be referred to, let him own it, and accept all he hears in a candid spirit.

To draw out a good speaker, if properly accomplished, is very proper. You must use your judgment, and skilfully invite him to treat the subject on which he will display his knowledge best. A skilful educer is a valuable auxiliary to any conversational party, and, if he cannot say much himself will at least construct a thread on which wiser men may hang their several beads of wisdom. The frequenter of intellectual circles should study the art of drawing out a good talker.



G. GROSSMITH.—Large Mirthfulness.

BOOKS AND PLAYS.

BOOKS and plays are sometimes retailed at full length for the entertainment of a company, but the practice is objectionable, since—however well the story may be told—it spoils the interest we should afterwards take in any work so introduced to us. But the difficulty of doing such things well is such that few can hope to succeed unless they accompany the relation with gestures, mimicries, and many modulations of voice, all of which are out of place in private circles. We remember that an excellent friend, whose impulse is apt to outrun his discretion, has frequently spoiled our enjoyment of

a new tale by repeating the whole of it before we had seen the work itself. The practice is abominable, and ought to be punished in a way that politeness of manner will not allow. It is as bad as if someone were to snatch a dainty bit from our plate at dinner. Discuss the merits of books, and quote them freely and correctly, but do not attempt to serve out the whole contents, unless specially requested, and then only when you are sure that you can do it in a manner creditable to yourself.

LONG TALKS. LONG talks are equally to be avoided, though narratives of adventure, enterprise, and accounts of events are very appropriate if condensed and told with effect. Cowper says :

“ — sedentary weavers of long tales,
Give me the fidgets, and my patience fails.
'Tis the most asinine employ on earth,
To hear them tell the parentage and birth,
And echo conversations dull and dry,
Embellished with 'he said' and 'so said I.'
At every interview their route the same,
The repetition makes attention lame ;
We bristle up with unsuccessful speed,
And in the saddest part cry, 'Droll indeed.' ”

ASSUMPTION OF WISDOM. THE assumption of wisdom is not to be borne, even from the wisest. Always assume that your hearers are as well acquainted as you are with all matters of ordinary knowledge. For instance : the conversation may turn upon botany, and if you are a botanist you must not arrogate to yourself any right to lecture the company, informing them that “we owe very much to Linnæus,” or that “Ranunculacæ is a family of plants having the common buttercup as a type ; all of them possess an acrid, and many of them poisonous juices, and owing to this fact they are not generally used as food.” This sort of thing reaches its climax when the speaker indulges in technicalities ; for everybody knows that really learned men are very careful not to introduce the subtleties of science into general conversation, and that the use of “hard words” generally betrays an ambitious but shallow brain.

PROVINCIAL- ISMS. PROVINCIALISMS, Cockneyisms, and everything approaching the nature of slang, should be carefully avoided, and if a person has acquired the bad habit of using any such peculiarities, the quicker the habit can be got rid of the better. We hear many

well-experienced and otherwise well-behaved people use such phrases as "As the saying is," "What you may call it," "As you may say," &c., all of them marking absence of culture in early life, which, if we have been so unfortunate, we should strive not to betray.

QUESTIONS AND NEGATIVES. QUESTIONS and negatives frequently partake of similar mannerisms. To put a question in a gentlemanly way is very easy, but to ask it abruptly, or with any show of impertinence is positively unbearable. Questions should generally have a suggestive rather than an interrogatory form, as, instead of saying, boldly to a man of travel, "What places of note did you visit in your last trip?" it is better to say, "From the number of places you have visited, you must be well stored with the experiences of travel." To the first you will probably get a short answer and no information; by the latter you draw out the person addressed, and all are benefited. In making use of negative expressions some grace is requisite, as well as a knowledge of grammar." We every day hear persons say, "I don't think so and so," "I don't know," &c. Now, if the first of these phrases is examined critically, we shall discover that it conveys a meaning the very opposite of that intended. "I don't think we shall go to war with England," means "I do think we shall not go to war with England." Why not abandon expletives and elisions, and adopt plainness of speech. "I don't know," says the uncultivated man; "I know not," says the gentleman. A little reflection will enable the reader to see that these remarks are capable of very wide application, but since our space is very limited we think the hint sufficient.

HOBBIES. OUR own hobbies and favourite topics should be carefully introduced, or egotism may lead us to obtrude them too freely upon others. What interests us may not interest others, though when legitimate occasions offer it is our duty to impart information on subjects with which we may be well acquainted.

AFFABILITY. AFFABILITY of manner gives a charm to the lightest word or the greatest disquisition. Lord Chesterfield calls this *douceur*, and speaks of it as "not so easily described as felt. It is the compound result of different things—a complaisance, a flexibility, but not a servility of manner—an air of softness in the countenance, gesture, and expression; equally whether you concur or differ with the person you converse with."

COMPARISONS AND SIMILIES. COMPARISONS and similies give grace to description and expression of sentiment, but harsh comparisons are always unpleasant, and vulgar ones opprobrious. It requires some care to guard against the use of professional comparisons, as for a surgeon to say that the boughs of a tree require amputation, or for a lawyer to speak of a parliamentary speech as an able pleading. Cobbet used to say it was wrong to set before a retired tailor a dish of goose and cabbage, meaning that we should not forcibly remind a man of his occupation, and it is equally wrong to remind or inform other people of ours. In polite society every female is for the time a lady, and every man a gentleman.

DISCURSIVENESS. DISCURSIVENESS leads a man rapidly from one thing to another, which is all very well so long as he does not leap too rapidly. But when a definite subject is under consideration, it shows a shallow and disorderly mind to skip away from it on the least pretence. A skilful person may keep conversation alive, and also keep it in order, by calling attention to the point arrived at in the discussion of a question, when some butterfly gossipier has suddenly diverted it from its channel. Suppose that Longfellow's poem, "Hiawatha," is the subject, and when some person has delivered an opinion on the splendid description of the costume of Pau-puk-keewis, another breaks out with, "Ah! that reminds me of the Indians who exhibited fifteen years ago at the Egyptian Hall. Have you seen Albert Smith's Mont Blanc there? I was there," &c. Here the audience are required to leap from the American prairies to the top of Mont Blanc, unless the former speaker takes up the thread again, enters on the death of the Storm Fool, and so on through the various striking scenes and incidents of the story.

WHEN we speak of others, grace and charity should season our speech. When we speak of ourselves, our words should be few and well chosen.

PERHAPS a gentleman is a rarer man than some of us think. Which of us can point out many such in his circle, men whose aims are generous, whose truth is constant, and not only constant in its kind, but elevated in its degree?—*Thackeray*.

LANGUAGE, OR A WORD FITLY SPOKEN.

BY L. N. FOWLER.

LANGUAGE marks a great distinction between men and animals. They understand each other so as to get along together, but the human language is much more perfect, and consequently more influential. Animals understand each other by expression and action ; but man not only learns by expression and action, but more particularly by intonations ; and as he has much more control over his voice than the animal, he also has more perfect influence, through speech, over man, than animals have over each other. The voice is a great educator, and a messenger of happiness to bring good tidings. The human voice is a great civilizer. How we all delight to hear the voice of blessing, and dread to hear the voice of cursing.

The angelic song draws the angelic audience, and opens the purse widely. The orator carries the whole audience with him. Speech guided by love and sympathy is very charming and soothing. This power of speech is one of the most mighty and beneficent that man can wield, and can be turned to a good account on all occasions if persons are so disposed. The proverbs of all languages abound in truisms indicative of this fact.

Language is the channel through which all emotions, feelings, passions, thoughts and imaginations express themselves. And as the fountain gives, the stream must receive ; hence, if the mind is hot with anger, the tongue hurls out threats, defiance and strife ; if it be gloomy and despondent then the voice is whining and weak. If controlled by passion, then the language will be severe. The untutored barbarian uses but little articulation in speech, and talks with guttural sounds. A highly cultivated, refined, elevated mind will express itself in sweet heavenly tones, most enchanting and bewitching, which stir the soul from the foundation and say most satisfying things in a most satisfactory manner. If full of religious emotion and Godly fear, the outflowings of the tongue are like the songs and whisperings of the angels. The language we use indicates the tone of our minds and is the servant also of the different faculties, for the latter dictate what is to be said, and how to say it. So willing a servant is this organ, that in a moment it has done the bidding of the excited faculty, and perhaps done an evil, a lifetime cannot retrieve. Thus we have numberless proverbs advising to circumspection in

speech. For instance, "Think twice before you speak once." "Speech is silvern, silence golden." "An angry word is the beginning of strife." "Children and fools speak the truth." "The less said the better, when no good can be said."

Had it not been that the tongue was more powerful as an organ of speech for good than evil, the Creator would never have bestowed it on man. Without it, the influence of man upon man would have been a nullity. Each individual would have been an atom by himself, dissevered from all of his kind with not sufficient outlet to his mind to encourage its action or stimulate those of others, consequently there would have been no great undertaking in which many minds needed to commune with each other. Any great enterprise can be stopped for the want of language. The most of men's enjoyments would have been within themselves. A man may be full of thoughts, emotions and discoveries, but will do others no good if he keeps them to himself, and in proportion as he expresses himself imperfectly, or unpleasantly, will he fail to give pleasure to others.

The great enterprises of the world would never have been undertaken, or if they had been conceived and planned, they would have died where they were born, like the perfume of a flower, if men could not have talked.

One of the greatest enterprises of olden time was given up because speech was confounded. It takes a concourse of minds, acting together by a fair and correct understanding, to accumulate power so as to create public opinion, and make a permanent impression and influence.

One small battery of electricity will knock a man down, but a hundred will send a message to New York or around the world, in proportion to the increase of the power. One mind can conceive a thought or a part of one. A combination of minds or brains, chained together by speech (the individual words of which are links), can produce a seething cauldron of thought enough to move the world.

Very few, if any, great ideas or enterprises have been conceived and brought to maturity by one mind. Thousands of the strongest brains of the time have brooded over them and brought them to perfection. It was so with the steam-engine, it was so with the weaver's loom, and so with the telegraph. And what would these have done without speech? There would have been no need for any of them. Many a man has had the germ of an idea in his mind, and could not work it out; but directly he has presented it to another, he has seen the whole subject! A word fitly spoken has been, from time to time in this great world of ours, of momentous

importance ; as also have words seemingly unfitly spoken, as when the tyrant has, by a word, given to slaughter thousands of his helpless subjects. Appropriate speech is a power not easily resisted.

Many a nation has been saved by a word of wisdom, given in the hour of need. Many a word fresh from the mouth of the inspired prophet has moved a people. We have instances of this in the history of the Jews, also of the Greeks. Many a battle has been successful or prevented by a word. Not alone in the history of nations, but in the history of families have a few words fitly spoken been pregnant with good results.

Oftentimes a wayward son whom no amount of harsh treatment would check, has been influenced and brought to terms by gentle words ; and a word once spoken is not easily recalled. Thousands of times families have been spared disruption by some member throwing in a calm sentence when the others were hurling about angry, cruel expressions. A word wisely and timely spoken is never without fruit. At the time it may appear to be disregarded, yet in the long run it must have its good influence, for it is the quality of a well put admonition or reproof, that never ceases to act ; but, being planted in the memory, is ever welling up with new force and undiminished truthfulness. Many a man has been checked in his career by recalling something his mother said. The word of a mother to a prodigal son, oftentimes unheeded for years, has in thousands of instances had its effect after years of wickedness, bringing the wayward one back again to the right path. In fact there is not probably a single individual who has not known the evil effect upon himself of an angry word, and the beneficial influence of a good word fitly spoken.

Lose no time then in saying as many fitly words as possible, and, remember, fitly spoken words are woven into a web, and become a safeguard to some and a snare to others.

Man's path through this world is rough and rugged, and when we have done all we can to make it smooth, there are many sharp points and rough corners to smooth down. We are all jostling against each other in trying to get through this world. Some are easily passed, some are not. Life is made pleasant or unpleasant by the way we live and say things. It is in the power of the human race to multiply pleasures, and add to the enjoyments of life much more than it does. It should be a part of the education of the young to learn to be agreeable and entertaining. Many persons are thankful for benefits bestowed, but say nothing about them. Ten men

were cleansed of leprosy, but only one returned to give thanks. There were many lepers in Israel in the days of Elisha the prophet, but none were healed by him but Naaman, the Syrian, which was brought about by the words fitly spoken by the Jewish maid.

I know of a man who is the butt of the household, because he never speaks pleasantly ; he is continually complaining and finding fault ; he is never grateful, never says thank you, does not like where he is, but will not leave because no one else will have him. Words fitly spoken are never forgotten, they have an encouraging influence through life. A swearing carter was told to wait till he got away by himself when he swore, so that only *God* could hear him. That mild reproof worked a radical change in the carter's mind.

There are many kinds of words spoken—words of wisdom, words of sympathy, words of friendship, words of love, words of encouragement, words of warning, words of threatening, words of exposure, words of defamation. Language can be improved, and tones of voice can be refined so as to be well nigh angelic. While in this world, we shall need all kinds of words and tones of voice, bass as well as tenor. We look, talk and act what we are, unless we are hypocrites. Our true internal characters influence others more effectually than our outside characters, for we feel what each other are when we get hold of the internal.

Words fitly spoken in music have a double effect. The more singing there is in the family the less scolding there will be. Expression and manner have a powerful influence, and tend much to modify and allay unpleasant feelings. Some always carry with them a placid, smiling, and sweet expression on their face, they make cross people smile when they meet them, and create good feeling wherever they go. Others are like a warm flat-iron, smoothing out all the wrinkles, or like oil on the rough waters, so that the wind passes over smoothly. Their words are soothing ; their voices are charming ; their manner modifying. Some have the look of purity, others have the look of refinement ; some have the voice of sincerity, others have the voice of love ; some have the manners of gentleness, others have the movements of elegance. All these looks, voices, and manners, have their mellowing influence.

Deeds of kindness at a proper time are like apples of gold. Many rude and wicked children have been tamed by kindness. Wild and ferocious animals have been tamed, and vicious horses have been made gentle and kind by suitable tones, and by music. Apples are a pleasing sight at any time. But

apples of gold are still more pleasing and valuable. Pictures are beautiful, but pictures in embossed silver-work are still more attractive. Apples of gold in pictures of silver are extra beautiful, and very pleasing to behold. Plain truths do good, but words fitly spoken, are still more important and beneficial.

Speech is a great and good gift to man. It is a wonderful gift, and not much progress is to be made without it.

Imagine a dumb world. Particular care should be taken to teach the child *how to talk*. All should talk some. Health, happiness and usefulness are connected with words fitly spoken. The "Sanitarian" tells the following :

A gentleman was suffering from an ulcer in the throat and his life was despaired of, and the family, one after another, came and bade him farewell, and went away weeping. Last of all came the pet ape, and shook hands, and went away with his hands before his eyes. The act struck the dying man so comically that he burst out laughing, which broke the ulcer, and the man got well.

If you want to show a beautiful picture, carry with you a pleasant face, a gentle voice, and a word fitly spoken.

THE ANNUAL MEETING OF THE FOWLER INSTITUTE.

ON Wednesday evening, March 8th, the Third Annual Meeting of the above Institute was held. Mr. Brown, Vice-President, who occupied the chair, explained the objects of the meeting, and then called upon Mr. Piercy to read the report. It ran as follows : " In presenting the report of the year's work, we are glad to say that our numbers are increasing (although some have resigned because of other work and studies, but with a hope of rejoining at some future date). New members have been enrolled, and we now start the new year with 132, including our Welsh branch, which is progressing most satisfactorily, as will be seen from their report. In time there will be many opportunities of keeping the Fellows of the Institute busily employed in Phrenological work.

" During the two courses of instruction 24 members have attended the various classes, to whom 66 lectures have been given. In addition to the above number of students, 16 are taking lessons through the post, making a total of 40 who have taken advantage of our instruction.

" The Annual Examination was held in the Hall of the Institute, Jan. 12th and 13th, 1893.

" Five candidates sat for the winter examination, while we are expecting more than this number of candidates to sit for our summer examination, as the latter has been arranged for the benefit of the provincial members, who were only part of the way through their course of lessons, and who wished to take advantage of the summer excursions for visiting London.

“Mr. Lewis Lepage and Miss Dexter have obtained the diploma, and Mr. Eagle and Miss Linington certificates, one candidate having failed to secure the requisite number of marks.”

The following is the examiner's report :—

“The answers to the written questions this year are not quite up to the standard of last year's answers, but in the *practical* tests greater ability was shown than has been manifested in any previous examination.

“Most of the candidates would have done much better if they had not spent so much time in answering a few of the questions so fully. This was especially the case with candidates Nos. 3 and 4.

“No candidate has this year qualified for honours.

“It will be seen by the analysis that the best answers were given to No. 6 in the morning and No. 10 in the afternoon.

“The reading from photographs was particularly good in every case.

“Signed by the examiners,

“L. N. FOWLER,

“J. ALLEN,

“J. A. FOWLER,

“W. BROWN.”

The Member's Meetings have been varied and interesting. The two summer meetings were held in the country—one at the President's house, and the other on Keston Common, Kent.

Thirty lecturettes have been given in all on the Wednesday evenings on Phrenology and kindred subjects. The following ladies and gentlemen have taken part: Messrs. Fowler, W. Brown, Tompkins, N. Morgan, P. Tovey, D. Milligan, Dr. Densmore; Misses E. Crow and J. A. Fowler. Miss Fowler has given twenty lectures in and around London.

The Annual Soirée was held in the City Temple Lecture Hall, when the programme consisted of several scientific tableaux vivants. Mr. W. T. Stead and Mr. John Lobb were among the speakers of the evening. Dr. Campbell's choir of ladies contributed to the musical part of the entertainment, and altogether it was a most enjoyable evening.

The names of two new Vice-Presidents were added to the list, namely, W. Hull King, Esq., and R. Sly, Esq.; also Miss J. A. Fowler's name, as lady President, was linked with Mr. Fowler's as President.

In Mr. Brown's remarks will be found the advantages offered to the Fellows of the Institute. We must press forward, for there is much to be done for Phrenology in the future.

One feature of the year's work has been the practical examination of heads, special pains having been taken by the Instructors, L. N. and J. A. Fowler, and also by the students themselves.

M. H. PIERCY, Secretary.

Mr. Brown pointed out the plans and advantages of the Institute, and for the Fellows. The following points were fully enlarged on :—
(1) Necessity of co-operation of Fellows in the interests of Phrenology generally. (2) That a Council of Fellows be formed. (3) That under the Presidency of L. N. and J. A. Fowler, the Fellows shall meet every

alternate month for practical demonstration of heads. (4) Association with the Institute in connection with its varied systems of agencies and usefulness. (5) Each fortified with the credentials of the Institute as a practical phrenologist. (6) Free attendance of classes in the first and second courses of Phrenology. (7) Use of Museum for study, and loan of its contents, with pictures, &c., for lecturing purposes. (8) Special reduction in phrenological literature. (9) Continuity of study and participation of benefits resulting from development of other agencies in work therewith. Mr. Brown concluded by saying :—I regard we are meeting here as a special Institute in the hope of filling up a very great want.

After the reports, the Members' Committee was re-elected, and Mr. L. Lepage was chosen Secretary of the Members' Committee. A hearty vote of thanks was given to Mr. Coleman for his services during the past year. The following officers were elected on the Committee :—Mr. Brown, Chairman ; Mr. Lepage, Secretary ; Misses E. Russell, Maxwell, and Wilson, and Messrs. Baldwin, Smith, and Coleman. Miss Crow was elected Editor of the Members' Column.

Mr. Fowler then gave away the diplomas and certificates with a few appropriate words to each candidate.

Mr. Brown then called on Miss Dexter to make a few remarks.

Miss Dexter said :—Mr. Fowler once told us that there was a time when he was not much of an orator, but that he became the speaker he now is by determining to have something to tell his audience, and then to tell it in the best possible manner. I have one little thing to tell you this evening which I know will not at all surprise you. It is that I am very glad indeed to become a "Fellow of the Institute," and particularly glad to become a "Fellow of the *Fowler* Institute." When I say I am glad to become a "Fellow of the Institute," I am thinking of what that term denotes, viz., that we, as such, have really made a start in the study of the grandest of sciences. In the study of that science which shall teach us how to live aright, how to build up noble and harmonious characters, how to use our abilities to the utmost of our powers, how to be up and doing, how to make that immense influence which each one of us possesses, such, that the higher and nobler faculties of those with whom we come in contact shall be stimulated, whilst their more selfish and less pure feelings shall be checked and kept in abeyance ; so that, if we live up to the teachings of this Phrenology our lives shall be full of usefulness to our fellow-men, and shall be daily happier to ourselves. Then, I am particularly glad to become a "Fellow of the *Fowler* Institute." Years ago I used to hear of the great professor, who had such wonderful insight into character, and I remember how we girls longed, and yet dreaded to meet him ; the good in us longing to have him put his hand upon our heads, and tell us how to become those of beautiful characters we pictured. The bad, dreading to have him scan our faces, and read of the many unkind thoughts and faults that spoiled our lives. Little did I think the day would come when I should know, love, and honour the man whose whole life has been a speaking witness to the

truth of his beloved Phrenology, and that I should have the honour and pleasure of thanking his daughter, Miss Fowler, for her great kindness and untiring helpfulness to us as students ; and of asking her to accept this small token of our love and esteem. Miss Dexter then presented Miss Fowler with a bouquet and a handsome volume of "*Sartor Resartus*," in which was inscribed the names of the students.

Mr. Lepage followed with an address, and said :—There is an old saying which no doubt you are all acquainted with, that if one looks after the pence the pounds will take care of themselves. Now, what I wish to illustrate by this is that if we as phrenologists, and when I use the word phrenologists, I mean all those who study the principles of Phrenology, would do our best to help others as well as ourselves in trying to obtain as much information regarding our nature as possible, so that we may all practise harmoniously the great doctrine of self-government, and that every individual who comes to this knowledge will make it a special duty of his life to exercise all the faculties of his mind from a phrenological point of view, in order to produce the greatest amount of happiness and comfort, not only to himself, but to all those with whom he may come in contact during life. I say if every individual made this a special duty, and I do not think it is a mean duty, in fact it is my opinion that it is man's greatest duty to know all he can regarding his own individual ego and the laws by which he is governed, and it seems to me that the only way to obtain this information is to study human nature according to the principles of Phrenology. Now, if every one of us did this, would not society, and when I use the word society I mean humanity, be elevated almost to an ideal state ? It is my strong opinion that it certainly would, and as far as I am able to judge, I think the safest way, at any rate the surest way, for all those who wish to benefit mankind and who take an interest in the amelioration of human suffering, would be for them to study their own nature first, and only to impart such knowledge as will tend to benefit the individual, and humanity, as a result, will better be able to look after itself, so to speak. By this means, the means of self-government, every individual would have a hand or rather head in the government of the nation, and not as it has been, and is now, and is likely to be unless self-government steps in pretty quickly. I am not looking at this from a selfish point of view, but when I look at society at the present day, and find it in a state of chaos, where harmony ought to exist, as being a result of man's attempt of governing nations instead of himself, I cannot help but thinking that the old adage that the longest way round is the quickest way there, is well applied in this instance. Looking at it from this point of view, it is impossible to say that Phrenology does not stand pre-eminent of all sciences, seeing that it tends to the happiness of each individual, consequently of nations, and that its discovery is the greatest of discoveries. It is not my wish to occupy much of your time to-night as there are others here who judging from their countenances seem to be very anxious to exercise their organ of Language, but let me tell you here to-night that the man who is unable to control his mind is on the borderland of

insanity, and that the greatest misfortune that can befall anyone is for that one to lose control of himself. I therefore trust that we may all from to-night do our best and try to obtain this self-government. Possibly there are some here who have been fortunate enough to succeed in their efforts, but again there may be some who have not. Unfortunately, it has been my lot to witness many of the latter, and it is more especially to them that I speak. I do not want you to go away with the idea that it is an easy matter, for I assure you it is no such thing, and cannot be accomplished in a day. It will take years, in some cases a life-time, in others, not even then ; but I trust from the little I have said, you will all see the importance of not procrastinating this important duty, and as years roll by you will all I am sure look back with great pleasure upon the day that you first undertook to study the great doctrine of self-government. We are all, it is to be hoped, greatly indebted to all those good and wise men and women, not forgetting our worthy and respected President and his daughter, Miss J. A. Fowler, who are happily present to-night, who have given and are giving their lives towards this end, in order that we may all be benefited thereby, and I sincerely hope that all those who have the good fortune to read their books will make up their minds to apply the principles contained therein to their own individual nature, and thus be the means of helping forward the coming great reform. Ladies and gentlemen, it is a grand and noble thing to be able to make up one's mind towards the obtainment of a good end ; and my warmest wishes, feeling sure you will all agree with me, are, that all those who are now occupying their minds towards the perfection of human nature, especially Mr. L. N. Fowler and Miss J. A. Fowler, may long continue their works, and that they, while imparting good health to others, may heartily enjoy the same themselves.

Mr. Eagle said that he was pleased to have gained the certificate of the Institute, but he should not be satisfied until he held a diploma with honours ; that he was sure that Phrenology had done him more good in the past few years than £1,000 could have done for him.

Miss M. Linington then said a few words on the benefits of the study she had taken.

Miss J. A. Fowler, in acknowledging the tokens of appreciation presented to her that evening on behalf of her father and herself, said she needed no such testimony of their interest in their work, for the quotation in the volume they had just presented her with was verified by every effort they had put forth. It was not an easy thing to gain a diploma from the Institute, and she did not wish to make it a slighter task, as she felt sure the hard work did them good, and equipped them better for the standing they would have to take. She considered they were all building characters and bringing out capacities and latent talents. She considered that the factors of character-building were, first, birth, which has to do with the foundation stone ; heredity, parentage and law ; secondly, education, which has to do with the first and second storeys of the building ; growth ; thirdly, consecration, which had to do with the climax, capstone or roof of the building ; the harvest, &c.

She considered the first two were very important factors, but in the Institute we had to take material as it presented itself, and hence the third factor, consecration, was what necessarily concerned us the most. We should consider character was above knowledge, riches, position ; character even is not to be considered an everyday inheritance, for it cannot be given ; character is not what we think of ourselves ; character is not what others think of us, but we must, in a very large measure, carve and mould our characters ourselves. What kind of pattern, she asked, are we all going to carve ? The beautiful flowers that had been given to her were arranged to form a certain design. The tools for mental building were, most certainly, *Environment*, or atmosphere ; *Discipline*, or solid food ; and *Life*, or example, the practical doing. Thackeray's words would appropriately speak to them when engaged in character-building :—

Sow an act, reap a habit,
Sow an habit, reap a character,
Sow a character, reap a destiny.

Character-building was thus reduced to a science. Life grew on ideas. It was possible for a person to pass through so-called years of education, without getting a single vital idea, and that was why many a well-fed body carried about a feeble, starved intelligence. The habits of a good character were registered on the brain cells. She impressed upon all, in building and consecrating their lives, to make their lives happy and joyous. Ruskin had said that all education which does not make people glad—and glad justly, is failure, for you cannot make a character beautiful if you do not make it happy. She believed Phrenology tended to make people happy, and life pleasurable, because more beauty of soul was crowded into life through its help.

Miss Edith Russell said :—All of us are agreed, I think, that Phrenology is progressive, therefore its work must necessarily be aggressive. I should like to make a few remarks upon one department of phrenological work, in which progression is needed, that is, among the children. It is very necessary, in fact essential, that Mental Science should take an important place among the subjects for study in all our schools, and the more lectures and lessons that are given to children upon it, the better. They need to be taught Phrenology, as well as trained according to its principles. But as a rule, children would not be likely to be taught much on the subject of Mental Science at school before the age of ten or twelve years, if as early, and something of Phrenology, of their own nature, abilities, and capabilities, needs to be known by them before that. It should be learnt at their mother's knee. Character is to a great extent formed in the nursery, and brain and mind are then so impressible that it is the best time to impart knowledge. Children can be easily interested and instructed in the *simple* workings of their minds, without any danger of forcing the delicate brain to work beyond its natural power. They are always interested if told about themselves, and so can be made to understand something of their own nature, and it will be easier for them to become a law unto themselves and regulate their conduct, and so be truer men and women, better fitted for the

work of life, and able to leave the world better than they found it. They can be taught that all faculties are God-given, and that they are, in fact, so many servants whom they are to direct and control in carrying out the work of life ; so many talents for the right use of which they are responsible. I believe that a child should learn Phrenology and his Bible stories together. He will have a keener and more intelligent interest as he understands what prompted Abraham's generosity or Lot's selfishness, and so on throughout the Book. It is of intense moment that children should believe in the reality of the Bible in this age when there is so much unreality, doubt and scepticism. Phrenology is a greater aid in understanding the written "Book of Nature" than any other science, because it enables us to understand the character of man, and the Bible is God's record of the life and character of men. And the more children understand the two the better will be the foundation laid for their belief not only in humanity, but in Divinity. Mothers and teachers are pre-eminently *the* responsible ones for the formation of children's characters, but before they can understand child-nature, or do much for its culture, they must realise the sacredness of mind and must indeed have a reverence for the child before them. They have the parents of the next generation to train. The children of to-day will, one day, be greater than we are, or should be, and we have to see in them our future statesmen, politicians, our men and women of genius, the leaders of thought in the next generation ; and it depends greatly upon their training now whether the world is the better for them or not. Some time ago London was startled by the fact that a tiny child, only four years old, had attempted to commit suicide. The poor little fellow, when asked his reason, said, "Because I was so very miserable." Yet London is not so horrified at the mental and moral suicide that goes on daily in her midst, among those who are growing up into manhood and womanhood. Never taught in childhood how to cultivate or direct their powers, never shown their responsibility and power, never taught to have great and noble aims in life—and this among the higher as well as the lower classes—is it much wonder that they too become "so very miserable," and seek to drown their misery in uncontrolled passion, in drinking, in questionable places of amusement ? Or where they *do* feel the power they possess, how often, for want of right direction and control, is it abused, and the intellect used for purposes for which it was never designed ? A few years back they were all children, and it remains to be seen what the children of to-day will be in a few years' time. It devolves upon all to do their part in this great work for the children, but especially responsibility rests with woman and the phrenologist. If it be true, and it is, that we each help to form the character of those with whom we come in contact, though but for a moment, how much more then with children, whose receptive minds learn so easily by example and suggestion ? We each have known the influence that even a word has had upon us. It was a single sentence in what Mr. Fowler said to me, when he examined me some years ago, that altered the whole course of my life in a way that it would be impossible ever to regret. Let us each then do what we can

to give the children some knowledge of themselves and create in them a love for the science so dear to us, and which to most of us has become a part of our life. Onward—progression ; upward—Godward ; outward—extended influence, was the motto given to us students for our phrenological work some fifteen months ago in this room, and to follow it truly for the sake of our science will be the key to our success in the work.

Miss Crow was next asked for a few remarks which were as follows :—I have much pleasure to-night in congratulating those who have been successful during the past year in their examinations. I know how strangely pleasant it is to feel you are really through, and I also know how one then realizes that they have not finished, but have just begun their work ; a work of life. I wish you all success, and I sincerely hope you may find a wide field of usefulness open before you. We are just entering on a new year of work, and I hope we shall, one and all, use the powers we have to the best advantage, that of helping to raise the standard of Phrenology, and the moral standing and character of mankind, by engrafting into them, how, with the means they have at hand, they can strengthen and purify their characters. I believe that Phrenology in the hand of a wise operator is a Divine power, and one which no human mind is capable of measuring. I am often told that those with certain developments of the moral brain are unable to help themselves. This I do not believe. If such is the case, then those with propensities large are equally unable to help their actions, and no one would agree with this theory. If so, I think punishment for wrong is a very unjust measure. I prefer to look upon the case in this way. Here we are in the world, whether we like it or not, with a certain phrenological development, and we have to make the best of it. Those who have been fortunate enough to have been born of healthy, righteous parents, and have the best evenly developed mind, have the best tools at their disposal, and the easiest battles to fight ; but those who have a less fortunate development must not cloak their difficulties under the theory that Phrenology leads to unaccountability, but must rise and fight them like men, feeling sure that in God's strength they will prosper : and it is *such* people that I maintain phrenologists have it in their power to aid and strengthen, and surely none of us need a nobler object to work for. There is in every one of us a power or spirit which is ever hungering after a nobler life, a higher aspiration, and it is the stamp of the Divine upon us. I believe that if we will but use our Phrenology aright it is possible for us all to so cultivate our powers and character as to reveal the likeness of God in whose image we are created.

Miss S. Maxwell's remarks on " How to extend the usefulness of the Fowler Institute " ran as follows :—How are we, as members, helping to realize the aims of the Fowler Institute ? By dreams, longings and ambition.

And would we know that heart's full scope
Which we are hourly wronging,
Our souls would climb from hope to hope,
And realize our longing.

Our President I feel sure, I know, has had great dreams for this

Institute which he has started, dreams that it may grow from this small beginning, grow in strength of purpose, broadness of views, high aims for its usefulness to not a select circle, but to an ever-increasing number, that the truth of Phrenology may be preached far and near by its members, and that its light may become clearer and our knowledge of it extended and perfected ; and that the members may not be careful only to perfect their own character, but that of their Institute, for every institute, like a school or church, has an individuality, a character and a spirit of its own. You notice it as soon as you enter. And the spirit of an institute exists in the members that dominate it. In some associations or congregations you are conscious of warmth, enthusiasm and friendliness, and in another you are conscious of stiffness, coldness and artificiality. In one you are conscious of a large, liberal and generous spirit, and in another you are conscious of factions, fightings and meanness. You must have felt it. An institute has capacities of its own and can do what no individual member, or any mere number of individuals added together can do. A house is not a thousand bricks, it is something quite different, something made not merely by the presence of bricks, but by their being built together. Each separate element of the building when united, is able to do its share in the great work that none of them, or any member of them, could do without that combination which forms the edifice. We want our Institute to be a Living Institute. For wherever there is life it cannot be still, it works, it moves, it beats, it becomes warm, and we want this to be full of warm, living life. If it is only half alive the work is only half done. If in an institute of 100 members only 20 are working the utmost of their capacity, the work will not be, cannot be, fully accomplished ; 20 cannot do what it takes a 100 to do—not necessarily office bearers—by no means. The following practical suggestions may be useful—(1) Taking individual interest in it. (2) Making monthly meetings specially attractive ; make them so full of life and interest that we shall feel we have spent our time in the *best* way by coming, and that one and all the members shall feel invigorated mentally, and refreshed socially, by coming in contact with friendly workers in a common good. (3) That we have more debates in which the members can express their ideas with freedom—we do not want to get narrow—let us ventilate our ideas thoroughly. If they are badly formed, or illogical, we may put them right ; we know not how much we lose by keeping so much locked up in our minds ; we may be harbouring ideas and thoughts that discussing would prove to be worthless. (4) Let us have more observations from the members. We are students together, and I think we are all agreed as phrenologists that the more one knows the more there is to learn. (5) Practical examination of heads, and the use of the skulls ; special study of the localization of the faculties. In the *Phrenological Magazine* we might have a question column. Country members should take an interest in sending up more facts and queries. Our lady members should do their share. Our possibilities can be greatly increased if we make the most of our advantages. We do not want to be half-hearted. (6) We

could learn much if members would bring those who are competent artizans in various pursuits to the Institute for examination on specially arranged evenings. I myself could bring some. Not only could we do good in spreading the truths we have already studied, but in extending our own knowledge. The mine of truth is deep enough if we will have patience enough to search for it.

Mr. Ashby said he thoroughly congratulated those students who had been successful in gaining the diploma. He had been very much pleased with Mr. Brown's remarks, pointing out to them the advantages in the future of the Fellows, as he was naturally interested in them. He was pleased to be able to say that he had been very successful in the examinations he had made, and hoped to do still more in the Phrenological line in the coming year. He had found his diploma of great service to him, as it had introduced him favourably to people who did not know him personally, yet they knew Mr. Fowler's name in connection with Phrenology.

Mr. Dommen said Phrenology had always been of interest and service to him since he could remember, and considered that more intelligent people were taking up the study and developing the scientific side of it. He considered it would take all our united efforts to keep the world astir with the importance of the study that was engaging the interest of phrenologists.

Mr. Tovey, in the course of a very concise and stimulating speech, said he hardly knew whether to congratulate the successful students or not, because he felt, through his own experience, how much greater was the responsibility that now rested upon them, but if they were willing to shoulder it, they would add so much to their usefulness. He thought phrenologists should be well prepared to give advice concerning the suitability of people going to the colonies, the kind of climate, and the occupations most likely to be open to them. He considered it was not enough for a phrenologist to tell an interested parent that his son would make a good engineer, without considering how overstocked that occupation already was. If the lad was likely to excel in that work and nothing else, that was a different matter, but it was useless in his opinion for a phrenologist to recommend children to be trained in certain trades or professions that they would find crowded with eager applicants when they entered their work in earnest. He thought Phrenology should be of inestimable value to them in guiding them, like a signal on a railway line, for it so much depended upon the right pointing of the signals whether they followed the proper line and developed and improved their characters.

Mr. Brown then caught together and commented upon the various lines of thought that had been touched upon, and trusted that all would get truly in love with their work, for without love they could succeed in nothing. He said it was then his pleasurable duty to unveil a bust of Mr. Fowler, which he would like their criticism upon.

After a vote of thanks to the chairman the meeting was brought to a close, and several new members were enrolled.

Fowler Institute.

MEMBERS' NOTES.

"A certain quantity of power belongs to a certain quantity of faculty."—EMERSON.

THE third year of the Fowler Institute was concluded with the Annual Meeting, held on Wednesday evening, March the 8th, which was well attended by the members and friends of the Institute. After the report of the work of the past year had been read, Mr. Brown, F.F.I., Vice-President, gave a very interesting address on the future work, making several very practical suggestions, especially mentioning the future work of the Fellows. Most appropriate and interesting speeches were then made by those who had just received their certificates and diplomas, also by the Senior Fellows. A beautiful bouquet and book were presented to Miss J. A. Fowler by the pupils who had been studying during the past year, with the following well-chosen words inscribed on the first page :—

Let every moment as it springs,
Convey fresh knowledge on its wings.
Let every moment as it flies,
Record thee good, as well as wise.

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MR. FOWLER presented Miss Dexter and Mr. Lepage with their diplomas, also Miss Linington and Mr. Eagle with certificates.

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FOR further particulars we refer our readers to the report of the Annual Meeting on another page.

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WE are looking forward to a very pleasant and instructive evening on Monday, April 10th, when Mr. Sumner will give an account of his tour through Norway—with illustrations—entitled "Notes on Norway." We hope to have a large attendance of Members and friends.

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THE Editor will be very glad to receive any items of interest from the members of the Institute for the above column as early in each month as possible.

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THE Members' Column will, in May, be open to receive queries members may care to forward.

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WE are indebted to Mr. Smith for the following interesting physiological fact relating to the subject, as to whether people ever really die of a broken heart :—

"The late Sir George Paget, in one of his lectures just published under the editorship of his son by Messrs. Macmillan, acknowledges that in the vast majority of cases thus popularly described, there is

nothing like an actual rupture of the heart ; yet he admits that mental affections will not unfrequently cause real disease of the body, and he mentions an actual case of broken heart cited by Dr. J. K. Mitchell, of the Jefferson College, Philadelphia, in lecturing to his pupils. In an early period of his life Dr. Mitchell accompanied, as a surgeon, a packet that sailed from Liverpool to one of the American ports. The captain frequently conversed with him respecting a lady who had promised to become his bride on his return from that voyage. Upon this subject he evinced great warmth of feeling, and showed some costly jewels and ornaments which he intended to present as bridal gifts. On reaching his destination he was abruptly informed that the lady had married someone else. Instantly the captain was observed to clasp his hand to his breast and fall heavily to the ground. He was taken up and conveyed to his cabin on board the vessel. Dr. Mitchell was immediately summoned, but before he reached him the captain was dead. A post-mortem examination revealed the cause. His heart was found literally torn in twain. The tremendous propulsion of blood (adds the narrator), consequent upon such a violent nervous shock, forced the powerful muscular tissues asunder, and life was at an end."

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WE have received a most interesting and appropriate item from Mr. G. B. Coleman on human and other skulls, which have been found in certain caves in Europe :—

"Two of those skulls found are somewhat particular in character, and much discussion has gathered around them. The one is called 'Engis,' because found in the cave of Engis, in Belgium. It is the oldest of all skulls, and was supposed by some to belong to an extremely ancient race, more allied to apes than men ; but it is found to approach nearly to the Caucasian, the highest form of development. The following opinion of Professor Huxley should for ever preclude the Engis skull from being brought into court as a zoological witness to the simian descent of man. 'Taking,' he says, 'the evidence as it stands, and turning first to the Engis skull, I confess I can find no character in the remains of that cranium which, if it were a recent skull, would give any trustworthy clue as to the race to which it might appertain. It is, in fact, a fair average skull, which might have belonged to a philosopher, or might have contained the thoughtless brain of a savage.' The other is that found in 1857, in the cave of Neanderthal, near Dusseldorf. Though the Neanderthal skull is somewhat unusual in its development, it is evident that Professor Huxley does not consider it to be that of an anthropoid ape. Indeed, a British skull has recently been found in which the so-called abnormal characters are as fully represented as in that from Neanderthal. With regard to 'cranial capacity,' the largest observed capacity of the European skull is 114 cubic inches, and the smallest 55, while that of the Neanderthal is estimated at 75 cubic inches. Some Hindu skulls have as small a capacity as 46 cubic inches, and the very largest capacity of the gorilla is only 35 cubic inches. The difference

then of 11 cubic inches between the gorilla and man is the difference between an irrational brute and *Homo sapiens*. It is believed that the caverns in which these human skeletons have been found were places of sepulture, that the ashes mark the funeral feasts, which accompanied the burials, that some of the animals whose remains occur were eaten at these feasts, and that beasts of prey prowled about and fed on the relics. In the Aurignac cave at the northern base of the Pyrenees, there are not only at the portal of the vault the relics of funeral feasts, but within it indications of viands probably destined for the use of the departed on their way to the land of the spirits, while among the funeral gifts are weapons wherewith, in other fields, as has been supposed, to chase the gigantic deer, the cave-lion, the cave-bear, and woolly rhinoceros. If these memorials have been correctly interpreted, we have here obtained a clue in tracing back the sacred rites of burial, and, more interesting still, a belief in a future state, to the primeval customs and traditions of mankind."

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WHEN Molière made his physician say "We have changed all that," because his attention was called to the fact that he had placed the human heart on the right-hand side of the body, it was thought he was poking fun at a statement in a learned publication of the period which dealt with a remarkable case of the kind alleged to have been discovered. Quite recently, it seems, a genuine case has cropped up. A gentleman of independent means, named De la Savinière, died the other day quite suddenly in Paris, in the Rue Saint Louis-en-l'Île. Dr. Descouts, who performed a post-mortem examination, was astounded to find the heart, liver, and other organs on the wrong side, according to all accepted notions on the subject. The news got spread abroad, and the *Temps*, the gravest perhaps of all the French papers, sent an interviewer to question the doctor upon the subject. The latter fully confirmed the truth of the story. The dead man, he said, in spite of his little peculiarities of construction had lived to the good old age of eighty-five years.

E. CROW.

WALES AND PHRENOLOGY.

THE ABERAVON PHRENOLOGICAL SOCIETY.—The officers of the society are : President, Rev. T. G. Dyke ; Treasurer, Councillor John Thomas ; Secretary, Wm. A. Williams ; Auditor, Dan Davies ; Librarian, G. D. Loveluck, A.P.S. The following is the First Annual Report :—"The officers of our society have much pleasure in presenting their First Annual Report. A meeting was convened on the 24th of May, 1892, for the purpose of forming a Phrenological Society, the majority of those present associated themselves under the name of 'The Aberavon Phrenological Society,' with the object of promoting the sciences of Phrenology and Physiology, and the application of their principles to educational and other purposes. Since the formation

of this society, so much general interest has been taken in the sciences, that our membership has made a distinct advance, and during this brief period of existence, 18 meetings have been held, at which very interesting and edifying papers have been read, and discussions conducted on various subjects. The society affiliated itself to the 'Fowler Institute,' and was therefore favoured with a visit from Miss J. A. Fowler, who delivered a course of lectures; the lectures were attended by the *elite* of our neighbourhood, which afforded the lecturer an opportunity of raising the science to a higher pedestal than had hitherto been done. According to Section II. of Article I. in the constitution, a small library of useful books has been collected. The Fowler Institute has made a handsome donation of 5 vols. of the *Phrenological Magazine*, the remainder being contributed by the members of the society. Enjoined to this report will be found a list of the books in our library, also a statement of the financial position of our society. With regard to the future we hope to advance as we have done, gaining wisdom and strength, also urging upon all friends of the society the necessity of assisting in the useful work in which it is engaged, by advocating its claims, and adding to its funds by subscriptions and donations of money or books." Mr. Wm. A. Williams is the Hon. Secretary. We are glad to find the balance on the right side from the financial statement.

LONDON,

IMPERIAL BUILDINGS, NEW BRIDGE STREET,

LUDGATE CIRCUS, E.C., APRIL, 1893.

BRAIN
SURGERY.

The Animals' Guardian writes in reference to the death of Mr. John Pettie, R.A., and the value of brain surgery, as follows:—
After suffering for some time from an affection of the ear, Dr. Ferrier was taken into consultation, and on Monday, February 20th, Mr. Victor Horsley performed an operation for the removal of an abscess on the brain, but this seems to have been fruitless, the talented artist expiring almost immediately. The value of these operations appears as questionable now as in 1884, when "F.R.S." claimed that the person operated on "had faith in his doctor, and no fine-spun scruples about availing himself of the results of vivisectional discoveries," "was snatched from the grave," "convalescent and full of gratitude," "with good prospect of restoration to a life of comfort and usefulness."

"In that case," wrote "F.R.S." to the *Times*, "*he will be a living monument of the value of vivisection.*" It is well

known this "living monument" died eight days after this letter of "F.R.S." was published, and now, once again, in 1893, Experimental Physiology has brought about its own condemnation.

Commenting upon the above, we must say that we cannot question the wonderful skill of Mr. V. Horsley and the admirable judgment of Dr. Ferrier in such a case; but they do not consider it possible to be infallibly successful with the knife in every operation that is performed; still there is a well sustained fear lest clever surgeons are not sometimes over anxious to relieve their patients through the medium of operations instead of assisting nature to cure herself by milder measures.

VIVISECTION. A WRITER in the *Fortnightly Review* claims, in defence of vivisection, and apparently his claim is established, that lockjaw, which heretofore has been incurable, has been brought under control through discoveries made by vivisection. From this he argues that other diseases will in like manner be robbed of their terrors. That some beneficial results have been obtained from vivisection no intelligent person can deny, and we are inclined to believe that could the practice be regulated by law so that anæsthetics should always be administered, it might become a great aid to medical science without the terrible moral degradation which accompanies the practice at present. But it is beyond doubt that vivisection as at present practised entails excruciating and unnecessary suffering upon animals and a moral injury upon the men who practise it entirely outweighing any physical benefits accruing therefrom. When the vivisector is rendered so oblivious to suffering that he comes even to take delight in inflicting it upon his helpless human patients, and animals are frozen to death for the mere sake of proving that they suffer in the process, the evils of vivisection clearly exceed its benefits to such a degree that it ought, in that form, to be prohibited. If some plan can be devised by which vivisection can be so regulated by law as to restrain its practice to cases in which some real purpose can be attained by it and then anæsthetics always be used, the opposers of vivisection will probably withdraw their objections.

"OUR TWO
BRAINS." DR. B. W. RICHARDSON has recently explained his theory of "Our two brains, and how we use them." He holds that every man has two brains in his skull,—separate and distinct brains,

which are sometimes so very different that they seem almost to belong to two different men.

Dr. Richardson thinks he accounts for the phenomena of a man who becomes thoroughly changed. His theory is based on the duality of the human mind. He thinks so long as the evil brain retains its dominating strength it rules the man. But, he believes, the time comes when this excited brain gets worn out and becomes feeble, and then impressions upon it derived from the second brain begin to act with a regulating force. When he begins to feel that he has in him two volitions beyond his mere animal instincts and passions. At this crisis his better self drives his lower nature into the obedience of fear, and temporarily or permanently transforms him into that which he has never yet experienced: a newly born man, physically and literally. Dr. Richardson considers there is no mystery about it, that scientifically it is an organic mental transformation; an awakening into life from a semi-state of inertia. He considers his theory one of the grandest expositions ever revealed in the study of mental science. We shall look anxiously for a further development of these wonderful phenomena, especially to secure the secret by which the domination of the good brain can be secured at an early period. We thoroughly agree in the argument which sustained the theory of the duality of the faculties of the mind, but when we hear of there being two brains, and these of a good and bad character, we are tempted to ask, Why has not the brain been divided into more than two kinds? Sometimes the intellectual brain predominates over the moral brain; sometimes the social predominates over every other principle. Let us be broad enough to realize that in the Mental Parliament there is diversity enough in the faculties to separate oneself into several personalities but that they can be regulated by the study of each.

Hygienic and Home Department.

A DISTINGUISHED FAMILY.

"So your sons are all through college, are they?" asked Mrs. Smiley of Mrs. Lofty.

"Yes, indeed," replied Mrs. Lofty. "The dear fellows! I am so proud of them! Each of them made his mark. Only think of it! George won the gold medal for being the best polo player in his class!"

"Indeed!"

"Oh, yes, and Harry was never beaten once at lawn tennis during the last two years he was in college. He has ever so many badges and medals."

"How gratifying to you!"

"Indeed it is! And my son Will went ahead of his whole class at baseball, and is regarded as the most promising first base the college ever turned out! We are all so proud of him! But all our hopes are centred in our son Leo, who graduated two years ago. He has come out winner in every boat race he has rowed; and only think of it, we used to really fear that it was a waste of time and money to send him to college at all.

DANGER OF BEING A HUMAN BEING.

HEREDITY is a puzzle. It seems to be easier in this world to inherit bad qualities and traits than good, but both sorts make such leaps and jumps, and are so inclined to go off on collateral lines that the succession is difficult to calculate. The race is linked together in a curious tangle, so that it is almost impossible to fix the responsibility. Defects or vices or virtues will not always go in a straight line. The children of deaf mutes, for example, are not apt to be deaf mutes, but the cousins of those children may be deaf mutes, showing, it is said, that some remote ancestor of both had some mental or physical defect which has been transmitted to his posterity, though not in the form in which he was afflicted.

In most cases we cannot do anything about it; the older our civilization becomes the more complicated and intricate are our relations, so that it has already become a dangerous business to be a human being at all. It is not always certain that if a man eats sour grapes his children's teeth will be set on edge, but the effect of the sour grape diet may skip a generation or two or appear in a collateral line. We try to study this problem in our asylums and prisons, and we get a great many interesting facts, but they are too conflicting to guide legislation. The difficulty is to relieve a person of responsibility for the sins of his ancestors without relieving him of responsibility for his own sins.

AGED BY MENTAL DISQUIET.—Mental worry and disquiet, arising from any cause, is the strongest agent in "aging" men or women. It is an incessant source of exhaustion to the vital forces. You do so exhaust yourself when you worry about your business, your family, and about anything. It carves lines on the face and bleaches the hair. A peevish young woman at twenty will look old at thirty, because her

peevish or worrying thought represents so much of her force used to tear her down instead of building her up.

WHAT WEIGHT OF FOOD IS NECESSARY FOR HEALTH?—Dr. Nichols, some years ago, wrote an interesting book entitled, “How to Live on Sixpence a Day,” and at the conclusion gave the result of an experiment by himself. He had lived on twopence-halfpenny a day for a month, and that in the very best of health. More recently, Dr. Allinson successfully carried out a similar experiment, with excellent results to the *mens sana in corpore sano*, claiming greater health of body and clearness of mind for the moderate dietary. Neither gentlemen, as far as we can remember, repeated his experiment, for notwithstanding the advantages claimed, there was a sameness about the porridge and milk, &c., experiments, showing man wants not only sufficient food, but being endowed with taste he desires variety. Dismissing the question of variety, it is interesting to have the opinions of medical experts as to the quantity or weight of food necessary for an adult to live upon in health. Lord Playfair gives the following as a week’s fare: Three pounds of meat with one pound of fat, two ordinary loaves of bread, one ounce of salt and five pints of milk; or, for meat, five or six pounds of oatmeal. Lord Playfair knows that oatmeal is an almost perfect food, and the latter diet is even more nourishing than the former. Both appear as little as a healthy man can do with, that is, 10-lbs. weight of food per week. Doctor Pavey gives a higher standard, but even that is low compared to the actual practice of the most abstemious, viz., sixteen ounces of food per day in absolute rest; twenty-three ounces, during light work; twenty-six to thirty ounces, for a man doing hard laborious work. Doctor Pavey’s estimate is based on dry weight, now, as all our food contains more or less moisture, it would appear forty-eight to sixty ounces of ordinary food are necessary daily for a healthy adult, in active life. In a word, no positive rule can be laid down. It is well to eat what one feels it is possible to enjoy, according to individual capacity and necessity.

Notes and News of the Month.

THE Fowler Institute will hold an Examination in July for students unable to come up for the Winter Examination. The week before will be devoted to coaching the students in the practical part. Intending candidates must please send in their names as soon as possible to the Secretary of Fowler Institute.

* * *

MR. W. A. WILLIAMS, of Aberavon, has carried off the prize for obtaining the twenty-five subscribers to the *Phrenological Magazine*, having gained a total of twenty-seven prior to March, 1893, and is

now taking a course of lessons by post. The other awards have not been obtained, but they may be re-offered in a future Magazine in a modified form.

* *

THE Annual Business Meeting of the British Phrenological Association was held on March 7th, with the President, Mr. N. Morgan, in the chair, when the following officers were elected:—Mr. N. Morgan, President; Mr. B. Hollander, Hon. Sec.; Mr. R. Hall, Treasurer. The report was read and passed. The financial report was unavoidably delayed, and will be presented at the next Council Meeting.

* *

ROCKWOOD HOUSE is pleasantly situated on one of the southern slopes of the beautiful valley of the Wharfe, about seven minutes' walk from the Railway Station to the south east of Ilkley. Recently enlarged on an extensive scale, the latest improvements have been introduced both for securing increased comfort to the visitors, with all necessary requirements for invalids, and large, lofty, well lighted, and ventilated bedrooms. Mr. Jas. Lister is the proprietor.

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. J. W. TAYLOR has had a considerable amount of success at Nantwich in lecturing on Phrenology and in examinations. He is now in Morecambe for a short season.

PHRENOLOGY AND PHYSIOGNOMY.—Mr. Roe paid his third visit to Charlbury, and delivered a lecture in the Y.M.C.A. Hall on "Heads and Faces, and how to read them," J. M. Albright, Esq., of Hazeldean, in the chair. The lecture was illustrated by numerous diagrams of eminent men, also by busts and skulls. It was most interesting and instructive, and listened to by a good audience, showing that the lecturer was a welcome visitor. After the lecture he examined a lady and gentleman, who testified to the accuracy of the delineations, and several others remained behind to be examined privately.—*Oxford Chronicle*, Feb. 25th.

THE British Phrenological Association held their Annual Conversation in the Cavendish Rooms, Mortimer Street, on March 1st. The

rooms were comfortably full, and judging from the many new faces, the members must have done their part well in disposing of tickets. The President, Mr. N. Morgan, received the guests, and afterwards gave an address of welcome and a short history of Dr. Gall's early life. Light refreshments were served in one of the rooms at 9.45, after which Mr. Hollander gave an address, and then the meeting was thrown open, and the company divided into groups to listen to examinations by different phrenologists. Microscopic specimens and skulls were lent for observation and comparison, and proved of great interest to the guests.

PHRENOLOGY.—A lecture on Phrenology and Physiology was given on Tuesday evening, in St. Saviour's Schools, by Professor Timson, M.B.P.A. The meeting was in connection with the "Steadfast Union" Lodge of Good Templars, and was public. Councillor Vorley presided, and there was a good audience. Mr. Timson answered some criticisms recently made against Phrenology by a local medical gentleman. The lecture proved of a highly interesting character, and in response to a desire, Mr. Timson promised to give another lecture shortly. A number of gentlemen were submitted to a phrenological examination.—*Midland Free Press*.

MISS J. A. FOWLER gave an interesting lecture on "Brain and Mind," on March 15th. It was illustrated with diagrams showing the construction of brain cells and brain fibres, of infants and adults. She proposes to continue the subject in another lecture in April. This is a vastly important subject for the consideration of phrenologists, and needs twelve consecutive lectures to do anything like justice to its compass and extent.

Book Notice.

How to Thought-Read, a manual of instruction in the strange and mystic in daily life, psychic phenomena, &c., by James Coates, Ph.D., F.A.S., illustrated, price one shilling. London: L. N. Fowler & Co., Ludgate Circus. This is the fourth of the mental science series, bound in boards, uniform in size with *How to Mesmerise*, *How to Read Heads*, and *How to Read Faces*. In eight chapters the author explains in his easy and lucid style Somnambulism and Psychic Phenomena, Clairvoyance, Clairvoyance Illustrated, Psychometry, Thought-Transference and Telepathy, Thought-Reading Experiments, Spiritualism, &c., &c. All who wish to know how to thought-read should send for a copy of this book.

OLD friends are best. King James used to call for his old shoes, they were easiest for his feet.—*John Selden*.

Correspondence.

MR. C. DAUBENY contributed the following letter to the *Bath Chronicle* on the visit of Mr. A. Hubert :—

“ Sir,—I promised Mr. Hubert that I would write a letter to you on the above subject, as a sort of introduction to his coming lectures in Bath on Phrenology. First, then, what is the derivation of the term ? It is, as I daresay most of your readers know, derived from two Greek words, signifying ‘ a discourse on mind.’ And here let me ask, what can be more interesting than such a discourse by those who are qualified to discuss it ? One of our greatest poets has said—

‘ The greatest study of mankind is Man.’

By this, I take it, he meant especially, man’s mental attributes, as distinguishing him from all other created beings, *i.e.*, his powers of observation, reflection, comparison, of diving into the causes of the phenomena he daily sees around him and of reasoning justly therefrom. I say *justly*, because he is a free agent, and may choose to reason perversely. He then falls from his natural pre-eminence, and, as I have said elsewhere—

‘ His reason’s gone, and he becomes a fool.’

“ But what is the meaning of this term as used by phrenologists ? It embraces not only the mental, but the moral and the lower or animal qualities, all necessary to the preservation of the individual, and all situated in different parts of the brain ; but their relative proportions, often varying much with each individual, and hence producing the differences of character, of habits and of feelings we so constantly meet with in our daily intercourse with our fellow beings. They assert that the brain is a congeries of organs, and that each organ or faculty belonging to any of these classes has its distinct locality there. But how do they prove the correctness of that assertion ? By examining the heads of persons whom perhaps, as in my own case, they have never seen before, or even heard of ; or at the risk of their own reputation in case of failure, summing up the character ; indeed individualising, first of all, the excess or deficiency of each such quality, weighing it against some antagonistic quality or qualities, and so summing up the character of the individual under examination. Where these various organs lie is of course the result of considerable experience and observation on the part of the phrenologist, as is also his knowledge of their relative deficiency or excess.

“ Therein consists an essential part of the science. Equally important, however, is the judicious summing up of the character derived from such knowledge ; for one important error might throw such discredit on the phrenologist as to make him looked upon as a charlatan. See, then, to what a crucial test he exposes his system every time he examines a stranger with the view of delineating his character ; and if he were an impostor, of being proclaimed as such by him and his intimate friends ! To take my own case as an illustration of what I have been saying. I

did not know Mr. Hubert even by sight, nor he me, nor did he even know my name when I called upon him to have my head examined, nor did I give him the slightest indication of my character, prior to his examination. Yet in three days' time he gave me a written opinion in figures as to no less than 56 points going to form my character, and summed up the whole therefrom in a manner so generally accurate as to have astonished those who have known me most intimately for a great number of years : and which character, as far as I know myself, I can endorse. How is it possible to suppose that such a result could have been attained by chance ? Would not the chances have been infinite that if he had been an impostor for one lucky hit he would have made at least a dozen gross blunders ? Nor is his success in my case by any means an exceptional one.

"I think, then, I have established the facts, that there is truth in Phrenology and that it rests upon a scientific basis. These points being granted the next to be proved is—*cui bono* ? Surely it is of the greatest possible good in the education of children almost from infancy upwards, in fitting them for their future avocations in life, and in seeing that the latter are best suited to their respective capacities ! How often are young lives wrecked by the square man being forced into the round hole and the round man into the square one ? And where there is no such forcing, how often are young men led away by fancy or by a spirit of imitation to embark in pursuits for which they find too late they were quite unfitted ? Then, is this want of self-knowledge confined to young people, and may not many older ones be the better for a little advice on this head ? On the one hand one's friends are apt to flatter one, or the other one's enemies, to find fault needlessly. Between these two, would it not be a good thing to consult a competent and thoroughly independent judge in this matter ? Education is indeed a large subject, and I might write much upon it, but I don't wish to encroach further to-day upon the space in your columns.

"March.

"C. DAUBENY."

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 photograph ; 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 6s., for twelve 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.]

B. (Gateshead).—The photos of this gentleman indicate a strong bodily organization ; there is constitutional vigour, and every indication

of a strong hold on life. His powers of mind are fairly developed and in good proportion to each other. He has a strong moral brain which gives him a disposition to conform to religious opinions ; he has large Veneration and Spirituality and is a man of faith and belief. He is not self-willed or stubborn but can act from the influences of others ; is sympathetic and kindly disposed towards others. He is very prudent and economical ; is not given to waste ; is rather reserved and does not make friends very quickly ; he is disposed to make but few attachments. He has good mechanical abilities and constructive talent, and can handle tools very well. He can work and measure by the eye ; is neat and tidy and rather methodical. His power of calculation is not so good, and his memory of general events is rather weak, but memory of faces is very good indeed. He is not a ready talker, but is more thoughtful than expressive.

W. M. (Lady).—The photo of this lady indicates an intense and susceptible nature. She is full of energy and has a lively disposition, is sensitive to surrounding influences and quickly stimulated or depressed ; she feels most acutely both pain and pleasure. She is rather high-keyed and emotional, and she cannot act or feel impartially about anything, but enters thoroughly into whatever she does. She has a strong social nature, is very warm-hearted and affectionate, is constant, and has a friendly disposition. She is rather thoughtful and has good planning and adapting abilities ; she has good judgment ; is a shrewd observer. She is very neat in her work, and has an orderly and methodical disposition. She is generally economical and prudent. Is hopeful and not easily discouraged. She has not many secrets, but generally speaks as she feels and says what she means. She is rather ingenious in her work and has a versatile mind.

W.M. (Gentleman).—The photos of this gentleman indicate a good vital organization ; the bodily powers are well developed and the constitution is strong. The head is fairly rounded out. There is a fair amount of energy and disposition to turn off work with despatch. He has a strong sense of prudence and economy, is a rather cautious man, and rather forethoughtful. He has good imitative powers, and fairly good constructive talent or mechanical skill. His is a mind that can attend to details, and carry on a variety of work ; his power of continuity is not so strong, and he is not so patient and enduring. He is sympathetic, and his general disposition is to consider others. He is friendly and social generally, and has strong conjugal affection. He has a strong sense of punctuality, and his memory of dates and faces and of general events is very good. He is rather critical and sharp in his judgments, and is more original, sound and deep thinking, than he is showy and superficial.

“ JESSIE ” (Glasgow).—The photo of this young lady indicates a very positive character. Firmness of mind and self-reliance are prominent characteristics. She is full of energy, vital force, and executiveness, and has the qualifications for a worker. She is very

thorough in what she does, and quite capable of carrying out all she undertakes. Economy and prudence are strongly marked. She is very ambitious and independent, but is rather sensitive and easily stimulated by praise or blame. She can give her whole mind to her work and can finish what she has on hand ; is not changeable, or fickle minded. She has good scholastic abilities, and a mind capable of exerting considerable influence.

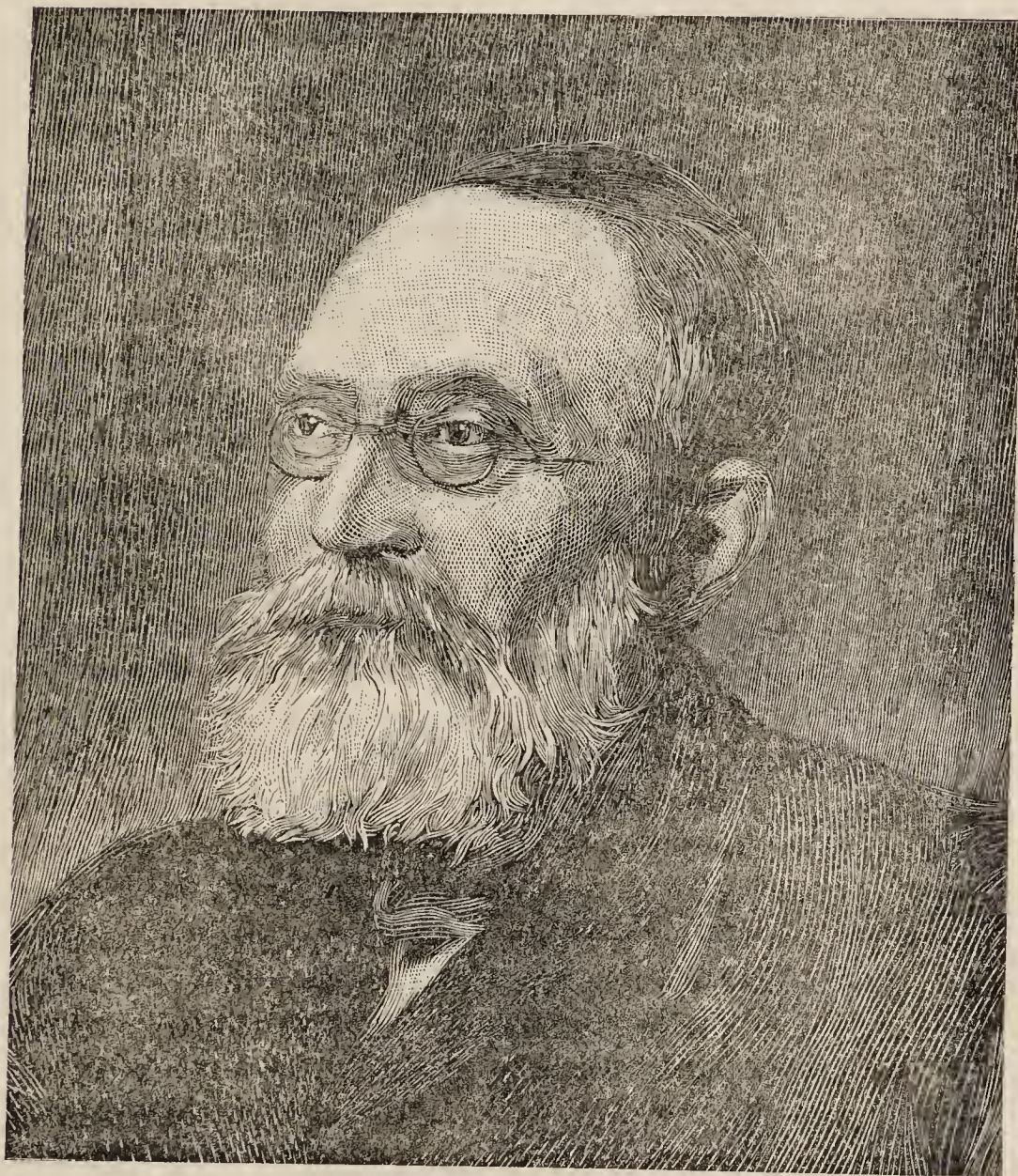
“ HARRY ” (Glasgow).—The photo of this young gentleman indicates a good vital stock, and fair constitution. The head is fairly developed ; all the mental manifestations are accompanied with functional vigour. He has an ardent, intense and susceptible mind, and good observing faculties ; will be quick to learn and curious to know. His memory of forms and faces is good and his ability to design and reproduce what he has seen is also very good, and had better be encouraged. He has a strong sense of order and neatness. He has a mind for details and general effect. Is not so cautious and prudent as he needs to be, he does not see the danger and has to learn as he goes along. He is candid and frank, rather affectionate and sympathetic.

ROSALIE (Linslade).—The photos of this child indicate a fair vital organization ; she commences life under favourable conditions physically and mentally. She possesses strong characteristics ; is very energetic and active, this will give her force of character to carry out her ideas and intentions. She is rather wilful and cannot be forced ; she needs to be drawn, and her attention to be directed to something else if she is to be dissuaded. She is very affectionate, rather timid, and easily frightened ; care should be taken to avoid exciting this faculty. She will learn rapidly and develop easily. Her mental impressions are rather strong ; she will pick up anything very quickly that she has seen done, for her imitative powers are very good. Her memory is very good, especially of faces. Neatness and system are well represented, and will present strong characteristics.

G. T. (Barton).—The photo of this gentleman indicates a fairly balanced mind. He has some rather strong characteristics, but works at a disadvantage, as his health is not good. If he were to pay attention to diet he would improve the tone of his digestive powers. He is fairly energetic, and of a rather forcible nature ; has a strong will, and is not easily dissuaded from his intentions, but can maintain his own opinions in spite of opposition. He has not a hopeful disposition, and is rather disposed to rob his prospects of their colouring. He is not so sanguine of success as he should be, and is rather cautious and irresolute. He is reserved and shows considerable tact in the management of his affairs, and is not disposed to make confidants. He has strong conjugal affections. Has good planning abilities, and can estimate and calculate very well. Is very systematic in his work, and has a methodical nature. He has an observant mind, is a good reasoner, and has keen insight, and his knowledge extends over a variety of subjects. He is a good judge of character ; is very self-contained, economical, and prudent.

THE Phrenological Magazine.

MAY, 1893.



DR. RUDOLF VON VIRCHOW.

THIS gentleman possesses a well balanced mind, joined to a superior quality of organization. There appears to be general harmony between body and mind, which gives him more than ordinary force, enthusiasm, and executive power. His moral and intellectual qualities are well regulated by his basilar brain. There is a substantiality about the development of all his mental powers which should make him reliable in his observations and accurate in the accumulation of facts. His head appears to be of good size :

high in the superior parietal region, and broad in the lower frontal. He is particularly well developed in those faculties that are located in the central portion of his brain—from Individuality to Self-Esteem; hence he must show superior memory of faces, and special events in history, or facts in science; remarkable analytical power; intuitive insight into subjects, character, and things; uncommon sympathy and great determination of mind, will power, and perseverance. He must show great intensity of mind, but at the same time an equal amount of mental control that will prevent his showing enthusiasm which cannot be supported by common sense, principles, and facts. He has a higher order of the mental and vital than the motive temperament, and is therefore better adapted to study than to laborious work of a physical kind. His head indicates that he is a great student of nature, and thoroughly investigates subjects in which he takes an interest. He has great power of observation, and should easily acquire knowledge of a practical character. He has a superior scholastic memory, and is naturally a free and easy talker on subjects of scientific value, but he does not talk for the sake of it. He can expand on a subject, and explain what he knows to a good advantage, still is not verbose, prolix, or wearisome. He has a most favourable organization for a scholar, and especially for a scientific man. He has a particularly well marked brow, which enables him to delight in exact sciences, facts, and experiments. He has great powers of analysis, is a great critic, and is well able to illustrate what he is describing. He can make close discriminations, and sees the salient points of a subject at once. He likes a good joke though he does not go out of his way to be humorous. His fun is dry and off-hand. He is very intuitive in his judgment. He can see far ahead, and is quick to take a hint. He is not so abstract in his philosophy as he is critical in his estimate of qualities and their uses. He is a man of great order, method, and system, and is accurate in all he does and says. He always has his plans well prepared before he commences anything, and is very particular how he sets to work to investigate subjects. He is steady and persevering when pursuing any special thought. He must have shown a considerable amount of determination in his lifetime, hence must have accomplished much that many men would have been tempted to pass by. His Firmness joined to his Conscientiousness must have made him all his life a resolute man in carrying out what he thought to be right and proper. He has a strong sense of duty and obligation, and nothing would give him greater annoyance than to

feel he had failed in his duty or agreement with any man. His mind is open to inspiration, and were he twenty years younger than he is, instead of being three score years and ten, the scientific world would have cause to rejoice. Still he is not old for his age, and he has the ability to retain his wonted vigour and geniality of mind, until after he becomes an octogenarian. He is a man who has lived well by living slowly, he has not wasted his strength prematurely. He enjoys life and knows how to make the most of it. He takes a calm yet penetrating view of subjects, and is very cautious and prudent about committing himself. He does not however appear to be wanting in frankness, candour, and open-heartedness with those who are anxious to listen to him, but he is not desirous of pushing himself forward nor inclined to make a great deal out of his abilities to court popular applause. He places a higher value on character than reputation. He is not an imitator of men, but has his own way of working things out. He has no want of adaptability, but is not carried away by quixotic opinions. The radical thinker may call such a character too firm and set for the present age of advancement in all lines of thought, but let such remember the incumbrances he must have cleared away in past years, to have enabled the men of to-day to make such a forward march in scientific pursuits.

THE EDITOR.

At a special convocation of Oxford University, the honorary degree of Doctor of Civil Law was conferred upon Dr. Rudolf von Virchow, Rector Magnificus of the University of Berlin and Professor of Pathological Anatomy, by the Warden of Merton College, who referred to his distinguished services in the science of medicine and public health. The recipients of the degrees met with a very hearty reception.

At Cambridge University the honorary degree of Doctor of Science has been conferred upon Dr. Virchow.

In addition to the public honours conferred upon Professor Virchow, he has been the object of many distinguished attentions, private and public, during his brief stay in London. He had the opportunity of renewing an old acquaintance with Mr. Gladstone, who manifested great interest in Professor Virchow's views on the present state of political affairs in Germany; and H.R.H. the Princess Christian received him at Buckingham Palace. The Lord Mayor had expressed his desire to some distinguished persons to meet Professor Virchow at the Mansion House in his character of the great leader of public hygiene in Prussia, had time permitted him to

prolong his stay. Professor Virchow expressed his gratitude and his sincere regret that it was not now possible for him to receive this honour. A banquet at Caius College—the college of Harvey and Glisson, the heroes of scientific medicine—whom Virchow had glorified in his Croonian Oration, afforded an historically interesting occasion of welcome at the University of Cambridge.

* *

Prof. Virchow, by far the ^{*}most celebrated of German scientists, has just declared with great emphasis, in the teeth of the ultra-Darwinians, that there exists a barrier between men and beasts that can never be removed. The heredity of *transmissible faculties* is an impassible dividing line between men and apes. A few years ago it was generally believed, says Prof. Virchow, that a small number of human beings were the “missing link” between human beings and the higher animals. But a careful examination of these races has shown that they are organized exactly as we are, or are even superior in organization to us. The “missing link” remains a myth. Professor Virchow’s testimony is a nut which will break the teeth of the materialists. They can produce no one whose authority is equally great.

* *

Prof. Virchow, whom the ^{*}élite of the English scientific world have met to honour, is equally famous as a biologist, anthropologist, and archæologist, and is withal a zealous advocate of social and educational reforms. When the chorus of laudation has died away, however, we may however hear a shrill counterblast, for has the Professor not declared that experiments on animals are absolutely necessary for the progress of medicine, and that if such experiments are prohibited in England, English medicine will very soon fall behind that of other countries? The anti-vivisectionists are pretty sure to go for his scalp.

MEDICAL MISSIONARY WORK FOR WOMEN.

BY J. M. GRAY, L.R.C.P. & S., ED.

Now, perhaps more than ever, in the history of the world and the church, is recognised the necessity of woman’s work for and to women. Some women are so enlightened, have been so surrounded by favourable environment, have inherited such characteristics, that they are enabled to spend and be spent in the service of others. While others of our sisters are

so trammelled by custom, overborne by observances, crushed down to the very dust by ignorance, and fettered by circumstances, that existence is a burden, and life a dreary pilgrimage to the grave.

Amongst the first class might be put the majority of women in England and America, and among the second, alas ! the millions of women in India and China.

In India the women are shut up in Zenanas. There they are kept in wearisome bondage, and never allowed the freedom of the outer world ; and when sickness, pain and sorrow come, instead of sympathy and all the many alleviations that surround an English mother, there is solitude and loneliness, isolation from the rest of the family, no clean clothes allowed, no water at times, and often a fire lit in the small hut set apart for her use. All the many ills to which human flesh is heir to, if they should attack an Indian woman, must be met without any skilled medical aid, unless she be one of those women who are fortunate enough to be living where there is a Dufferin or Mission Hospital.

But the hospitals are few and the women of India many—about 250 millions. Well may we exclaim, looking at the harvest field already ripe unto harvest, and at the few and scattered workers, “What are these among so many ?” No respectable woman can avail herself of medical aid from a man in India ; does not that fact lay upon us here a very great obligation as well as a privilege ? We can study medicine at home ; we can be trained in the schools and hospitals here, and when the course of study is completed, there is no lack of work if we turn our faces to the Oriental races.

At Patna, about six or seven years ago, the husband of a Mahommedan woman called in a man doctor (there was then no medical woman at Patna, though there is one now doing good work), but although the woman treated by the doctor recovered from her confinement, and should have been the joyful mother of a young life, she was so ill-treated by her female relatives, that she killed her child and committed suicide. Such are the deeds done in a heathen land, but if there had been a trained English woman in that city, understanding the art of medicine, such a life would not have been sacrificed.

In India the commonest elements of health are not known. Infants with bronchitis are laid by fond and ignorant mothers on the floor in the damp. Sanitary arrangements are *nil*. Even with the many bathings, that are necessary for holiness, in the Ganges, cleanliness is a virtue but dimly understood.

Seven or eight years ago it was said that there was work for two thousand women in India—medical work. At present there are at the very most twenty-four or twenty-five English medical missionaries in India and China who are on the British Register. That includes all those who have been lately qualified the last year, and have not yet started for their sphere of work—a dense, teeming population ; many a city and no hospital of any kind for the better class women of the place.

There are some workers connected with the Dufferin Association, but all those who work not only for the sake of their suffering sisters, but for Christ's sake, must feel that in that Association only one part of their mission to suffering humanity can be undertaken, and that the part that is left out is the better part.

Medical practice, fortunately, or unfortunately, in India, is free ; and this, alas, offers a great temptation to piously disposed persons to indulge in a superficial but rather sham kind of training, and then to pose as medical teachers to the heathen. Anyone who realizes that all work done for Christ should be the very best possible of its kind, will recognize what an incalculable injury is done to the cause of Christ, as well as to the status of women in the medical profession generally, by these pretenders to the art of healing.

Twenty years ago, when it was impossible for women to obtain the thorough medical training that is now open to them, such a thing might have been forgiven ; but now, when there is no difficulty in studying medicine in London, Glasgow, Edinburgh, or Dublin, what reason can be put forth by those who consider that a training will do abroad that would be insufficient because illegal for practice at home ? All of the workers now in the field have got more work than they can undertake with ease and comfort to themselves and complete satisfaction to their patients. If possible, in every station where there is a hospital, there should be at least two lady doctors, because, if there is not, the work must suffer when the sole one in charge has to leave for six or eight weeks' change in the summer ; and yet if she does not take this change the work will suffer in the winter by her illness or lack of energy. Again, where the responsibility is so great, it is a relief to be able to share it. Two is better than one, for if one fall then the other shall pick his fellow up. The church of Christ to-day should follow their Master's example in sending out their missionaries to the heathen two by two ; and the churches at home need to remember that "thrift in money means very often unthrift in life."

It would be rather difficult to give the exact number of lady medical missionaries at the present moment in India, for this is just the transition time when numbers are going out. Still, very few societies have more than two or three medical ladies to represent them. There is one Society that for many years has only employed thoroughly qualified women, even when all the other Societies were using women that were less than half trained, *i.e.* the Indian Female Normal School and Instruction Society, or as it is commonly called now, the Bible Zenana and Medical Mission. This Society has been unique in its determination to have only fully trained medical women in its employ; now at last many other Societies are beginning to follow in its train. It has now five workers in the field—two at Lucknow, two at Benares, and one in Patna. At the former stations there are two hospitals. The one at Benares contains twenty-five beds, and if there be great need, thirty-five patients can be admitted. Sometimes the out-patients exceed a hundred a day. There are medical, surgical, and ophthalmic wards. Dispensary patients are also seen twice a week in the city, and formerly, dispensary patients were seen in one of the many surrounding villages; this at present has been given up for a time, because only one lady has been in charge of the hospital for the last eighteen months. At Lucknow the hospital is larger, and the work heavier than it is at Benares.

At Patna there is no hospital at present, but it is hoped soon that one will be opened. There the work is heavy because so widely scattered, entailing many hours spent in getting to and fro from the homes of the patients. In one day thirty-two miles had to be traversed in seeing two patients only, because they both lived in different directions, and both were so seriously ill that two daily visits were required.

Lately a new hospital has been opened under the care of Miss Russell, M.B., belonging to the Established Church of Scotland.

Now on her way out is a medical woman to take charge of the Mission Hospital at Peshawr; another one going to Ludihana, and the present worker there is going to begin mission work at Delhi, under the auspices of the B.M.S.

Miss Agnes Henderson, L.R.C.P. and S., Edinburgh, is working at Bombay in connection with one of the many varieties of the Presbyterian Church, and here and there, widely scattered and separated from the teaching of superiors, and the criticism of their fellows, a few are manfully going to war against flesh and blood, princi-

palities and powers. And in these hospitals, not only is the most done that can be for the bodies, but every opportunity is taken to instruct those who know not Christ, of the wonderful love He bore to sinners, of His death on the cross for them, and of His resurrection. They are pointed to "a Friend, who sticketh closer than a brother," and very often it is not until the consistent life and the unwearying attention and kindness of the doctor Miss Sahib, has awakened love in the hearts of her hearer, that there is a prepared soul for the teaching of the Holy Spirit. Even a Mahommedan woman said that they had no hakim, *i.e.* physician, in the likeness of Jesus. Do we not all need to pray—"Fill us with Thine own compassion for the souls that know not Thee"?

The work that has been done for the last year at Ludihana has been great. The year before last sixteen in-patients could be held, and nine thousand had attended the hospital as out-patients. A letter to the Christian Association at the Woman's School of Medicine, London, gives a little idea of the work. In it Miss Brown says: "We have early breakfast in our room at 6.30, and breakfast at 8. At 9 we go to the hospital and dispensary. At present the weather is cold in the morning, so that few patients come before 10, so that Miss Pogson and I make up stock medicines, lotions, &c., when we first get there; and then go into the hospital and do any special dressings in which I need her help. At 10 we have a short service, lasting about ten minutes, and all the patients who are well enough come out to it. It looks so strange to see all the women sitting on mats on the floors, with their knees up to their chins, and in brilliant coloured (but very dusty and dirty) garments. . . ."

"I then see any eye patients who have come, and I have a special corner with a little dark room screened off for this. A native girl interprets for me, and if we are in difficulties I call for Miss Pogson. The eye cases are really dreadful, I should think half are quite hopelessly blind. It makes it sad work."

And many of the eye patients come fifty miles to the hospital. "Then I go to the hospital and see the in-patients, and Miss Kate Greenfield, who takes charge of the nursing, interprets. The hospital has been very full lately (this in January, 1892), varying from twenty to twenty-five patients, besides all the friends and relations who sleep on the floor. In the day most of them lie out in the yard in the sun, but we need a larger place for the night. The hospital was formerly a church. It has six 'rooms' screened off by curtains, each holding one, two, or three beds. There are

three beds on the platform, and three down the middle of the building. About thirty to fifty out-patients attend the dispensary daily."

Details of the various cases are exceedingly interesting. Some can be read in the November number of *Medical Missions at Home and Abroad*.

This, and similar work, needs doing in various parts of India, the hands of the missionaries now in the field are constantly being hindered by having too much work to do, and the lack of efficient help.

Are there not many women here in England who have the strength of mind and body that would enable them to engage joyfully in this work, who are squandering their youth, time, and talents away at home; who do not know the joy of service—the bliss of those who give themselves utterly away; who rejoice to do God's will, and take a small but active share in the forwarding of His kingdom? How many of those who pray day by day, "Thy kingdom come," are engaged in actively forwarding the same? We pray that many workers may soon arise who shall seize hold of their opportunities, and realizing their splendid chances and the open door set before them, enter in and labour steadily, faithfully, and earnestly, for the Master's sake.

The death of Miss McGeorge, on her way back to India in the *Roumania*, which was wrecked, speaks eloquently to us—

"The Kingdom cometh. The King's servants pass.
The Kingdom cometh. All flesh is grass.
Lord, let our sorrow be dumb,
There is no prayer so sweet as 'Thy Kingdom come.'"

Her work on earth is finished with the "Well done good and faithful servant, enter into the joy of thy Lord." But who is going to have the honour of doing the work she left behind? Also, Dr. Janet Humber, who died suddenly of cholera in the spring of last year, needs a successor.

The kingdom will come. God's work will be done, but terrible will it be for us if we have no hand in it, if we shut our eyes to the duties before us, and turn aside from the work Christ has given to us. Are we not called by a three-fold call, for our own sakes, for our sisters' sake, and for Christ's sake?

For the widening of interests, the fixity of aim, the strength of purpose, the joy in life, this will give us for ourselves; and then our sisters' sake, their bitter, unnecessary suffering, their glad acceptance of our help, their cry that comes to us like the cry from Macedonia, "Come over and

help us." And above all the Master's call that comes unto me and unto thee.

"For Christ's sake to me,
For Christ's sake to thee,
Oh what, oh what shall the answer be?"

Shall we not answer "Thy servants are we?" May we not rejoice to say, "Here am I, Lord, send me?"

It is said that every mission means a going forth not knowing whither we are going, because the work so grows upon one, the claims become so multiplied, and from very small beginnings such great issues arise.

God grant that many who read this article may solemnly ask themselves if it may not be to them a call from God to engage, like the Master, in healing the sick and preaching the Gospel.

* WANTED—GALL-LIKE PHRENOLOGISTS.

THE strain is too great. The men and women who are trying to carry out the programme of scientific phrenologists in England are too few. In face of the numbers, wealth, and influence of the world, the really active disciples of Gall are over-burdened and over-worked. The fact is that the ideal of Phrenology, now cherished in the hearts of the best phrenologists, is higher than it has ever been.

Fragmentary phrenologists, and half-hearted phrenologists, are so manifestly played out that nothing will avail hereafter except a return to the intensity and comprehensiveness of Dr. Gall and Dr. Spurzheim. The leaven of Phrenology has been fermenting in the heart of English society until it has produced such a conception of the practical scope of the phrenologist's life as our forefathers never imagined. For the first time in the history of this country it is believed and openly asserted that the principles of Gall must be applied in every phase and aspect of life. The phrenological conscience is no longer satisfied with an attempt to realise the phrenological ideal in personal experience and in private life.

The phrenological enterprise is now imperatively demanded in *all* the great spheres of English life. An honest and strenuous effort to carry out the principles of Phrenology was made in the days of George Combe. Our noble Prince Consort, with his clear and manly intellect, repudiated with

* With apologies to the Editor of the *Methodist Times*.

becoming candour the prejudices that existed in his day against Phrenology, by seeking advice concerning his children's characters, and fought with indignation the notion that the rules of conduct for a public man must differ from those of a private character. He acted upon sound common-sense principles, and hence they characterized him throughout his entire career.

Since Combe's day there has been an increasing desire to carry out the principles of Gall, and now a keen revival of them is agitating public life, which is beginning to take seriously to heart the desirability of introducing it into the curriculum of the teachers of our public and high schools. Doctors are understanding its value in our insane asylums. Parents are anxious to study it for the better education and guiding of their children. Public men are beginning to realize their direct responsibility in the matter. They know now that Gall established by observation what is at the present day being proved by experiment.

This brings us to the other novel features of applied Phrenology, the new conscience with respect to trade. Hitherto, men have acted upon the maxim that the best plan was to put children to their own trades, whether they were fitted for them or not, without reflecting whether they were not throwing away their lives. We have for long foreseen a very grave question with respect to the relation of capital and labour. Many employers in this country are undoubtedly Phrenologists, for they have contemplated these trade questions from an economical point of view.

The fact that practical considerations are now, not only in England but throughout the world, agitating both politics and business requires that English citizens should be much more highly educated in the ideas expounded by Gall, that they should have a more unselfish morality than at any previous period of history. In the meantime old-fashioned sentimental and individualistic prejudice has ceased to influence the masses of mankind. The frantic attempt of influential persons to galvanise the old styles and methods of education are impotent. The education of the future will be more practical and less emotional and sentimental or stereotyped. All this means that teachers, doctors, public men of every stamp, must become phrenologists, and must share Gall's thoughts, and act upon his principles of cranial observation. Phrenology is not an end but a starting-point. Until we have a much larger number of well-instructed and fully consecrated Christian men and women to promulgate the work, the burden of modern Phrenology will be almost impossible to carry, and

we shall make no progress. We do not mean that every one who has studied a shilling bust and read one book on Phrenology shall set up a sign and advertise himself as "The greatest living Phrenologist," but we want the principles of phrenological economy in talent to be inculcated into every public institution, trade, and professional career, on a sound scientific basis. Half-a-million more of Gall-like phrenologists would revolutionise the situation and solve our social, political and economic problems by organising that scientific state for which the best men of all ages have been sighing.

J. A. F.

THE WHIPMAKER.

A MAN of this craft lives, and (alas !) thrives in a quiet dingy little street in the Borough. There be many of like trade holding finer establishments in more pretentious districts, but this particular man, whose name was John Driver, was as the spark which fired the train of my reflection, and I will take the wearer of it as a type of his ancient and gruesome craft. Most of us know what it is to have the mind abruptly diverted from wayward speculation to a fixed interest by the sudden view of an object, even though it be not at the first glimpse an important or an extraordinary one. As I was strolling by his sign it caught my eye, and lo, the impulse was born, it arrested my steps, and then impelled me to enter the modest doorway.

If anyone had told me an hour earlier that I should want to buy a whip, I should have rejoined that I was as likely to purchase a needle-gun ; and here I stood now, in the small, dimly-lit, but clean and orderly shop, saying in my most business-like style—

"I want to look at some whips."

The manners of this strange artificer were the perfection of civility.

"Certainly. What kind of whip ?"

"Well—er—any kind."

"We have all sorts to choose from," he said superciliously, "What may you be requiring ?"

Then he went on, very courteously "roasting" the customer who had come in to buy a whip evidently without knowing what was to be flogged with it.

"We have dog-whips,—different kinds, of course ; horse-whips, hunting-crops, ladies' riding-whips, cart-whips, &c., at various prices. Would you like a dog-whip?—or perhaps you may be wanting a whip for a lady?" There was a humorous suggestion of a double interpretation to be put upon the concluding question, but the man's face was impassible, and I was just wildly wishing I had framed some sane requirement before entering the shop, when he proceeded to lay various specimens of his wares on the counter, commending each according to its use. Here was a dog-whip of such combined elasticity and strength that it was warranted, if skilfully applied, to cut through the thickest matting of a retriever's coat. "Of course you want to know how to 'andle a whip," added the gentleman cheerfully, "for it takes neat work to thrash them beggars proper."

As I should only have defeated my simple object by the humiliating admission that I did *not* know how to handle a whip, or to thrash anything "proper," I shirked a comment on this remark by picking up a massive weapon at hand, much as if it had been a torpid snake.

"This is a curious instrument," I said ; "what a size it is !"

The man took it from me, and cracked it admiringly.

"Ain't it splendid?" he said. "This is a proper cart-whip, this is ! You see how neat it's made—how smooth and close that lash is wove—guaranteed to *wear* well !"

He cracked it again. The sound of that artillery—with a potent imagination supplying the details of the wearing—was enough, and I cut the encomium short.

"I think," I said slowly, "I'll take this ; do it up, please."

John Driver complied with alacrity. I looked about as likely to want an ibis as a cart-whip, but it mattered not to him when once he had sold it. Having put him to some little trouble, I purchased also a couple of walking-sticks, making a feint of being fastidious in my selection that I might prolong our colloquy to the end which I desired.

He couldn't complain of business,—it was steady,—oh, pretty steady. Did he think a man might grow rich in such a shop? Well,—he couldn't say. If he didn't make his fortune, he ought, with a fair chance, to make a good living. What ! could a man really earn a good living by the mere making and selling of whips ? Well ! he should say he could, indeed ! Rather ! &c., &c. A little more to this effect, and I took up my purchase, saying, "Good morning," and left Mr. John Driver firmly persuaded, I believe, that I was either an escaped lunatic, or a detective gone very far wrong.

I took the cart-whip home, and spent some time in examin-

ing it, by which I came to heartily agree with the maker's encomium—that it would *wear* well. Assuredly it would wear well—upon *what*? Flesh and blood; every stroke a calculated pang. Indeed the insensate lash might have the best of it, and sometimes *outwear* the vital mechanism of the Divinity which it was designed to cut. I hung the work of art upon my wall, where it hangs to this day,—an ugly comment on our civilisation.

Then I fell to musing how strange it was that a decent, not unkindly, law-abiding burgher should have served an apprenticeship to the fine art of causing suffering, and was making—in common with a multitude of others—a *living* by an organized and recognized system of the infliction of pain.

Well, you say, what is this dreamer theorising about? We must have whips and men must make them——

Stop! stop! oh scion of civilisation! Why *must* we? Is the whip truly thy most indispensable product? thy sheet-anchor? thy loftiest achievement? Canst thou not get beyond it? Is there, then, grim truth in that moral estimate of his fellow-creatures which has inspired the renowned French writer to pour forth work after work in illustration of his hideous theory that the strong part, the *real* part in the gentlest and best of us is the savage?—half-devil because, being human, it is able to be brutal by *device*?

Your small boy gets his first lesson in the enjoyment of cruelty by the gift of a whip. He is as ardent as he is indiscriminate in testing its qualities, and people call him a fine fellow when they see him reckless in the dealing of stripes. We are ready every day to strike first, and hear or explain afterwards,—or oftener to strike and think no more about it, as if it were really in the order of nature that the lower animals were to wantonly be made objects of suffering.

Humane precepts, and, in rare instances, humane examples, make but small opposition to callous customs, and the reckless infliction of pain upon the dumb creatures that we should protect and control without cruelty, differs but little in our exquisite civilisation from the fashion or method of those “barbarian” herdsmen or charioteers who flourished whips a thousand years ago.

It is to the credit of our humanity that we have a society for the protection of animals. The utmost that such an institution could do (and righteously and rigorously it does it) is to punish on detection. How much wrong to the dumb is wrought that no ordinary organization could, with the keenest vigilance, prevent? Want of heart, want of *thought* (the most fatal and fruitful constituent of human selfishness),

the furious effervescence of a brutal temper,—these are some of the factors of sufferings unnoticed, uncared-for, and patiently borne! As I look up at the ugly thing hanging there, I say to myself that it would require an earnest, a heaven-inspired crusade against the active or passive culture of an evil instinct—cruelty—to do away with that personifying relic of barbarism—the whip. Only a horse! Only a dog! The Creator provided us with dumb, faithful, devoted creatures for proper service and kindly companionship, and man has devised John Driver, and has supported and multiplied him from age to age!

There can be no doubt that cruelty, both active and passive, is perpetuated through the curious training bestowed upon the brute's master—embryo man. In this favoured England of ours it is the fashion to thrash boys both at home and in the schools: unless we are to accept Crookback Richard's ferocious dictum that—"not love, *fear* 'tis, pays men adoration." I see not even what worldly advantage accrues. From immemorial time the lash has been the symbol of degradation; and it is not possible to subdue or punish a human being by beating without subjecting it through its lower instincts,—not its higher nature. I have seen fine natures demoralized, and intractable spirits made *worse* by the whip, but, in a wide experience, I have never seen anyone improved by it.

The first shoot of your evil seed is a certain indifference to a blow. A familiar figure to all of us is the boy who "doesn't mind a whacking" for this or that of his various errors of omission or commission. *Why* does he not mind? It must be because mere brute courage enables him to bear the smart of the rod, while that which should be the higher nature being indifferent or callous it must have suffered a *kind* of degradation. Yes, I know that many of these youths grow up "great" and "useful," &c. How much better they might have been, how much refinement might have advanced, how much the actual force of the world's morality would have increased had *all* the good and *none* of the evil been cultivated in them? is a question too momentous to answer, but it is worth the consideration of an intellectual race.

Yes, I know, too, that endurance of pain is essential to a human being's training, but *that* comes in the natural conflict with time and the world. Give old mother Earth her prerogative! *She* will make Antæus of him in faultless fashion. It is a feature of the grand impartiality in the scheme of life that the struggler in the race must often taste the rough hug, whose touch imbues with heroism; but

between the value of *that* school for stoicism and the organised brutality that keeps John Driver steadily at work, the difference is wide as the poles asunder.

How do they control and discipline those incomparable institutions—the State Schools in America—without the birch rod? I suppose the wildest Anglophobist would scarcely affirm that the American is wanting in physical courage or moral heroism? He is as bright an exemplar in fortitude and personal bravery as if his ideal of parental censure culminated in being summoned to father's presence and commanded to take his jacket off,—while the picture of a grave dignified pedagogue—often a cleric—leading a delinquent into his own study to “reform” him by means of a thrashing is viewed purely as a revolting spectacle. A barbarian censor of far antiquity or the remotest fastnesses could do no less; the polished specimen of the acme of civilisation can do no more!

One of the grandest of Englishmen, the most *English* Englishman who ever wrote a story, gave us his ideal school-master in *Dr. Strong*. Well, the reality is daily to be met with all over the United States. Why should it not be cultivated in one hemisphere as well as the other?

The greatest of modern philosophers opined that an evidence of man's superiority as an animal is, that he is a tool-making animal—a tool-maker. What an atrocious superiority must have towered up in the primeval factor of human pain who first manufactured that maleficent tool—the whip! The bear's hug, the tiger's claws, the lion's teeth, the anaconda's coil, these are but the means by which the brutes' instincts guide them to defend their lives, or prey for food. But the instinct which prompted to cut and trim the rod, the master ingenuity that further devised the lash as an appendage to this weapon with which the thoughtless may inflict stripes or bruises on the Creator's handiwork, could spring only from a thing endowed with an intellect and imbued with a soul! Tubal Cain wrought the first plough-share; I wonder who wrought the first whip—the tool that has made more liars, and cultivated more hypocrisy and cowardice, and perpetuated more suffering to the defenceless brute creation than all the instruments of man's invention?

As I look at the archetype of barbarism preaching silently from one eternal text as it hangs upon my wall, I wonder whether there will be a time when the whipmaker shall no longer have a *trade*. Pleasant to the “visionary” philosopher! to dream of generations trained through the higher, not the

lower instincts,—of the brute controlled by humanity, firmness and patience! This were indeed to figure forth the golden age when man shall have a nobler subjection of the dumb ministrants to his service, and a wise and lofty discipline for the waywardness of the immortal mind.

A. L. THOMPSON.

THE LIMITATION OF MIND.

WE are told that the mind cannot go beyond a certain limit, but that the limit can be increased. The limitation being different in each individual, it is necessary to analyse the action of the mental faculties and see where the limitation lies, and only by the study of Phrenology can we arrive at any accurate conclusion.

Is the cause of the limitation to be found in brain structure, in the mind itself, or in the influences by which it is surrounded?

Mind is limited by the material organism through which it has to work. Depending as it does upon the depth of the grey matter of the convolutions for its manifestation, it is not possible for mind to be fully or adequately manifested through any material medium. It is the mind that sees, feels, acts, and is capable of culture, not the brain; but the brain, stimulated to action by the mind, acquires increased capacity for mental work.

A brain cell cannot work beyond its capacity, but it can give place to others which shall have increased power. Hereditary influences have much to do with limitation of mind, for children are born with limitations, the result of the parents' mental, physical and spiritual life. Quality of brain fibre and size of brain determine in a great degree the extent of the limit. With the same quality of organization, the same balance of power in the mental faculties, the same advantages in education, a small brain cannot possibly do the work of a larger one, so that providing the quality is good a large head is a decided acquisition. Almost every faculty will exercise a limiting influence over the mind if not harmoniously developed. Each excessively developed faculty limits, because it warps the mind, leading it too much in one direction, and withdrawing the power from other parts of the brain to itself. It is a selfish, absorbing action of the faculty, and selfishness is a crippling influence in character. Some faculties are, in themselves, more liable to limit the

mind than others, whether by excessive or deficient development, while every faculty which acts harmoniously lessens the limitation. As a rule, genius is the result of a few of the faculties cultivated to the highest degree, often, for want of general harmony in the character, to the further limitation of some other faculty ; for the better balanced brain, the greater freedom in action.

We limit our skill when we hesitate to enter into hitherto untried spheres of work, whether from want of self-confidence or weakness of character. There is, however, a great difference between hesitancy from a feeling of unfitness to fill a position, and a desire to shirk the responsibility of such position, and so hiding weakness under the cloak of assumed humility. Lack of self-confidence is without doubt a drawback in life, but the limitation in the second case is far worse than in the first.

Mind is limited by the thoughts we think, and this limitation is in our own hands to a very great extent. We limit ideas when we fail to give expression to them so that we may not only benefit others, but also receive them back perfected or gain new ones in their places. Thoughts and ideas are limited whenever the mind is not open to conviction or receptive of thoughts higher than those of its own conception. Mind is affected more by mental influences than by material circumstances.

Minds which are least limited or restrained in action are those which find and work with their congenial spirit. Mind cannot put forth its highest powers alone. It is indispensable to perfection throughout nature, and the same laws govern the natural, which govern the mental and spiritual. Without its kindred spirit the thoughts and actions of the mind are incomplete, imperfect, and limited. The one being the complement of the other, when working together there is oneness of mental action, the subtle power giving strength, beauty, grace and completeness, as far as it is attainable while mind is expressed through material agency.

That the limitation of mind is not to endure for ever is proved by the ceaseless, unquenchable desire for progress, which would have been stifled long ago had the limitation been eternal.

Causality, Constructiveness, Imitation, Ideality, Sublimity, and especially Spirituality, tend to enlarge the mind and extend the limit of capability.

Memory also is a great aid, for the more we strengthen it the more we increase the limit, for the oftener we send the nerve fluid between any two parts of the brain, the firmer we

establish the nerve current, the greater becomes the mental capacity. When we think of the forty-two faculties, with their divisions, and of the almost endless combinations of which they are capable, we have some little idea of what our responsibility is if we consciously limit any one of them in our own minds, or put a limit on the minds of others.

“Each good thought or action moves
The dark world nearer to the sun,
Then faint not, falter not, nor plead
Thy weakness.”

F. F. I.

HOW TO TALK AND DEBATE.

DISTINCT UTTERANCE. **DISTINCT UTTERANCE** is very essential, and may be acquired in time by those who do not possess it. There is no need of a solemn, sermonizing tone, or of a magisterial assumption of dignity ; yet speech may be measured so that each word has distinct and clear utterance, and with emphasis where required. The easy distinctness observable in the utterance of a refined person offers a striking contrast to the drawling and hurried style of one untaught. In the speech of the latter the words have no corners, the consonants glide one into the other, and many of the words get attached together, as, for instance : “ ’Twas a nour afterwards th’the boatupset, and before w’ad time t’aul in or see ’ow far’off the shore was, so th’twen we found ourselves adrift,” &c. A neat speaker would say : “ An hour afterwards, and before we had time to judge what was our distance from the shore, or to haul in the canvas, the boat upset ; and then, finding ourselves adrift,” &c.

ACCENT AND PRONUNCIATION. **ACCENT** and pronunciation must be diligently studied by the conversationalist. A person who uses vulgarisms will make but little way in good circles, though we do sometimes hear, to our horror, a man of some cultivation use such pronunciations as waunt for want, sault for salt, urse for us, puddin for pudding, &c. A proper accent gives importance to what you say, engages the respectful attention of your hearer, and is your passport to new circles of acquaintance. If you have occasion to read a passage aloud from a book—as a stanza of poetry or a paragraph from a newspaper, do it well and without hurry. Persons who aim at accuracy of

speech should practise reading aloud, and especially the reading of poetry ; it improves the utterance, extends the knowledge of language, while it increases the store of general information.

THE VOICE. THE voice may be vastly improved in its tone and modulations by the practice of reading aloud. Confidence gives the voice fulness and clearness ; and trepidation is generally accompanied with a huskiness of utterance that has a most unpleasant effect. Captain Sabertash



THE RIGHT HON. W. E. GLADSTONE.

W. E. GLADSTONE is one of the marked men of the age as to political standing, learning, and personal influence. He thinks, talks, walks, and works easily and without friction. His large Language joined to his great variety of knowledge, enables him to express himself in a free, easy, and copious manner. His very large Order, connected with his great discipline of mind, enables him to arrange all his thoughts before utterance, while his large Constructiveness and Ideality aid to give scope to his mental operations, finish to his style of speaking, and ingenuity in the constructing of his sentences.

says : " The modulation and proper management of the voice is a point to which I would particularly call the attention of young ladies ; for a fine and melodious voice, ' sweet as music on the waters,' makes the heart-strings vibrate to their very core. This can only be done by a certain degree of con-

fidence, and by a total absence of affectation ; for uncertainty, agitation, and striving for effect are always ruinous to the voice of the speaker, which is constantly running against breakers, or getting upon flats. I am certain that temper and disposition are far more generally and more perfectly marked by voice and manner of speaking, than we are all willing to allow."

TEMPER. TEMPER not only influences the voice, but the manner of speaking. The least display of ill temper or unkindness will mar the finest conversation that ever took place. If you disagree with a person, it is quite possible to do so without snapping at him or contradicting him flatly. Some writers deny our right to contradict, but truth must at all times be respected, and if contradiction becomes necessary, it may be accomplished without rudeness or haste. Whatever errors people commit, we must not expose them before others in a ruthless manner, or give the slightest wound to the pride of any one.

SPEAKING ONE'S MIND. SPEAKING one's mind is a practice on which a volume might be written without exhaustion of the subject. It is a vice that has a thousand forms, and a thousand degrees and gradations of each. When we meet with one of the excessively candid gentry who pride themselves on speaking their mind, we always feel inclined to say : "You are a fool, sir—there's nothing like speaking one's mind." But we have never ventured so far in reproof ; we prefer to avoid the society of such.

The man who "speaks his mind" generally has a wretchedly poor mind to speak ; he is obsequious before superiors, and tyrannical to those beneath him. In the social circle he cannot avoid talking of his affairs, if only for the sake of impressing us with a high sense of his importance—his magnanimity—his very special candor and honesty. Yet some of these are good fellows in their way, possessed of generosity, and even of jovialness, though their good points are at times extinguished by their suspicious manner and their ignorant frankness in speaking their mind. We have no right to speak our mind so as to give pain or cause embarrassment ; we are as fallible as the rest of mankind, and after we have flung the poisoned dart may discover that it was aimed at the wrong victim.

SLANDER. SLANDER should not be even mentioned here, but the vice is too common to be allowed to "sleep in the shade." To speak kindly of others, and to refer rather to their excellencies than defects, are tokens of a refined and gentle nature; but to carp and quibble, to criticise severely, and drag into the daylight every defect we may have observed in others, marks a low, cunning deceitful disposition, and whosoever listens long to a twaddle of personalities becomes a party to the meanness. The words of the Saviour should be called to the recollection of those who indulge in traducing others: "Let him that is without sin cast the first stone." Perhaps we may very fairly remove the mote from a brother's eye when we have extracted the beam from our own.

EJACULATIONS. EJACULATIONS are the bane of conversation among persons of but moderate culture.

"I came from York by the mail train."—"Indeed!"

"I came by the Great Northern."—"Dear me!"

"The engine broke down soon after starting."—"Lor!"

"But was quickly replaced by another sent from the York Station"—"So—oh!"—"and we hurried off again very much alarmed, but not hurt"—"Did you now?"—"but were destined to sustain another fright"—"Good gracious!"—"a luggage van caught fire"—"Good heavens!"—"but was fortunately seen by the guard"—"So—oh!"—"and at once uncoupled"—"Ah!"—"and effectually extinguished"—"Indeed!"—"and we arrived in London only ten minutes after the usual time"—"Gracious me!—oh goodness! how fortunate to be sure."

But worse than this is the habit some folks have of demanding a repetition of every statement made, as in this wise: "I've been reading *Hiawatha*"—"Have you?"—"Yes; I like it much"—"Do you?"—"Yes; I think the characters are finely developed"—"Do you?"—"Yes; and particularly that of *Minnehaha*; that is a wonderful portrait"—"Is it?"—"Oh yes, and so is that of *Pau-puk-keewis*"—"Is it?"—"Yes," &c.

You cannot make a single remark to such folks without having to repeat it merely in answer to the ejaculative—"Does he?"—"Is he?"—"Don't they?"—"Are they?" and so forth, so that you get at last fatigued, and practise taciturnity from sheer compulsion. Responses are useful—they denote that you are listening with interest, but the hackneyed forms just quoted are by no means useful to the speaker, and betray the absence of culture in the listener.

FASHION. THE Frost of Fashion may soon freeze up all genuine hilarity and kindness, if in our endeavours to improve the habits of speech and action we allow forms and rules to have too much influence. The perfection of conversation is to be attained without the sacrifice of ease and a certain degree of freedom. Everything depends upon the tone—the tone of voice, the tone of manner. The assumption of a stiff formality, a cold dignity, an unbending hauteur, or a reserve which allows nothing to ruffle it—not even the most genuine cause for laughter—are but so many proofs of conceited coxcombry, which would call forth our pity, were not pity extinguished by contempt. Young men who frequent taverns and casinos are now-a-days much given to the affectation of such fashionable politeness. Vicious habits and pursuits give them an exalted sense of their own dignity, and the general emptiness of their minds is choked and covered by the assumption of a sublime indifference ; when knowing nothing they of course have nothing to say. We may be polite without being frozen, affable without affecting a condescending desire to patronize whoever will submit to it. Let us have as much sunshine as possible ; let joy have its way, and the music of laughter free from coarseness will not lessen our stock of wisdom, nor unfit us for the consideration of more serious things.

PUBLIC SPEAKING AND DEBATING. THE great nations of ancient and modern times have cultivated oratory as one of the noblest arts, and it has become the fashion to judge the relative positions of nations in the scale of civilization by their respective excellencies in the exercise of this high accomplishment. Oratory has served the highest uses in promoting the prosperity of States, the administration of justice to individuals, the promulgation of truth, the denouncement of wrong and assertion of right, in every age of the world, and is at once the most attractive as well as the most persuasive and forcible of any mode of expression exercised by man.

At the present day, no man of any pretensions to literary culture or social refinement dare consider himself utterly free from liability to be called upon to appear in public as a speaker—either to defend a principle, enforce his own claims or the claims of others dear to him, to oppose a false doctrine, or simply to return thanks at a dinner, or propose a resolution at a meeting ; but to do such things well is less easy than is sometimes imagined, for the mere gift of speech will not

make an orator, nor the most perfect knowledge of a subject enable the proficient to expound it with ease.

The same may be said of debate—most men can reason, but not many can argue ; there are very few who cannot distinguish common sense from error and bigotry ; but want of method will frequently weaken the force of a truthful and sincere appeal, and give a temporary victory to the abettor of falsehood.

HOW TO MAKE A SPEECH. **WHATEVER** the subject of an address, the speaker should preserve his self-possession, and check all enthusiasm at starting. A beginner in oratory should first of all guard against what is called warmth ; for when once the energy of the speaker rises into impassioned eloquence, it requires the judgment based on long experience to keep the tongue within bounds, to preserve the thread of connection, and to avoid turgidity, strained comparisons, and bombast. A young speaker will often take us by surprise with a fine burst of original eloquence, and no sooner has the applause subsided than signs of exhaustion show themselves. He is striving to follow up the grand hit with a still greater ; he cannot succeed ; he gets confused, begins to stutter, and perhaps breaks down just as the field was open for him. Why does he fail ? Simply through having lost control of himself ; his imagination has extinguished his reason, and the thread of connection is lost. Positive coldness is better than injudicious warmth, measured sentences preferable to hurried exclamations, and an immovable firmness and quietude of demeanor more worthy of cultivation than all that is understood of “moving appeals” and “passionate addresses.”

THE EXORDIUM. **EVERY** set speech should be complete in itself ; it should have a commencement, in which the subject is introduced ; then the main portion of the address must be devoted to the consideration of the question, and the peroration or close should set forth the conclusions of the speaker as based on the arguments already advanced.

The exordium should be as brief as possible, and the more attractive in style the better, so as to engage at once the attention of the audience. Yet there must be no vain attempt at oratory, and during this part of the discourse the speaker should maintain a measured calmness such as to prove his claim to undivided attention.

Many experienced speakers commence their addresses with

a happy allusion, a queer comparison, or the statement of some apparent paradox which is to be unravelled as the speech proceeds, and which naturally opens up the question to be considered. If this is cleverly accomplished, the attention of the audience is rivetted at once, and the speaker is pretty sure to have a respectful and appreciative hearing, even if the whole of his hearers are opposed to the views he advocates. Ability always commands applause, even if engaged on the side of the minority. Still this method is not to be recommended to a beginner, who may make many sad mistakes in attempts to produce effect. Let sound reasoning and plain statement have precedence, and the use of the weapons will be found in time.

The use of the exordium is to enable us to state (if necessary) why we speak, and on what subject we purpose speaking. If the subject is already fixed, then the speaker is bound, as a rule, to state distinctly what line of argument he intends to pursue—which side he intends to advocate, for it is quite illegitimate to catch your audience in a trap, and gain convictions by appearing to agree with those whom you purpose to oppose.

THE THREAD OF CONNECTION. THE thread of connection must be preserved under all circumstances. This, indeed, is the rock on which the immature orator is most likely to split. A little discursiveness is sometimes allowable, and a clever speaker will diverge slightly for the sake of bringing to his argument some striking illustrations or some convincing proof; but observe how neatly and completely the thread is caught up again, and strengthened by the addition of matter which at first appeared incongruous.

It is most important for the speaker to keep constantly before him—in fact, to watch with his mind's eye the leading object of his address. Let him for a moment forget what is the main purport of his address, or be drawn aside from it by some comparison or simile, and he is pretty sure to get into a loose, rambling discursiveness, and not only lose the point he meant to gain, but cover himself with dire mortification. Ordinary parish meetings and second-rate public dinners are just the occasions for eloquence of this discursive kind; it is not funny enough for laughter—it simply wearies and disgusts, while it need not do so if each speaker were to rise because he has something to say, and be content with saying it gracefully.

LOSING THE THREAD. To lose the thread is a calamity which sometimes occurs to the most able orators, but it generally happens through having allowed a simile, or comparison, or illustration to call them too far away from the statement or argument in which the break has occurred. It is almost impossible to give instructions on this point, but the first thing for a speaker to do who finds himself in such a predicament, is to preserve his self-possession by a strong mental effort, and amuse his audience by a light play of generalities or any suitable pleasantry, or even gossip, and if the speaker does not lose self-control in his momentary confusion, he will, in a few seconds, regain the thread he had lost, and proceed with fresh vigor, without the least betrayal of the effort. It is astonishing how in such cases, if self-possession is preserved, the mind is enabled to pause and consider, to fall back on memory, and to invent a new argument or comparison while the tongue continues the subject, and sustains the interest and energy of the discourse. It is a mysterious affair, not easy of explanation, yet sufficiently familiar to all who have had experience in oratory.

INCONGRUITIES. INCONGRUITIES are sometimes turned to good account by practiced speakers, who, from things that do not naturally assort, derive illustrations that please from their novelty, and sometimes help logic by their force. But a young speaker should study fitness, and should avoid gaieties or eccentric modes of expression when discoursing on subjects of a serious kind, as he must avoid to cloud a happy moment by allusions of a sad or painful nature.

STAMMERING AND HESITATING. STAMMERING and hesitating are not easily cured when they become habitual, and many clever speakers are so afflicted at times. It is quite certain that the cause is to be found in the speaker not having entire control over himself, and unless the mind be concentrated on the subject and removed from the audience, the most fluent speaker will be apt to lapse into disjointed utterance, even if he is not yet utterly lost. Here we offer the young orator a golden receipt to cure bashfulness, hesitation, confusion, and want of collectiveness; the tremulous nervousness that besets a beginner when the fatal moment has arrived that he must arise. Just consider that behind you is a wall of the room, and on your right and left hand are two

other walls, making three in all. Now to a speaker in difficulties the audience is the fourth wall of the room, and to that wall he is simply rehearsing what he would say were he called upon to appear before a real audience.

The reader may think this a merely fanciful suggestion, but we assure him that it is based on an experience of fifteen years, and that even now the writer, if required to speak when not quite in the mood, finds it necessary to regard the audience in the mass, and mentally to ignore the existence of everyone of the individuals composing it during, at least, the first ten minutes of an address. If there are personal friends in the audience, young speakers should at once face them, and by an effort of the mind merge them into the general mass—that is, melt them down into the wall, and the fear of their criticism or anxiety for their applause will be over in an instant.

To avoid looking toward them will be more likely to suffer their known presence to interfere with the self-possession of the speaker than the little effort necessary to mingle them in the mass of faces at once, and without the slightest attempt at recognition.

(*To be continued.*)

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., MAY, 1893.

MEMORY. EVERYONE is not gifted with a good memory. Mrs. Crawford, the Paris correspondent of the *Daily News*, is exceptionally talented in this particular, and can recall the personal history of many an illustrious person at a moment's notice. Hence her success as a journalist.

The latest instance of this ability was on the death of M. Jules Ferry, when she at once sat down and without any book or reference, wrote the splendid biographical notice of the statesman that appeared in the *Daily News* the next morning.

A BROKEN HEART. THERE has been considerable controversy as to whether the term a broken heart is a physiological fact. Many years ago Dr. Gall mentioned the case of a dog that had died from valvular extension of the heart through grief on the death of his master.

Now, from the recently published lectures of the late Sir George Paget, who was not a romancist, it is interesting to learn that a broken heart is not a mere sentimental figure of speech, but often, alas, an accomplished fact. Great grief, causing a sudden shock, will produce actual rupture of the arteries of that organ.

EYES. PEOPLE unfortunately have not the power of choosing the colour of their eyes, else, if the information collected by the *Optician* be correct, a universal rush would be made on *blue*. It appears, according to this indisputable authority, that among the great men of the world blue eyes have always predominated. Socrates, Shakespeare, Locke, Bacon, Milton, Goethe, Franklin, Napoleon, and Renan all had blue eyes. The eyes of Bismarck, Gladstone, Huxley, Virchow, and Buchner are also of this colour, and all the Presidents of the United States, except General Harrison, enjoyed the same cerulean colour as to their optics.

Hygienic and Home Department.

THE TEETH, IN RELATION TO HEALTH.

BY N. HART.

“WHY have so many children bad teeth, and what is the prospect for the future?” This very interesting and important question was debated at the annual meeting of the British Dental Association, August 17th, 1890, and the President, Mr. Kirby, in his address sought to explain a state of things which few thoughtful or observant persons can have failed to remark.

The explanation, however, is very imperfect and unsatisfactory. We are told “there are added to the population a considerable number of people, who, if not actually weak, may be looked upon as scarcely equal to those who used under harder circumstances to fight the battles of childhood;” and that, “in the next generation, we may expect to find a general lowering of tone, and consequent greater tendency to dental decay.”

This is, without doubt, perfectly true, and the medical profession are aware of it, though naturally loth to speak of or discuss the subject.

Mr. Kirby attempts to show that climatic influences are at

work, and may be one of the causes of the bad teeth of children; he also advances theories of race distinctions. These reasons are both wide of the mark and open to objection.

The true cause, the cause that is the primary agent in the very serious increase of dental decay and premature loss of teeth, is *malnutrition*, the result of improper feeding.

In the first place the children born are often handicapped by the inherited weaknesses of their parents, and when safely launched upon life's journey, sometimes have not a fair chance of surviving childhood, for the simple reason that they are not rightly fed.

The unconscious cruelty inflicted upon the helpless little ones by mismanagement is very sad, and is more the result of downright ignorance than anything else.

Mothers and nurses, with the kindest intentions, are often guilty of serious indiscretions, and doctors sometimes are lamentably incapable of directing those who put faith in their instructions.

Babies, even the poorest, seldom die of starvation, in the usual meaning of the term; but hundreds die of it, in the sense that they never had proper nourishment. The proof of this assertion may be found in any newspaper containing the week's inquests.

Teething, instead of being regarded as a natural process, is often dreaded as a disease, and the reason it is ever attended with danger may usually be traced to the fact that an improper system of diet has been persisted in.

Children brought up on milk seldom suffer any discomfort, but when solid food is given at an early age local disturbances arise which affect teething; it then takes place under unnatural conditions, causing the teeth to grow imperfectly, and so predispose them to decay.

When once children get their teeth the food they eat does not conduce to their natural development or preservation. It has already been put on record that "the decay and premature loss of teeth, so prevalent amongst all classes, is largely due to the absence of phosphatic salts in the fine white breads," and this does not only apply to the teeth. The rich supplies of silica, sodium, phosphorous, calcium, nitrogen, and other elements that are necessary for the growth of the bones, hair, nails, muscles, and essential for purity of blood, are to a large extent extracted from the wheat; what is left is mainly starch, and starch is the greatest foe to childhood. Only the other day a medical man, acting in his capacity as coroner, said that bread* was poison to a very

* *i.e.*, Ordinary bakers' bread, made of fine flour.

young baby ; it is poison in varying degrees to all who eat it. We have, in consequence of its use, children growing into manhood and womanhood whose bones are limp and rickety, whose teeth are defective, whose hair is thin and impoverished, whose nails are imperfectly formed, whose muscles are flabby, and whose blood is watery and deficient in tissue-forming materials. Should nothing be done to arrest this condition of things, we may reasonably suppose each generation will be weaker than the preceding one.

BE CAREFUL OF THE CHILDREN.

A CAREFUL mother keeps her small children from tossing off their crib covering at night by pinning them—the covers, not the babies—to the mattress at either side. She gets horse-blanket safety pins, which are of larger size than the ordinary nursery pins, and with these has no difficulty in piercing the thickness of blankets and spread. Another mother makes nightgowns of flannel for her boys and girls alike, till they are five years old, with long skirts attached. These have a hem and shirring tape at the bottom, and when they are in bed the tape is drawn and tied, leaving the restless legs free to toss without uncovering.

Another mother, with a family of five children, has each provided with ankle-covering knitted slippers with soft woolly sole ; these are always kept under the pillows of the children, and they are taught not to touch their bare feet to the floor, slipping their slippers on as often as they leave the bed. The pores of the soles of the feet are peculiarly sensitive ; chances of cold are much enhanced or lessened according as these are exposed or protected.

INFANTILE DEVELOPMENT.

IT is wonderful enough that infants of a few weeks or months should make unmistakable manifestations of the simpler emotions of fear, affection and anger. But that an emotion so complex as jealousy should appear so early as at the age of ten months is especially remarkable, and indicates a degree of development at this age which, in the absence of observation, might justly be deemed incredible.

Darwin observed jealousy in an infant of 15½ months, but adds, “ It would probably be exhibited by infants at an earlier age if they were tried in a fitting manner.”

IN the education of children, bodily health should have primary attention. The tree of knowledge should be grafted on the tree of life.

No two things differ more than hurry and despatch. Hurry is the mark of a weak mind ; despatch of a strong one. A weak man in office, like a squirrel in a cage, is labouring eternally, but to no purpose, and is in constant motion without getting on a jot. Like a turnstile, he is in everybody's way, but stops nobody. He talks a good deal, but says very little. He looks into everything, but sees into nothing. He has a hundred irons in the fire, but very few of them are hot, and with those few that are he only burns his fingers.

ELIHU BURRITT gives some sound advice to parents in the following remarks :—Be ever gentle with the children God has given you ; watch over them constantly ; reprove them earnestly, but not in anger. In the forcible language of Scripture, “ Be not bitter against them.” “ Yes, they are good boys,” I once heard a kind father say. “ I talk to them very much ; but do not like to beat my children—the world will beat them.” It was a beautiful thought, though not elegantly expressed. Yes ; there is not one child in the circle round the table, healthful and happy as they look now, on whose head, if long enough spared, the storm will not beat. Adversity may wither them, sickness may fade, a cold world may frown on them ; but amidst all let memory carry them back to a home where the law of kindness reigned, where the mother's reproving eye was moistened with a tear, and the father frowned “ more in sorrow than in anger.”

Fowler Institute.

MEMBERS' NOTES.

“ Knowledge is made by oblivion, and to purchase a clear and warrantable body of truth we must forget and part with much we know.”—SIR T. BROWNE.

ON April 10th Mr. Sumner gave an exceedingly interesting lecture at the Members' Meeting, on his trip to Norway, illustrating the same by lime-light views of the places he visited, by the photos that were taken at the time. The subject was rich with suggestive ideas of the life of our Norwegian friends, and it was handled in such a manner that it made everyone envious (who was able to be present) of the lecturer and the fortunate reproduction of his trip.

The journey was made *viâ* Edinburgh to Leith, thence by the North of Scotland Steam Navigation Company's ship the *St. Sunniva*. The delightful trip taken was as follows :—Straight to Stavanger, round to Sand, overland to Osen, through Bratlansdal to Briefond, over the mountains to Odde, steamer to Eide, then to Bergen, overland to Vossenvanger, Stalheim and Ludvangen, steamer to Naes and Molde, then to Christiania and Trondhjem, and from Trondhjem to Leith. To describe all the exquisite views of this journey would be beyond the province and space at our command, but while all of

them appealed to our Sublimity and Ideality, several of them introduced us to studies of Human Character. For instance, we were introduced to Captain James Angus, the jovial commander of the *St. Sunniva*, whom we recognised as a genial and practical Scotchman. Hans Jacobson was in the group as large as life. He it was whom Mr. Gladstone highly complimented on being so successful in navigating the *Sunbeam* on its tour to Norway in 1885, and who is known as one of the most skilful Norwegian navigators. He possessed a heavy brow, a keen eye, large Locality, Individuality, Form, and Size. At Stavanger, an interesting group of the party was taken, which included a few Norwegian children. The Norwegian travelling conveyance is more simple than convenient, there being no springs, and the shafts run right through, to which the box, or seat, is affixed. A beautiful view of Osen introduced to us some magnificent scenery—the mountains on either side of the Souldal Lake rise some 800 feet. Out of this lake runs the Souldal river, which is considered the finest salmon river in Norway. On the way to the Briefom Hotel we were shown one of the many bridges which make this mountainous country passable. We saw the great Saldal Lake in the distance. The bridge before us, which spans a gorge of many hundred feet, is curiously constructed, the buttresses being formed of solid rock, to all appearance laid dry one on the other, while the roadway across, and rafters and supports under, are entirely of wood, the latter being dovetailed into the stone. We come now to the loveliest spot in Norway. Norway would not be Norway at all if it had no peasant's huts, or cottages with thatched roof; in front of one of these stood three Norwegian women in their neat native costumes. We were shown the Narrodal Pass, which Mr. Gladstone and Lady Brassey truly declared is the finest gorge in Norway, and several magnificent falls, such as Espelandfoss, the Bucebrae Glacier, which is a mighty ice field of 50 English miles in length, and rising 5,000 feet.

We next came in sight of the lovely Hardanger Fjord, and passing through the quaint and picturesque little village of Odde, the carriages were dispensed with, after the party had been jolted about for eight or nine hours. They joined the *St. Sunniva* and were taken as far as Gravens Fjord. This is one of the most charming places for fertility, forest scenery and cherry trees, to be seen. Hardanger Fjord and Eida were then passed, and a beautiful coloured slide of some peasants introduced us once more to the people of this remarkable country.

We were very much interested in the account given of the Vossenvangen Railway which runs for sixty-seven miles and contains no less than forty-seven tunnels. It is a single narrow-gauge line, the trains passing each other at the stations; there are but two departures a day, at 7 a.m. and 4 p.m., and the utmost speed is twenty miles an hour. One interesting picture represented a Norwegian wedding party which assembled for the special benefit of the photographer, and thus we were introduced into another unique custom of the country. Courtship in Norway, we were told, is often prolonged over a period of ten or a dozen years, and when the marriage takes place there are

great rejoicings. On the eventful day the bride adorns herself with a high head-dress or crown. The rejoicings often continue for two or three days, and are brought to a close by a dance which is kept up until the crown falls off from the bride's head, a friend having previously removed a pin that fixes it. At Stalheim the hotel is a wonderful structure, fitted with every modern improvement, electric light, &c. The promenade, instead of being on the ground, is elevated to the roof of the building, where an unparalleled view was to be obtained of the Naerödal Pass. The attendance of the hotel is all carried out by Norwegian girls. A large picture of one of them was then shown to us, in her working dress. She appeared a tall, well-built person, possessed of the vital temperament. She had a square forehead, which indicated practical talent ; more common than uncommon sense, large Order, and a full degree of Language and ability to understand foreign languages. A cap covered the rest of her head, but from what one could see below it there was indicated a kind and sympathetic nature, a readiness to help, and an intuitive mind.

Another characteristic picture represented three old women making "Flad Broe," or flat bread, outside their cottage. We had none of the bread to test, but we were told that it has a very peculiar taste, and one needs to get used to it, when no doubt it becomes palatable. The old women were certainly curiosities, as was also the fisherman at Trondhjem, whose wrinkled forehead and heavy perceptive brow betokened his trade.

The humour which sparkled all through the lecture is lost in a report of this kind. The only regret I heard expressed was, that all the members of the Institute, far and near, were not able to avail themselves of the valuable information of the charming country, and to see for themselves the exquisite and magnificent scenery.

A hearty vote of thanks was accorded to Mr. Sumner for the minute way in which he carried out every particular of his lecture. A suggestion was made that Mr. Sumner be asked to become a guide for a party of Institute members for a similar summer outing this year, with all expenses paid.

* *

THE Member's Meeting in May (8th) will be addressed by Mr. Lepage, on "Eyesight." To-day, when eyesight is such a precious commodity, it is interesting to think that one of our members is prepared to give us all possible information on the subject. We trust all City members will book that evening for the Institute.

* *

MISS E. RUSSELL writes :—"A short time ago I had the opportunity of examining a head in which the sagittal suture in the frontal bone had not properly joined. The lad was about sixteen or seventeen, and appeared deficient in memory of facts. On examining the organ of Eventuality, it was possible to put the finger almost between the two portions of bone, so imperfect was the joining of the suture. The boy had been extremely delicate until the last two years, and there was great want of physical strength, he being unable to lift anything heavy.

He said his memory had always been deficient ; that it was difficult for him to remember anything even though he gave his mind to it.

* * *

MR. GEO. COX and Mr. Ramsey have kindly forwarded the following item on a *Singular Loss of Memory*, à propos of Miss Fowler's lecture on "Tune and its Medicinal Effects" :—An extraordinary case of loss of memory is reported from Melbourne. A young man, about thirty years of age, walked into the police barracks and asked the officer in charge if he could tell him who he was. It was found that his memory had entirely failed him. He was kept in custody, and numerous persons called in the hope of recognising him, but without success. The doctors attribute the man's condition to masked epilepsy. In default of his right name the Melbourne gaol officials call the man "Edward Bellamy" after the author of "Looking Backward." While the church service was being proceeded with in Melbourne Gaol, "Bellamy" was noticed listening intently to the music. Upon being questioned, he said, "I seem to have heard that before somewhere. What is it ?" He did not seem to understand when told it was music, but at the conclusion of the service he was taken to the organ, and having been shown that the sounds he had heard were produced by fingering the keys, he was seated at the instrument. "Bellamy" struck several notes unintelligently, and then a chord or two in harmony, and in an instant with a look of pleasure he commenced a selection from "The Creation," which he played correctly and well. He played several hymns and secular tunes after the first few bars had been whistled, but he could not read sheet music, and said he did not remember ever having seen anything like it before. Dr. Shields is convinced that the man is genuinely afflicted, and not a malingerer.

E. CROW.

THE dispositions of the mind are expressed in flowers.—*James Ellis.*

OVER-EAGERNESS to find particular things *true*, leads us away from the truth.

TRUE philosophy is a revelation of the Divine will manifested in creation ; it harmonises with all truth, and cannot with impunity be neglected.—*George Combe.*

Book Notice.

MISS POPE, of Bradford, has brought out an interesting book called *Novel Dishes for Vegetarian Households*. This is a well compiled manual of dainty dishes, and how to make them supply the needs of vegetarians. Some dainty menus can be culled from the book for

either dinner or supper parties. The cocoa-butter, which is so highly recommended in the various receipts, is well adapted for frying purposes, as it does not sputter or grease the stove when used. The receipts have been compiled from various sources to meet the everyday requirements of a vegetarian household, during a period of twelve consecutive months. The book is published by Percy Lund & Co., Bradford and London, and can be obtained of L. N. Fowler & Co., Book Department, 7, Imperial Arcade, Ludgate Circus, E.C.

Notes and News of the Month.

THE Editor begs to thank "Leeds" for his contributions to the Magazine.

PHRENOLOGICAL contributions either original or otherwise will be gladly received by the Editor from the readers of the *Phrenological Magazine* in any quarter of the Globe.

THE Midsummer Examination of Students for Certificates and Diplomas will be held on the 27th and 28th of July. Any members wishing to sit for the examination must send in their names, &c., to the Secretary of the Fowler Institute.

WE have to thank the following papers for notices of the Magazine :—*Review of Reviews*, *Evening Reporter*, *Western Mail*, *Beverley Recorder*, *Rastrick Gazette*, *Northampton Herald*, *Dundee Evening Telegraph*, *Ashton Reporter*, *Perthshire Advertiser*, and others.

THE Lectures for May will consist of several interesting features. Mr. Alfred Hubert will lecture on "Relation between Phrenology and Physiognomy," illustrated. Mr. Tompkins, M.F.I., will lecture on "A half-hour's chat with objectors to Phrenology." Miss Maxwell will lecture on "Individuality." Miss J. A. Fowler will lecture on the "Character and writings of R. Browning." For dates, &c., see announcement on the inside of cover.

"A HOME FROM HOME."—Massage, electricity, and Swedish movement cure. Mr. and Mrs. Coates, well known Phrenologists, late of Greta Bank, Glasgow, have removed to Glenbeg House, Ardbeg Road, Rothesay, which they intend to open on the 15th, for patients and visitors. The house is beautifully situated, facing the sea, and being well sheltered, makes an excellent winter as well as summer residence. Small numbers and personal attention will be a special feature. There is, however, another special feature—gentlemen only are received as resident patients or temporary visitors. Glenbeg House is neither a hydro nor a hotel, but a home where home comforts can be obtained,

and skilful treatment, massage and electricity, given when desired. Application in advance is desirable to secure a course of treatment and board. We heartily wish Mr. and Mrs. Coates every success.

NOTICE OF LECTURES DURING THE MONTH.

At the Fowler Institute Mr. Fowler's lectures on "Language," and "Mechanics or Constructive Skill," Mr. Baldwin's on "Character, and how formed," and Jessie A. Fowler's on "Tune, and how Music can be applied Medicinally," were the features of the month.

In the last lecture several members assisted in illustrating the various points touched upon, and Miss Edith Hands, R.A.M., added much to the evening's enjoyment by her beautiful rendering of two songs.

On Tuesday, April 4th, Mr. B. Hollander read a paper on "The Fundamental Principles of Phrenology in the Light of Modern Science," before the members of the British Phrenological Association to an appreciative audience.

THE CHINESE HAVE NO NERVES.

THE Chinaman can write all day, he can work all day, he can stand for a whole day in one position, weaving, hammering gold, or cutting ivory, without once being attacked by nervousness. This peculiarity makes itself apparent in early youth. The Chinaman can bear any kind of bodily exercise. Sport and play are to him unnecessary labour. He can sleep anywhere and in any position—amid thundering machines, deafening noises, the cry of children, or the wrangle of grown people; on the ground, in bed, or on a chair. In his own innocent way the Chinaman is almost a Sybarite.

SECRET OF HEALTH IN CHINA.

THE Chinese live in houses where the supply of air is so limited that no European could endure the vitiated atmosphere; yet they are a very healthy nation. This is due probably to the fact that their food is invariably simple and clean, and thoroughly well cooked. Meat, potatoes, and rice are all boiled together. When cooked the mixture is put into small bowls, and as it is eaten with tiny chopsticks, it is impossible to try the mouth or stomach by scalding them with a quantity of very hot food. Moreover, they rarely drink water if they can get tea, either hot or cold.

CARLYLE'S HAT.

THE number of pilgrims to the house at Ecclefechan in which Carlyle was born is yearly increasing. During the past three months three hundred names have, we learn from the *Glasgow Mail*, been added to the visitors' book. Of that number nineteen were from the United States of America (including Dr. De Witt Talmage and his daughter), two from Manitoba, two from India, two from South Africa, two from Canada, and one each from France, Denmark, Japan, and

Australia. The room where Carlyle first saw the light is (our contemporary adds) fitted up with his writing-table and various articles of furniture from Cheyne-row. Amongst the curiosities is Carlyle's hat. Of the thousands of visitors to the house during the past few years, the hat has only fitted thirty-four. Dr. Talmage was rather disappointed that the Sage's headgear did not suit his cranium.

BIG BRAINS.

At Napoleon Bonaparte's post mortem examination at St. Helena, it was found that the head that had imposed its will upon nearly the whole of Europe contained $52\frac{1}{2}$ oz. of brain. This is a somewhat unusual quantity.

A great financier died not long since in the United States who was a remarkably intelligent and strong-willed man. He had risen from the bottom of the ladder to great wealth and influence. His brain was of exactly the same weight.

But here is a curious case. An idiot's brain was once carefully weighed at the London College of Physicians, and it was actually ascertained to weigh 53oz.

Giants are almost always of feeble intellect, although their brains often weigh heavy, while many persons of diminutive size possess undoubted genius. It follows that in mere growth—*i.e.*, increase of size—and development—*i.e.*, increase in elaborateness and complexity—there is a certain antagonism. The former is at the expense of the latter. What makes all the difference is not merely the quantity, but the quality of the brain.

SOME HISTORICAL NOSES.

LYCURGUS and Solon had noses six inches in length.

The immortal Ovid, surnamed Naso, had a bottle nose.

Scipio Nasica derived his name from his very prominent nose.

Alexander the Great had a large nose, so had Richelieu and Cardinal Wolsey.

In the medals of Cyrus and Artaxerxes the tips of their noses come clear out to the rim of the coin.

Antiochus VIII. was called "Grypus," because his nose was as big and hooked as a vulture's beak.

Washington's nose was the true aquiline, indicative of great firmness, patience, and heroism.

Mohammed's nose was so curved that the point seemed to be endeavouring to insert itself between his lips.

Julius Cæsar's nose was also of the aquiline type, characteristic of patient courage and heroic firmness.

Numa's nose was six inches in length, whence he obtained his surname of Pompilus, as being the owner of a superlative nose.

The noses of Shakespeare, Bacon, Franklin, and Dr. Johnson had wide nostrils, betokening strength of thought and love for serious meditation.

Napoleon I.'s nose was exquisitely chiselled, sculpturesque in mould, form, and expression. He was wont to say : " Give me a man with plenty of nose.

Great Frederick's nose was so prominent that Lavater offered to wager his reputation that blindfolded he could tell it out of 10,000 other noses by simply taking it between his thumb and forefinger.

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. HAW, late of Grimsby, has opened rooms in Paragon Arcade, Hull, for phrenological consultations.

MR. S. RANDOLPH has been lecturing to crowded audiences in the Temperance Hall, Leek, on mental science and physiological subjects. The local papers paid him high compliments for the way he handled his discourses and the delineation of the characters of those that came up for public examination.

THE First Annual Meeting of the A.P.S. was held at the Mechanic's Institute, on March 14th, the President, the Rev. T. G. Dyke, in the chair. The Hon. Secretary and Treasurer presented their reports, which were unanimously accepted. The officers were all re-elected for the ensuing year.—WM. A. WILLIAMS, *Hon. Sec.*

PROFESSOR HUBERT'S classes for practical instruction in Phrenology commenced last month, at his rooms, Dorset House, 3, George Street. Twenty ladies and gentlemen attended and appeared highly interested with the manner and method in which the subjects were treated. A second class will be formed as soon as a sufficient number of members is obtained.—*Bath Chronicle.*

"BRAIN STRUCTURE AND FUNCTIONS."—A lecture on this subject was delivered last night by Mr. G. B. Setchfield, of Lincoln, at the Free Methodist Chapel, Saxilby, to a very large and appreciative audience.

The lecturer went deeply into his subject, showing the adaptation of the human mind to Christianity, and stating man's spiritual nature was immortal, and that men therefore must worship a God. There was no such thing as infidelity ; he said so-called infidels simply hoped there was no God when their conduct was contrary to God's Word, and showed much fear when ill or in danger. He also went into the very interesting subject of transmitted qualities. He gave advice on training the faculties in children and adults. The proceeds were devoted to the chapel fund.—*Lincolnshire Echo*, April 1st, 1893.

L. N. FOWLER & CO.

MANY of the readers of the *Phrenological Magazine* desire to know of what the addition of L. N. Fowler and Company consists. There is in reality nothing new about it, but as I wished to associate the names of my daughters with my own in the phrenological work in which they have so long assisted me, I have linked their names with mine.

The business will now be carried on under the name of L. N. Fowler, A. M. F., L. L. F. P., and Jessie A. Fowler.

It is my wish to strengthen and concentrate the work of Phrenology at Imperial Buildings, which has so long been known to the world as the centre of Phrenology.

I have a large Publishing Dépôt (mainly of phrenological works), which issues a Monthly Magazine and a Phrenological Annual. I have also Consultation Rooms, a Labour Bureau, an Institute for the Education and Training of Students in Phrenology, in connection with which is a Circulating Library and Museum of Crania, &c. A lecture is given in the Lecture Room every Wednesday evening at 7.30, admission by ticket, which can be had from members, or on application to the Secretary of Institute.

A further object of the Institute is to assist people to see the use of Phrenology in their various trades and professions, so that in time there will be Teachers, Ministers, Overseers, Writers, and Artists, &c., interested in our science.

The path of Phrenology is widening in all directions, so that the scientific world is recognising the much tabooed subject.

L. N. FOWLER.

Correspondence.

DEAR MISS FOWLER,—I regret very much that owing to my absence from New Zealand I have been unable to reply to your letter at an earlier date. I have been spending the past few months in Australia. I had expected to find a greater interest manifested in Phrenology in Sydney and Melbourne than I discovered, and hence was disappointed to find that, for such large cities, Phrenology was not more extensively advocated.

I enclose you a copy of the rules of our Society, which has been in existence since May last. It is, I believe, the first and only society of its kind in New Zealand. We have a membership of about twenty-five, including two ladies, and we hope to add considerably to this number during the present year.

With the exception of our lecturer, a namesake of mine, who has had some training from an ardent advocate of Phrenology of this city, we are all "book taught."

A great deal of interest is taken in the subject by our members, and as we hold our meetings in a public hall in a central position of the city, we always secure a fair attendance of the outside public. We are making very fair progress however in the study, and there are but few of our members who could not at this stage give an accurate estimate of the salient points of a person's character. We have, even here, the anti-phrenologist, who knows all about everything, and are "agin" every reform that does not bear the impress of their own particular views, yet thus far we have been able to hold our own against this opposing element which, after all, is not much to be feared. During the next session I shall endeavour to obtain the services of one of our local medicos to deliver a series of lectures or hold a class for the study of anatomy and physiology, and thus add to the attractiveness of an already interesting institution.

As a Society, and as individual members, we are gratified at the receipt of the kindly sentiment expressed in your letter, and are proud to acknowledge allegiance to a science which has a so pre-eminently useful career before it, and which is as ably advocated in the person of the venerable Mr. L. N. Fowler and his co-labourer, Miss Jessie A. Fowler—yourself. On behalf of the Wellington Phrenological Society, I beg to subscribe myself,

Your faithful co-worker,

JOHN WHEELER,

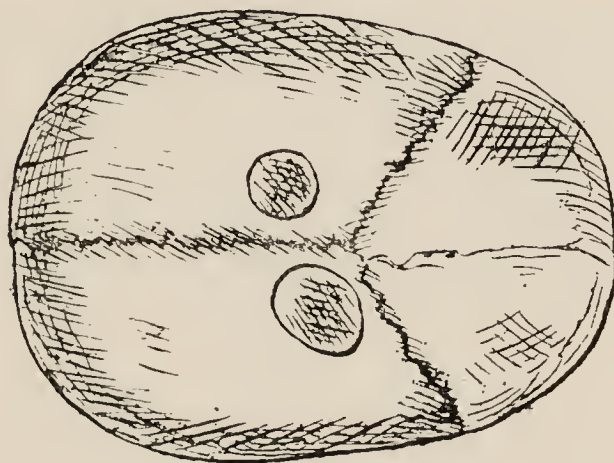
Wellington, N.Z., February, 1893.

Hon. Sec., W.P.A.

TO THE EDITOR OF THE *Phrenological Magazine*.

DEAR SIR,—With reference to the article in this month's *Phrenological Magazine* from the *Animals Guardian*, dealing with Brain surgery, and much as its value may be questioned, it seems to me, in justice to men of unquestionable skill like Mr. Horsley, that cases where operations in this particular branch of surgery have led to beneficial and lasting results should be more widely known. There is living in this town a man—George Chapman—(by his permission I use his name) who is what I consider a living witness to the value of Brain surgery. After reading the article mentioned I felt anxious, and a certain curiosity to examine his head in order to satisfy myself as to the extent and result of the operations, and invited him to pay me a visit for that purpose. This he willingly consented to do, and the following account is in substance what he told me and the result of my own observation. About three years ago, so far as he could remember, he was sent to

London to undergo an operation for the relief of fits, from which he had been a great sufferer for some considerable time previously. The fits came on after he had retired to bed, the symptoms of their approach being a "feeling of numbness in the left hand, accompanied by contraction of the thumb, fingers and arm." The operations (there were two) were performed by Professor Horsley, and resulted in the removal of two pieces of bone on each side of the sagittal suture, near the angles formed by the junction of the frontal and parietal bones. The annexed drawing shows the position of the operations. The cavity



over the left hemisphere is $1\frac{1}{2}$ in., and that over the right 2 in. in diameter, and there is a considerable depression on each side. The removal of bone from the left side, I believe, led to no discovery; the other shows the seat of the mischief. This man, after the lapse of three years, enjoys comparatively good health, is able to do light work, has apparently the use of all his faculties, but with this drawback:—the total loss of the use of his *left* arm. He has never had a fit since the operations.

I am, dear sir,

Yours faithfully,

Romsey, 17th April, 1893.

FRANK J. OFFER.

The Employment Bureau.

[The Employment 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 employées. This department has already become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C. Principals requiring special Teachers, Students (certificated) requiring employment either in schools or families, Typewriters, Skilled Artists, Musicians, Literary or Journalistic Workers, Builders, Architects, Decorators, Phrenologists, Shorthand Clerks, Secretaries, good Readers, who have satisfied L. N. Fowler as to their abilities, may find a medium through which to be successful in obtaining suitable positions.]

A YOUNG MAN seeks an opening in Electrical Engineering—Wireman.

A GENTLEMAN desires the position of Secretary, Librarian, or Curator.

A GENTLEMAN desires a position as Parliamentary Agent or Organizer.

A LADY desires the position of Amanuensis or Secretary.

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 photograph; 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 6s., for twelve 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.]

H. G. (Hapton).—The photo of this gentleman indicates a fair development of both mind and body. His powers of mind are such as to place him favourably amongst his fellow-men, for they are fairly balanced and under good control. He will not be likely to deviate from the regular course of action, but will be disposed to walk in the quieter paths of life, being rather cautious, and possessing considerable foresight. He will prefer to succeed gradually rather than risk very much. He may seem to lack effort, and be disposed to reserve his force rather than use it, and hesitate as to the right thing to do. He had better stimulate his Concentrativeness, and apply his mind more to the work in hand. His character will be greatly influenced by his circumstances, which, if favourable, will produce good results. He has an inquiring mind, and can easily interest himself in his surroundings; is quick to see and note anything new; has good imitative powers and fair constructive ability. He has a social nature which may bias his character almost too much. Attention to diet and the health laws will prove beneficial to him.

HELENA (York).—This lady has an active organization. She should be known for her sharpness of character; all the mental operations are quick, and accompanied with great positiveness of action. The head is well formed, and she should show a uniform character. She has quite a social nature, is warm-hearted and affectionate; has strong friendship and forms lasting attachments; has also much love for children. She is rather firm and self-reliant, is quite capable of managing her own affairs and of protecting her own interests. She has plenty of spirit and determination, is quite equal to the occasion, and always appears to advantage. Prudence and economy are strong characteristics. She is a good manager, full of contrivance, versatile, and capable of undertaking almost anything. Is thoughtful, original, and comprehensive in mind, and takes a fair view of things. She has good observing faculties,

and her insight into things generally is favourable. She has a good memory ; her powers of expression are very good. She speaks to the point, and has an easy style of language.

TELEGRAPHIST (Northumberland).—The photos of this gentleman indicate a good vital organization, and a well-formed brain. His mental powers are good. His leading characteristics are sympathy, sociability, and an energetic disposition. He has a susceptible nature, is intense in his feelings, and capable of experiencing to a large degree both enjoyment and suffering. He is very enthusiastic, and throws his whole mind into his work, and would stimulate others and create an interest in whatever he undertook. Cautiousness and prudence enter largely into his character, hence he deliberates before acting, and does not decide quickly, and is forethoughtful in disposition. He has a strong sense of economy ; fair constructive talent and mechanical skill. He has a good memory of faces ; is very sympathetic, kind-hearted, and friendly. He has a large moral brain, is strictly conscientious, and has a religious cast of mind. His imitative powers are good, which enable him to adapt himself to different kinds of work, and to copy and imitate the style of others. He has a mind open to conviction.

J. A. S. (South Shields).—This gentleman has some strong characteristics. He should be known for his energy, power of endurance, and strength of constitution. His bodily powers are compact and vigorous ; he is very active and tenacious, fond of work, and shows a determined spirit. He is efficient, capable of sustaining great trials, and does not readily give up, but generally carries through whatever he undertakes. He has a strong will, does not change or waver ; is slow in making up his mind, but very firm and reliable when his opinions are formed. His sympathies are rather strong, he is kind-hearted, and well-disposed towards others. He has good mechanical skill and constructive talent. His perceptive faculties are rather large, giving him the abilities of a good worker. Neatness and order, and the disposition to be methodical and systematic, are strong characteristics. His general memory is not so strong, and requires stimulus to be of much service to him.

A. E. D. (Blackburn).—The photo of this gentleman indicates a fair organization and fairly developed character ; there are, however, indications that the conditions under which the mind works are not so favourable. If attention were given to his digestive powers he would work to a better advantage. The head is fully developed, giving him strength of character and strong feelings. He is more firm than self-reliant ; he does not yield to others sufficiently, and likes to have his own way. Is fond of change and variety, for Continuity is not so strong ; he is very interested and persevering, but does not dwell sufficiently on the subject in hand. He has good imitative powers and is quick to copy the style of others. He is not so cautious, or careful ; has not much fear, and will overcome difficulties, but may inconvenience himself to do so. He has plenty of energy when necessary, but it lacks direction and object. He has fair scholastic abilities, but would make a better worker, having considerable constructive talent.

J. W. P. (Belfast).—The photos of this gentleman indicate a good vital organization. He has a strong hold on life and there is every indication of constitutional vigour. His strong mental characteristics are firmness, cautiousness, and perseverance. He has plenty of energy and determination to carry through his undertakings. He has a strong sense of economy ; also good mechanical ability, and can adapt means to ends, as well as work after a pattern. He is quick to learn, and has good business talent. Has an enquiring mind, and can readily understand what he sees. He has more than average insight. He is by no means superficial, but goes into subjects thoroughly. Is restless, and fond of travelling. He has a fair general memory, but that of faces, forms, and outlines, is very good. As a worker he would show much taste, and would be very neat, methodical, and systematic in his work.

S. E. C. (Ohio).—The photo of this lady indicates good vital stock and strength of constitution. She possesses more than average powers of mind and ability to influence others. She should be known for her practical disposition and ability to deal with things as they come. She has considerable will power and uncommon energy ; her whole bearing is one of action and work. She possesses considerable tact and management, and knows how to deal with people. She is quite cautious and forethoughtful, and rather farseeing, makes every allowance for the dangers in the path, and always knows her own strength. She is rather original, and has her own ways of doing things ; does not stand on ceremony, but acts as she feels, and is at one with her surroundings. She is more practical than imaginative, and has never over-rated her prospects ; her hope has not stimulated her to expect more than is reasonable. She is friendly and social, and should be known for her willingness to help others, and for her sympathy in general. Her memory is good for she never forgets what she sees.

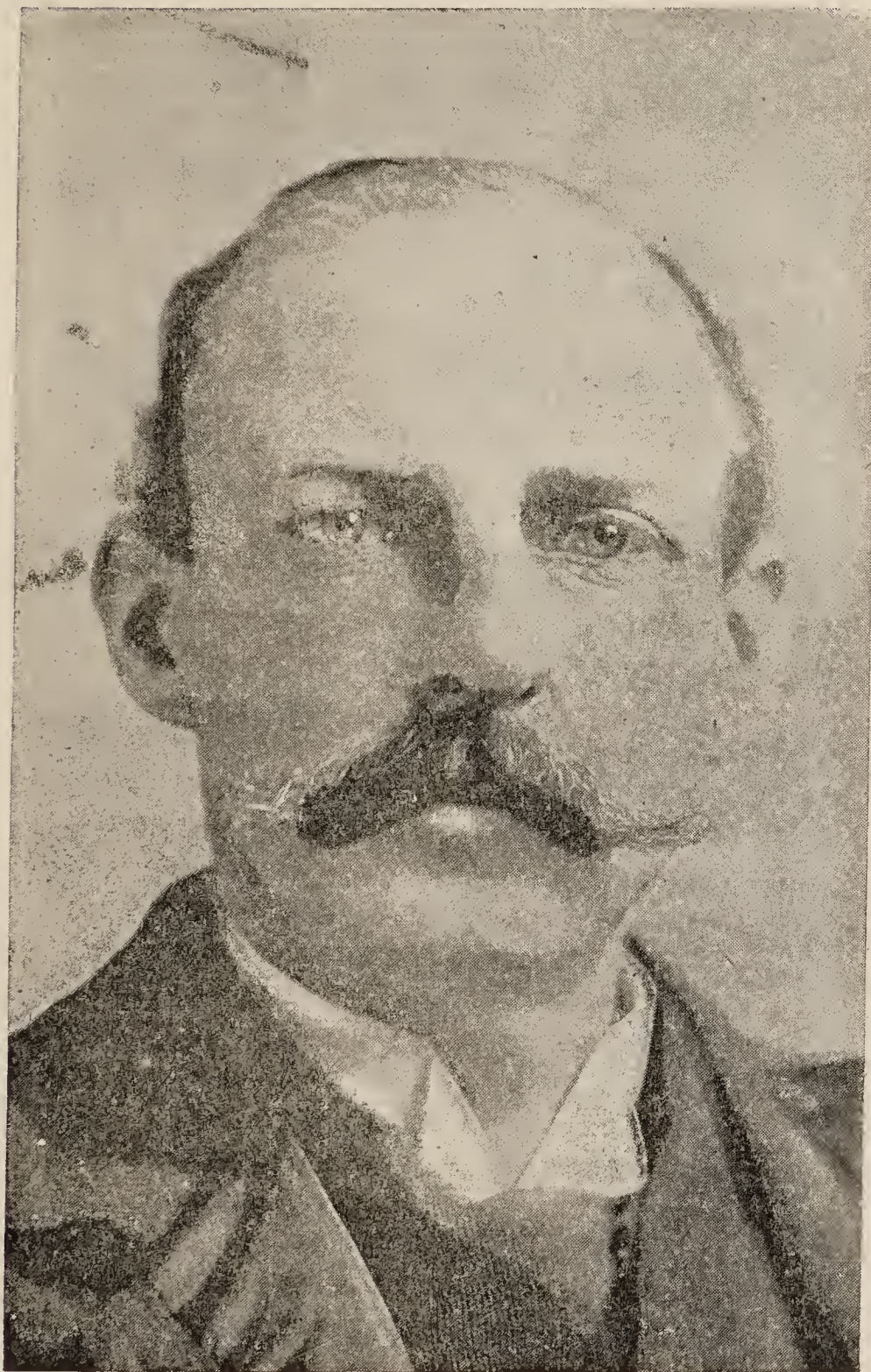
A. W. T. (Ohio).—The photo of this lady indicates a predominance of the mental, arterial, and nutritive temperaments. She is organized on a high key, is ardent, intense, susceptible, warm-hearted, and impulsive. She should be known for her elevation of mind, her refinement, and gentleness of manner. She has strong parental attachment, connubial love, and domestic feeling ; considerable patience, prudence, and pliability. Her sympathy is remarkably keen, she is quite desirous of pleasing and making others happy. The elements of sagacity, economy, intuition, neatness, and taste, are strongly developed. She has prominent observing faculties, and a good memory of persons and things, also has good conversational powers. She has much faith and buoyancy of mind, and is certainly in her element when with younger people, giving them advice and encouragement.

To act with common sense, according to the moment, is the best wisdom I know.—*H. Walpole.*

It seems, however, an invariable maxim of Providence that most of those who are greatly honoured should be greatly tried.

THE
Phrenological Magazine.

JUNE, 1893.



MR. F. MARION CRAWFORD.

THIS gentleman has more than an average share of mental power, grasp of mind, and conception of ideas. He is well stocked with vitality, and is equal to almost any mental task. His large features and heavy base to the brain indicate animal stock. He appears

to be equal to almost any task that he may attempt. He is not so showy as he is sound, thorough, and reliable. He can develop his mind to better advantage by writing than by talking. He could communicate his ideas with considerable magnetic force. He would shine better in the literary world than as an orator. He has stability of character, and does not show to a good advantage at first ; but he has an organization that wears well. He does not make many mistakes ; sees his way clearly before he ventures far. He is harmoniously developed, not bright in spots, but is equal to almost any duties he is called upon to discharge. He will bear testing, will wear well when put to the task ; but his gifts are not of the kind that show to a good advantage at first. His head is high, which favours a good moral tone. He has more reflective than perceptive mind, but he is not wanting in the perceptive power. He would distinguish himself anywhere as a man to throw off ideas, give others something to think about, rather than to make a display of gifts that appear on the surface. He will make a reputation that will wear well and last. He has a talent to see things as they are. He is good to recognise shapes, faces, and the forms of things. As a scholar he will be correct rather than brilliant. He makes very correct estimates and calculations. He is naturally methodical and systematic. He has more than average versatility of talent. He is not wanting in power to invent and contrive, and devise ways and means. He is not witty and brilliant on the spur of the moment but he sees things that are humorous, and remembers facts well. He pays a great deal of meaning in his talking and reading. He takes large and liberal views of subjects. He is no sectarian, and must have been educated in a school that dealt in simple numbers, and believes in taking broad views of life, of men, and character. He is an ingenious man in his way. He does not seek aid of others but thinks a thing out himself. He is not timid or afraid of new ideas, but rather delights to investigate subjects that require a good deal of thought. He would do very well for a lawyer, in a department where his mind had been drawn out. He has imagination of the broad and comprehensive kind. He is not so fond of the simply, bright, showy, and beautiful, as he is fond of the strong, the comprehensive, and the thing as a whole. As a speaker he would come at once upon the general ground, and spare himself when only dealing in details as it was necessary. In short he is a whole man, and deals in large things ; takes hold of whatever he attempts to do with both hands. He does not mince matters much. Other people follow him rather than he them. He requires

considerable motive to produce vigorous action, but when that motive is produced he is equal to his task. Whatever he does as a profession he goes at it like a master, and is a guide to others rather than one to be guided. He should not stop at doing one or two things or take any profession in a limited sphere, but should take hold of work that required strength of mind, depth of thought, and power to see the thing in its various bearings. He should be constantly employed. He needs to work up his energy rather than let it waste away. The more he has to do the better able he is to work.

THE EDITOR.

PHRENOLOGY—ITS SAVING POWER.

MEN are saved by Phrenology in more senses than one, the world is familiar with the idea that the greatest saving power is faith in God, but it has yet to learn—speaking largely—the saving power of Phrenology expressed by an expert to the man who stands in sore need of being saved from his own disappointed efforts. There is a wonderful tonic in the consciousness that another who does not know one fact about his life, is able to trace a redeeming feature in his character, and set him on his feet again. By thus seeing something aspiring and noble in him he discerns the possibility of recovery. Discouragement and despair are the moods in which men throw themselves away ; more people are finally lost to themselves and to society in the hour when no human being seems to believe in them, than at any other time. To make a person realize that despite all his imperfections, someone can see in him ground for encouragement, and material for hope is often enough to revive his dying spirit and give him courage for one more struggle with his weaknesses. When everyone gives him up for lost he is generally lost. A practical knowledge of Phrenology creates a belief in the vital spirit of great achievements, but belief must have its foundation. A phrenologist must inspire his subject with a sublime sympathy which exists in the world as well as a sublime hope. There is no limit to divine tenderness and love, and there is, therefore, no limit to the divine faith in the recuperative power of the human being. A phrenologist should endeavour to secure for himself that working hypothesis by which he can encourage and stimulate the least fortunate individuals. The phrenologist can and must imitate divinity, especially when he sees his faith is founded

upon fact. The time to give up a man entirely never comes in this world. The time to give faith its greatest opportunity is the hour when the man has lost all faith in himself. When he feels he has severed all ties, and stands friendless and solitary in a world ; when a man has failed in every attempt he has made and yet has not exhausted his gifts or possibilities, such possibilities a phrenologist should see and point out. Faith expressed by another man in such an hour has often been the door through which a lost man has come back to himself again, and in another's assurance finds himself once more a man. A practical phrenologist has often told me of this saving power he has thanked God he has been able to use. How by a word or two he has transformed an object of despair into an object of light. I remember one case of an unfortunate imbecile, whose senses all seemed shattered but one, that was the sense of Sound, joined to large Tune. His eyesight was dim, and a curious malformation of the skull was particularly noticeable in the left side of the occipital lobe. The phrenologist pointed out the redeeming feature of the character, and was somewhat surprised to find a radiance spread over the whole face at the expressed confidence in any musical ability.

GRANT S. ALLEN.

OUR ORIGIN AS A SPECIES.

BY THE LATE RICHARD OWEN.

THERE seems to be a manifest desire in some quarters to anticipate the looked-for and, by some, hoped-for, proofs of our descent—or rather ascent—from the Ape.

In the *Fortnightly Review* a writer cites, in this relation, "the Neanderthal skull, which possesses large bosses on the forehead, strikingly suggestive of those which give the gorilla its peculiarly fierce appearance ;" and, he proceeds : "No other human skull presents so utterly bestial a type as the Neanderthal fragment. If one cuts a female gorilla-skull in the same fashion the resemblance is truly astonishing, and we may say that the only human feature in the skull is its size."*

In testing the question as between Linnæus and Cuvier of the zoological value of the differences between lowest man and highest ape, a naturalist would not limit his comparison of a portion of the human skull with the corresponding one of a female ape, but would extend it to the young or imma-

* Grant Allen, *On Primitive Man*, p. 314.

ture gorilla, and also to the adult male : he would then find the generic and specific characters summed up, so far, at least, as a portion or "fragment" of the skull might show them. What is posed as the "Neanderthal skull" is the roof of the brain-case, or "calvarium" of the anatomist, including the pent-house overhanging the eye-holes or "orbits." There is no other part of the fragment which can be supposed to be meant by the "large bosses" of the above quotation. And, on this assumption, I have to state that the super-orbital ridge in the calvarium in question is but little more prominent than in certain human skulls of both higher and lower races, and of both the existing and cave-dwelling periods. It is a variable cranial character by no means indicative of race, but rather of sex.

Limiting the comparison to that on which the writer quoted bases his conclusions—apparently the superficial extent of the roof-plate—its greater extent as compared with that of a gorilla equalling, probably, in weight the entire frame of the individual from the Neanderthal cave, is strongly significant of the superiority of size of brain in the cave-dweller. The inner surface moreover indicates the more complex character of the soft organ on which it was moulded : the precious "grey substance" being multiplied by certain convolutions which are absent in the apes. But there is another surface which the unbiassed zoologist finds it requisite to compare. In the human "calvarium" in question, the mid-line traced backward from the super-orbital ridge runs along a smooth tract. In the gorilla a ridge is raised from along the major part of that tract to increase the surface giving attachment to the biting muscles. Such ridge in this position varies only in height in the female and the male adult ape, as the specimens in the British Museum demonstrate. In the Neanderthal individual, as in the rest of mankind, the corresponding muscles do not extend their origins to the upper surface of the cranium, but stop short at the sides forming the inner wall or boundary of what are called the "temples," defined by Johnson as the "upper part of the sides of the head," whence our "biting muscles" are called "temporal," as the side-bones of the skull to which they are attached are also the "temporal bones." In the superficial comparison to which Mr. Grant Allen has restricted himself, in bearing testimony on a question which perhaps affects our fellow-creatures, in the right sense of the term, more warmly than any other in human and comparative anatomy, the obvious difference just pointed out ought not to have been passed over. It was the more incumbent on one pronouncing

on the paramount problem, because the "sagittal ridge in the gorilla," as in the orang, relates to and signifies the dental character which differentiates all *Quadrumana* from all *Bimana* that have ever come under the ken of the biologist. And this ridge much more "strikingly suggests" the fierceness of the powerful brute-ape than the part referred to as "large bosses." Frontal prominences, more truly so termed, are even better developed in peaceful, timid, graminivorous quadrupeds than in the skulls of man or of ape. But before noticing the evidence which the teeth bear on the physical relations of man to brute, I would premise that the comparison must not be limited to a part or "fragment" of the bony frame, but to its totality, as relating to the modes and faculties of locomotion.

Beginning with the skull—and, indeed, for present aim, limiting myself thereto—I have found that a vertical longitudinal section brings to light in greatest number and of truest value the differential characters between lowest *Homo* and highest *Simia*. Those truly and indifferently interested in the question may not think it unworthy their time—if it has not already been so bestowed—to give attention to the detailed discussions and illustrations of the characters in question in the second and third volumes of the "Transactions of the Zoological Society." * The concluding Memoir, relating more especially to points of approximation in cranial and dental structure of the highest *Quadrumane* to the lowest *Bimane*, has been separately published.

I selected from the large and instructive series of human skulls of various races in the Museum of the Royal College of Surgeons that which was the lowest, and might be called most bestial, in its cranial and dental characters. It was from an adult of that human family of which the life-characters are briefly but truly and suggestively defined in the narrative of Cook's first voyage in the *Endeavour*. †

Not to trespass further on the patience of my readers, I may refer to the "Memoir on the Gorilla," 4to, 1865. Plate XII. gives a view, natural size, of the vertical and longitudinal section of an Australian skull; Plate XI. gives a similar view of the skull of the gorilla. Reduced copies of these views may be found at p. 572, figs. 395, 396, vol. ii. of my "Anatomy of Vertebrates."

* "Osteological Contributions to the Natural History of the Orangs (*Pithecus*) and Chimpanzees (*Troglodites niger* and *Trog. Gorilla*)."

† Hawkesworth's 4th ed., vol. iii. 1770, pp. 86, 137, 229. The skull in question is No. 5394 of the *Catalogue of the Osteology* in the above Museum, 4to, vol. ii., p. 823 (1853).

As far as my experience has reached, there is no skull displaying the characters of a *Quadrumanous* species, as that series descends from the gorilla and chimpanzee to the baboon, which exhibits differences, osteal or dental, on which specific and generic distinctions are founded, so great, so marked, as are to be seen, and have been above illustrated, in the comparison of the highest ape with the lowest man.

The modification of man's upper limbs for the endless variety, nicety, and perfection of their application, in fulfilment of the behests of his correspondingly developed brain—actions summed up in the term "manipulation"—testify as strongly to the same conclusion. The corresponding degree of modification of the human lower limbs, to which he owes his upright attitude, relieving the manual instruments from all share in station and terrestrial locomotion—combine and concur in raising the group so characterised above and beyond the apes, to, at least, ordinal distinction. The dental characters of mankind bear like testimony. The lowest (Melanian), like the highest (Caucasian), variety of the *Bimanal* order differs from the *Quadrumanal* one in the order of appearance, and succession to the first set of teeth, of the second or "permanent" set. The foremost incisor and foremost molar are the earliest to appear in that series; the intermediate teeth are acquired sooner than those behind the foremost molar.*

In the gorilla and chimpanzee the rate of course of progress is reversed: the second true molar, or the one behind the first, makes its appearance before the bicuspid molars rise in front of the first; and the third or last of the molars behind the first comes into place before the canine tooth has risen. This tooth, indeed, which occupies part of the interval between the foremost incisor and foremost molar, is the last of the permanent set of teeth to be fully developed in the *Quadrumana*; especially in those which, in their order, rank next to the *Bimana*. To this differential character add the breaks in the dental series necessitated for the reception of the crowns of the huge canines when the gorilla or chimpanzee shuts its mouth.

But the superior value of developmental over adult anatomical characters in such questions as the present is too well known in the actual phase of biology to need comment.

In the article on "Primeval Man," the author states that the Cave-men "probably had lower foreheads, with high bosses,

* *Odontography*, 4to, 1840-44, p. 454, Plates 117, 118, 119.

like the Neanderthal skull and big canine teeth like the Naulette jaw."*

The human lower jaw, so defined from a Belgian cave, which I have carefully examined, gives no evidence of a canine tooth of a size indicative of one in the upper jaw, necessitating such vacancy in the lower series of teeth which the apes present. There is no such vacancy nor any evidence of a "big canine tooth" in that cave specimen. And, with respect to cave specimens in general, the zoological characters of the race of men they represent must be founded on the rule, not on an exception, to their cranial features. Those which I obtained from the cavern at Bruniquel, and which are now exhibited in the Museum of Natural History, were disinterred under circumstances more satisfactorily determining their contemporaneity with the extinct quadrupeds those cave-men killed and devoured than in any other spelæan retreat which I have explored. They show neither "lower foreheads" nor "higher bosses" than do the skulls of existing races of mankind.

Present evidence concurs in concluding that the modes of life and grades of thought of the men who have left evidences of their existence at the earliest periods, hitherto discovered and determined, were such as are now observable in "savages," or the human races which are commonly so called.

The industry and pains now devoted to the determination of the physical characters of such races, to their ways of living, their tools and weapons, and to the relations of their dermal, osteal, and dental modifications to those of the mammals which follow next after *Bimana* in the descensive series of mammalian orders, are exemplary.

The present phase of the quest may be far from the bourne to yield hereafter trustworthy evidence of the origin of man; but, meanwhile, exaggerations and misstatements of acquired grounds ought especially to be avoided.

REPRESENTATIVE SKULLS.

No. XXI.

THIS skull is of a superior type, being nearly perfect in shape and proportion. The skull does not so much show superior intellect however, but superior power. It is a well-formed head, and indicates strength, durability, and ability to sustain itself in labour.

* *Fortnightly Review*, September, p. 321.

There is no apparent weakness in the animal brain, or social and domestic feelings. It indicates great power, "other things being equal" to the shape of the head. He must have been a superior man in his day and age for the work of life, for there is no indication of instability or incapacity to work.

The base of the skull, however, shows great power. All the affections were very strongly represented, joined to a predominance of Veneration and availability of intellect.

Hope, Spirituality, and Conscientiousness are well represented in the moral brain. It is a very good sample of a Scotch head living in the time of great labour, requiring much



effort and great forethought. The restraining faculties are all strong, and there is every indication of economy and reserve.

The temperament was not of the light nervous type, a person who could not have had much brilliancy or display. He must have lived in a day when every man had to look out for himself. Such a head would do to live in times of danger, where courage, energy, and prudence are all necessary. He was not wanting in the qualities that indicated good-heartedness and benevolence. It is possible he belonged to a party or clan where the people banded themselves together, and is supposed to be that of a gentleman of standing. It had been dug up and thrown into a refuse pit at Aberdeen. A fine specimen, and has all the peculiar marks of Scotch character.

L. N. F.

THE NINETEENTH CENTURY WOMAN.

BY R. E. LORD.

THE problem, how to educate the average girl so as to qualify her to fulfil the various duties of the nineteenth century woman, is one that clamors for solution. It is true that the nineteenth century woman will soon belong to a past generation, yet so clearly indicative is the immediate present of the imminent future, that too great consideration cannot be given the educational interests of our feminine youth of to-day.

Never has girlhood been more impressed with its own importance than it now is ; and never has the American world at least, been more lavish in its facilities for intellectual development, and the license accorded to individual liberty of thought and action, than in the present era. This is to such profuse degree we can but wonder, is the American girl of to-day in no danger of being spoiled ?

Old-time methods once taught are much like old-time doctrines once preached, almost obsolete. Could grandsires of a century ago return to view the present time and generation, they would look in vain for ancient landmarks of old, familiar places, and once enforced precepts by which girls were made useful housewives and children "trained in the way that they should go."

The note of liberty that re-echoed on American shores had more fertile soil to bring forth fruits of freedom than has yet been estimated, the patriot of the past was not a stauncher advocate of freedom than the girl of the present, and it is because she possesses the right to think her own thoughts and to live her own life, as she demands these rights, that aids to the solution of the best possible regime, by which to develop these human germs, seems incumbent upon every one who is interested in the world's future.

Questions which ask themselves persistently are : What are the ambitions of the average girl of to-day ? What are her parents' ambitions for her ? Toward what are the energies, the aims, the lives of our daughters directed ? The development of a single woman herself, or of all women, her sisters ? The interests of self, or the interests of humanity ? The aggrandizement of the individual, or the uplifting of a world ?

It is undoubtedly true that the future woman's shadow is seen in the self-confident, self-assertive, undeveloped girl of the present, yet suppression is not possible were it desirable. Direction of energy in safe and good channels is what is needed.

It is often said, "that girls are not what they were in my

day." Girls should not be expected to be what their grandmothers were, or even as their mothers were in their girlhood ; times have changed, so too have people ; it would not be right to try to model the girl of to-day in the unyielding, inflexible mould that fashioned girls of even half a century ago, yet so beautiful is the life of a nobly developed woman and so full of power, too, that we do believe every effort should be made to unfold and perfect the characters of our daughters ; nor do we think this need to rob them of their sweetness but rather should enhance their charms, and increase their usefulness in fulfilling the various duties of the coming woman.

How our girls are to be educated depends largely upon what they are to be educated for. Are our daughters to occupy the presidential chair, the pulpit, rostrum, bench ; are they to be doctors or lawyers or are their ambitions to find scope in the more secluded empire of home ? Vocation determines education. Said Napoleon : " I conquer provinces, Josephine conquers hearts."

Everyone respects and admires a womanly woman. It is true, especially of the last twenty years, that girls and women have done, to a large degree, work which heretofore had been done by boys and men. This dates from our civil war ; what was then a necessity seems to have now become to a large degree woman's choice, and more and more, we see as a consequence of this the development of an abortive species of girl and woman. But if this means loss, so too does it mean gain. Loss of the emotional nature has been developed and more self-reliance has become conspicuous. A certain brusqueness characterizes the maturing girl of to-day, certain thoughtful courtesies have been dropped, and deference to the opinions of others is regarded as want of character, yet is it possible, do we believe so to harmonize these distinctive traits, independence and affection, that the world may be enriched by women unsurpassed, if not unequalled, in moral, mental, and physical culture ?

" Canst thou so will that the maxim of thy conduct may become a universal law ? " asks Kant.

Woman's love for admiration should ennoble her. It too often debases her. Admiration founded on less than respect destroys itself. To be respected one must first respect oneself. It is because we would have our daughters exert the power of affection that we would have them wise, firm and self-confident. Our girls should be encouraged to think well of themselves. Everyone should think well of himself. Said Mr. Emerson, " Everyone should believe in the integrity of

his heart," but so far from producing the effect of perfect content, such should induce the greatest test care "lest supposed gold prove to be only pinchbeck."

No one has helped more to develop self-reliance than that friend of little children, Frœbel. Latent germs spring into life in kindergartens. Concentration of thought is acquired there. Order and accuracy are enjoined. Observation and originality are encouraged; not traits that tower conspicuously, but walls of adamant upon which the structure of a life depends for beauty, for strength, and for utility.

Our girls must have a liberal education. They must be encouraged to think and should be allowed to reason. Any system of education which denies these rights cannot develop a typical woman as an ideal for those who will come after her, but will make her much like "a wound up puppet," or automaton. It is true that liberty of thought, like liberty of action, will take our daughters out of ways we trod, but no deviation is outside of love. Mothers have no right to insist, as some mothers do, "that their way of thinking must be their child's way of thinking." Children may for a time yield, or seem to yield, to those whom they grieve to wound or whom they fear to offend, but the weal of the parent is purchased at the welfare of the child.

Lives should be permitted to unfold naturally; this too many mothers do not allow, often from an over estimate of parental responsibility; they are too much like the fearful Clementina, whom Sir George Macdonald says: "Maun aye be settin a' things right afore their time . . . whom I cud just fancy I saw goein aroon the trees of a summer nicht putt- ing honey upo' the peers an' the peaches, cause she cud na leave to nature to rippen them sweet enough." However much conflict this liberty of thought may mean, the wise mother will let it be a silent conflict, and her reward shall be a more completely and perfectly developed woman who will be the future mother in a future generation. Girls should appreciate the dignity and nobility of motherhood.

Progress is the universal law, and though it may appear to move ever in a circle, is not the circle capable of extension? The correspondences of human nature and physical nature are almost startling; the one seeming as boundless as the other: Nature seeking to develop man; man seeking to develop nature. Extension of territory meant extension of thought which in this age of search-lights will not brook restraint nor ignorance.

Our daughters must be wise to know good from evil rather than innocent through ignorance. Wisdom should conquer

vice. Wisdom should diminish crime, pauperism, and too frequently enacted tragedies. Ignorance, however, does not necessarily go hand in hand with poverty. Could the Cinderellas in rags exchange for a time places with their sisters in velvets some helpful lessons might be learned from each to assist in the moral education of our girls of to-day. It is strange that women will clamor for equal rights with man before adjusting the equal rights of woman !

To increase one's knowledge should be to increase one's power.

The girl who realizes that greater understanding of things profound, philosophic, philanthropic, scientific, and beautiful, is knowledge which will intensify and beautify, and harmonize her power, is the girl who cannot afford to waste her time in senseless chatter, in idle gossip, in clandestine amusements, or in aimless purposes.

A girl with a high ideal cannot afford to commit a single act or to think a single thought that would make her less that ideal.

As girls are made to realize that self-interest alone enjoins the strictest guard upon their words, their acts, even their very thoughts, there will, we believe, be fewer giggling, gossiping frivolous girls.

Capacity, not sex, should determine the education of our girls to-day. Let our daughters have that which our boys have to develop genius, learning, culture. Our daughters should be physically developed girls. No power is a more keenly recognized elixir than that which proceeds from the exuberance of health ; not only is Delsarte, but every teacher who encourages the development of grace and muscle, a benefactor to mankind and womankind. Yet we do rejoice for those whose hands and feet are others' servants, that such may find in natural movements of bed-making and bread-making, perhaps even in balancing a pail upon the head, that which others find in artificial ways.

It is possible to improve one's physical condition by one's mental condition. Not to wonder how one feels helps one not to feel. Too much energy is expended in feeling that should be employed in doing. *Thoughts have the power to reconstruct the body as well as to emancipate the soul.* Persistent effort of the will can make us the masters of our physical selves as our thoughts effect the tissues, cells and pulsations of our bodies. "*Mind*," says Professor Henry Wood, "*translates itself into flesh and blood.*"

To be a healthier girl is to be a happier girl. The nineteenth century girl should be a happy girl. Never before has

education been offered in such varied and attractive form. Stores of treasure have been unearthed to tell their story. Ancient architecture looms upon American soil. Ancient lore gives fairy-godmothers to our girls again, and side by side is modern lore of every phase of thought in comprehensive phrasing. Trips to the moon are offered free of charge. Battles, long since ended, are re-enacted. Antiquaries bring their rare and costly treasures from afar. A world is represented in a few square miles! So varied and reductive are all forms of learning we can but wonder what will be the fruit grown from this "Tree of Knowledge."

There is no book so necessary for our girls to study as the free, open book of nature, nor any study that so lavishly repays. The study of nature should make us reverent, pure, humble, wise, and happy. Says Rev. S. R. Calthrop, "If an archangel after a million years of study could thoroughly know what goes on in a cubic inch of space, we might say that he knew the universe. The exactness of God is in that inch. The economy of God is in that inch. The love of God is in that inch."

It is in the book of nature that Shakespeare tell us we shall find—

"Tongues in trees,
Books in the running brooks,
Sermons in stones,
And God in everything."

To commune with nature is to commune with God. Imagination pictures the future world for the future woman, but come what may on electric wings or in electric currents, we cannot believe that woman should ever be anything but just woman! Nor is the sphere of woman as narrow as it seems. The child soon grown to manhood and womanhood cannot have too wise a mother or too happy a home. *In this land of charities and churches we need more homes.* Homes instead of apartment houses; homes instead of tenement houses; homes instead of club-houses. Men need homes, women need homes, children need homes. Home is woman's empire, there she is queen, and her throne may be as lofty, beautiful and renowned as woman wills that it shall be lofty, beautiful and renowned.

The girl of the nineteenth century should have that developed by education and example that shall make her an embryo queen. The woman of to-day should be a domestic queen whose progeny, ere many generations, shall be little less than gods. And, should the sphere of home seem small, we ask in the words of the late and revered poet:

“Clara, Clara, Vere de Vere,
 If time be heavy on your hands,
 Are there no beggars at your gate
 Nor any poor about your lands?
 Oh! teach the orphan boy to read,
 Or teach the orphan girl to sew,
 Pray Heaven for a human heart,
 And let the foolish yeoman go.”

THE EFFECTS OF TOBACCO ON HEALTH.

By E. L. HART.

“Think of Ancient Greece; of her glory in arts, arms, and song; of her poets, sculptors, architects, after whom the moderns toil in vain. We do but follow in their track with halting steps and slow, and yet they lived their lives, and thought their deathless thoughts, and gave immortal beauty to the silent stone without tobacco.”—*Quarterly Journal of Science*.

“In 1492, when Columbus arrived at the Island of St. Salvador some of his sailors who went ashore returned saying that they had seen some natives roll up a kind of dry leaf, set fire to one end and inhale the smoke.”

“This same habit of smoking tobacco was then a gift of savages to civilised men, and strange to say, whilst the good works of civilisation advance so slowly, this fetid herb, borrowed from the naked Aborigines of the New World, has overrun the whole of the Old World in the space of three centuries.”—*Dr. Drysdale*.

“If you get a medical opinion in favour of a pipe, it is the opinion of a man who indulges in it. An unbiassed and unprejudiced opinion in favour of tobacco is yet to come.”—*Professor Muller*.

“Surely, if the dictates of reason were allowed to prevail, an article so injurious to the health, and so offensive in all its forms of employment, would speedily be banished from common use.”—*Dr. Prout*.

THE use of tobacco is largely on the increase, and has become an important factor in the debilitated condition of the present generation.

Smoking is a relic of barbarism, an unclean and unnatural practice that has become one of our national vices; its prevalence is deplored by all who have the welfare of their country at heart.

Our forefathers looked upon smoking as a luxury seldom to be indulged in till the work of the day was done. Most men, nowadays, who have adopted the habit, regard it as a necessity, and their pipes as inseparable companions.

Nicotine, the active principle in tobacco, is a deadly poison, and cannot be inhaled with impunity. A most moderate

indulgence in the weed is harmful, whilst its excessive use is often fraught with disastrous consequences.

Dr. Joel Shew says :—

“The essential oil of tobacco, as also an infusion from its leaves, is one of the most virulent poisons known. ‘The empyreumatic oil of tobacco,’ says Christison, in his work on poisons, ‘is well-known to be an active poison, which produces convulsions, coma, and death.’”

In dealing with the question of “Smokers and Smoking,” it should be remembered that isolated cases do not form correct data for argument. There are men of refined stamp who smoke, and men of the lowest calibre who do not. Men who are apparently in good health and will never own to a headache enjoy their pipe and cigar, and men who are often in a doctor’s hands who never touch either. One man will say tobacco has been the bane of his life, whilst another will strongly assert it has been his greatest boon. There are many inveterate smokers who, to superficial observers, suffer in no particular in consequence of the habit. It is nevertheless true that smoking is physically, mentally and morally injurious to the constitution, and that the use of tobacco is incompatible with a high standard of health and vigour.

The late celebrated phrenologist and physiologist, O. S. Fowler, of America, has remarked that—

“The constitutional effect of tobacco is to pervert and vitiate the entire being, from the crown of the head to the sole of the foot, in all the ramifications of mind and functions of body. It equally vitiates appetite by producing a craving, corrupt state of both appetite and stomach. It causes dyspepsia of body and dyspepsia of mind ; that is, a diseased, gnawing, hankering, dissatisfied state of all the feelings, appetites, and passions.”

Smoking is one form of self-indulgence and unmanly selfishness. It dulls a man’s sense of the rights of others, and destroys the natural susceptibility of his mind, causing him to be morose and indifferent, if not actually unkind. It may here be remarked that the ill effects of smoking upon a man’s nature are negative rather than positive, soothing into forgetfulness his sense of duty and moral rectitude, and rendering him unmindful of those existing evils which it should be every honest man’s aim to remove.

Dr. Copeland says :—

“Tobacco weakens nervous power, favours a dreary, imaginative and imbecile state of existence. The smoker ultimately not only becomes partially, but generally paralysed in mind and body ; he is subject to tremors and numerous nervous ailments, and has recourse to stimulants for their relief.”

The evil results of over indulgence in strong drink are more positive, arousing the baser passions, and causing a man to break the rules of decency and order.

These traits vary according to the disposition and temperament of the individual, and are in proportion to the extent of his indulgence. Of course there are smokers who are not drinkers, and *vice versâ*; with the majority, however, the habits go hand in hand, for smoking creates a desire for stimulants, and when the habit of drinking is first acquired, the false solace of tobacco is found desirable.

Promiscuous smoking has of late years become an intolerable nuisance, and it is to be regretted, seeing that smokers are so oblivious to all but their own comfort, that stricter rules are not enforced to prohibit the practice in public places and mixed assemblies.

It is, undoubtedly, most offensive to ladies and delicate persons, and is sometimes persisted in when true politeness would prompt its discontinuance.

The selfish unconcern of smokers is most apparent on omnibuses and other public conveyances, where the ash and smoke from pipes or cigars is blown into the faces of passengers, whether women, non-smokers, or children; when asked to desist in the interest of others, an insolent reply is often made, to the effect that those who don't like it had better get inside or take a cab.

Cowper truly wrote :—

“Pernicious weed, whose scent the fair annoys,
Unfriendly to society's chief joys.”

It is lamentable to see the very small boys and mere lads smoking in the streets of our large towns; they are clearly beyond the control of their parents, for it cannot be their wish their children should acquire the habit so early in life.

Dr. B. W. Richardson, in “Diseases of Modern Life,” says :—

“The effects of this agent (tobacco) often severe, even on those who have attained to manhood, are specially injurious to the young, who are still in the stage of adolescence. In these the habit of smoking causes impairment of growth, premature manhood, and physical prostration.”

With some the liking for tobacco is inherited, and thus not so much to be wondered at; fathers are the first offenders, and there is not the least doubt that excessive indulgence largely conduces to the lowered vitality and enfeebled health of little children.

Indeed, to quote Dr. Richardson again :—

“If a community of the youths of both sexes, whose progenitors were finely formed and powerful, were to be trained to the early practice of smoking, and if marriage were to be confined to smokers, an apparently new and physically inferior race of men and women would be bred.

No healthy man or boy well born and well brought

up has the slightest inclination to smoke, or to adopt the use of tobacco for its own sake. Influence and example are responsible for many acquiring the habit, who otherwise would never dream of doing so ; but, alas, perfect health is becoming an extinct quality.

In this connection Mr. James Parton, of America, remarks:—

“In our civilised sedentary life he who would have good health must fight for it. Many people have the insolence to become parents who have no right to aspire to that dignity ; children are born who have no right to exist, and skill preserves many whom nature is eager to destroy. Consequently while the average duration of human life has been increased, the average tone of human health has been lowered. Fewer die and fewer are quite well.”

These are remarkable truths not recognised by the majority of mankind.

The waste of saliva is an important item in the consideration of the evil results of smoking. Medical men agree that the constant expectoration incidental to the practice impairs the digestive organs by wasting the fluid designed by nature to assist in the process of mastication.

The presence of saliva is indispensable to the perfect digestion of foods, and the thirst created by the use of tobacco causes the consumption of fluid, which interferes with its secretion ; whilst not only injuriously affecting digestion, it indirectly retards assimilation and prevents the normal vitalisation of the blood. Thus smokers suffer more or less from dyspepsia and kindred ailments.

Dr. Richardson says :—

“Smoking produces disturbances in the blood, causing undue fluidity, and change in the red corpuscles ; in the stomach giving rise to debility, nausea, and sickness ; on the heart, causing debility of the organ and irregular action.”

Dr. Alcott, another authority, considers that :—

“Tobacco injures the gums and the lining membrane of the mouth, stomach, and alimentary canal generally, and, in fact, of the lungs also ; and thus not only prepares the way for various diseases, but spoils the beauty, injures the soundness, and hastens the decay of these organs. It was no doubt the intention of the Creator that the teeth should last as long as their owner.”

And Mr. George Crickett, the great London authority on the diseases of the eye, says :—

“That he is constantly consulted by gentlemen for commencing blindness, caused solely by great smoking. He accordingly condemns smoking in most unqualified terms, as most dangerous to human health.”

It will be seen that medical opinion on the evils of smoking is prolific. The causes that lie at the root of these

evils, and the reasons that have led to their prevalence are not so fully recognised, nor have the investigations of the medical faculty indicated any effective remedy.

The majority of smokers could at once and for ever renounce the practice, with no injury and with little inconvenience ; many who have found smoking a slavery do not believe this, and, if they did, would lack the moral power to free themselves.

Again, tobacco is woman's rival. She often becomes in consequence of its pernicious action a secondary consideration with the opposite sex ; women should therefore be the strongest foes to smoking, and most ardent anti-tobacconists.

But, alas ! the causes that have made men slaves of a pipe have lowered in women their sense of fitness and self respect. A woman who allows a man unrestricted liberty to smoke in her presence at all times and under all circumstances loses something of her own individuality, and comes, it may be unconsciously, into competition with a pipe or cigar. Instead of creating in herself an ideal and "setting upon herself her own price," she loses the power to make "brutes men and men divine," and comes down from her God-given pedestal of purity and goodness to the level of the debased habits of man.

It is sad to note the couples walking together in the parks and streets, and mark how the female has learnt to tolerate the smoking habits of her companion. There are women who say they like their lovers to smoke, and see no harm in the practice. When married they will probably tell a different tale.

A still more deplorable sight, though fortunately rare in this country, is when women unsex themselves and adopt the use of tobacco.

The following on Women Smokers in America, taken from a recent evening paper, speaks for itself :—

"The League of Women connected with commerce and industry has petitioned the Committee of Ways and Means at Washington to tax every box of cigarettes to the extent of a dollar. The petition is on the score of mercy. It is shown that epilepsy and mental disorders have increased 10 per cent. in establishments where women smoke. The use of tobacco among women and girls in America is declared to be lamentably on the increase."

Women have much to reproach themselves with, were they capable of reviewing their true position and realising what their sex have lost in true womanliness and moral influence. Men might become, without exception, good and noble if women not only *desired* them to be so, but *deserved* to have them so.

As someone expresses it in verse :—

“Men are what the women make them : age and youth
Bear witness to this grand eternal truth !
They steer our bark o’er destiny’s dark wave,
And guide us from the cradle to the grave !”

The causes that have led to the unnatural social conditions of the present generation, and to the deteriorated constitutions upon which the smoking and drinking habits have taken such strong hold, are primarily attributable to the imperfect nutrition of the human frame, the result of an artificial and unnatural dietary. Until these truths are recognised little improvement can be looked for.

It is evident that America is alive to the evils of smoking, as will be seen by the following extract :—

“Children under 16 years of age are forbidden, under a new law of the New York State, to smoke cigarettes or tobacco in any form in the streets, or in any other public place. If they offend they are subject to a penalty of not more than \$10, and not less than \$2 for each offence.”

It is useless to forbid boys to smoke or to urge upon men the desirability of foregoing the use of tobacco unless a reform is effected in their system of life, more especially their dietetic habits—short of this, all efforts must bring partial, if not complete failure.

The first step must be to abolish white-flour foods, and adopt in their place those made from the entire wheat grain in the form of Whole-meal Bread, pastry, &c. White flour is disease producing whole-meal is health giving, and its use is essential to the maintenance of uniform health and vigour. White-flour foods are almost totally deficient in health giving products, and, as articles of diet, are practically worthless. Whole-meal contains every element needed for the health and development of the body ; it supplies the properties necessary for normal cerebral action—by its use the brain is sustained and its powers remain intact ; these facts cannot be too strongly impressed upon smokers in particular and the public generally.

In no sense of the term does it *pay to smoke* ; it is an expensive luxury considered from any standpoint, and is antagonistic to the better instincts of humanity.

Dr. Adam Clarke says :—

“It is with pain at heart I am obliged to say that I have known many who through their immoderate attachment to the pipe have become mere sots.”

In some instances smoking leads to intemperance, immorality, and crime.

If the money spent in tobacco by the young men of the middle and working classes were devoted to self-education and improvement in their various trades and professions, they would be greatly benefited individually and collectively.

The question of smoking does not resolve itself into a merely personal one, though under that aspect it is chiefly considered.

As a national habit it aids in undermining the noblest characteristics of our race. The use of tobacco is of world-wide importance in its bearing upon human health and happiness, and affects generations yet unborn.

It behoves all who lay claim to any degree of patriotism to dispassionately review this vital question, remembering that the greatest good of the greatest number should ever be the aim of all true men and women.

“Dr. Hardwicke said he thought that, as public men, the medical profession ought to speak out more boldly than they were wont to do, about the evils caused by tobacco smoking. From his own experience he would say that there were no perfectly healthy men who smoked. He believed that smoking caused many severe diseases.”—*Conference on the Effects of Smoking.*

CHARACTER SKETCH OF A BABY.*

“HE has a considerable amount of stamina and is well planted. He has large Human Nature, Agreeableness, and Mirthfulness. He is sure to laugh his way through the world pretty well. He has great observing power, great memory, and mother will need to be very careful that he learns right the first time, for it will be very hard for him to unlearn anything. He will express more by his face than he will in words ; he may be a great talker, but has not the amount of language to express all he wishes.

He will use words because he is obliged to, to convey his meaning, but it will be much easier for him to understand himself the meaning than to convey it to others. He will be governed much by his impressions, and in teaching him do not try to force him to study anything, but let him learn by experience as much as is necessary. If he wants to get into the fire, let him get a little touch of it, so as to make him keep away from it. He will learn more from the first experience than many will from a dozen.

He seems to be a very healthy boy ; appears to have a

* See presentation plate.

good body. There is a good base to the brain ; the head is high from the ear to Cautiousness, and from Cautiousness to Firmness, and this will make him executive, and give him a fine moral nature. As near as I can judge, Conscientiousness will be large, also Benevolence, and he will be very much influenced by his sympathies and his friends, notwithstanding so much self-hood. Do not try to drive him—if you try to drive him he will back ! If he were a pony I should tie the corn so that it should stick out beyond his head, so he could see it and go for it, and so keep going every day. But this little fellow will not be fooled the second time ; he might be persuaded to do or not to do, but cannot be forced into things.

Mirthfulness is very large and influences him much, for he appreciates anything funny. It will be to him as a medicine if ill. As he grows up he will write and talk real wit, and Causality joining with Mirthfulness will make him draw truthful conclusions, and in this way he will come at the pith of the truth. He will be quick to see what is ridiculous and absurd in a truth or untruth. He will want to try experiments. He will never be satisfied until he knows the inside of every plaything or machine, or anything that is done. He will ask a thousand questions ; they may not be orally, for he had rather go himself and peep in and find out by his own knowledge, and when he has got to his wits' end he will say, "Mamma, what makes the wheels go round?" She has a great responsibility in what she teaches him, for he will expect everything told him as just right, and he will accept it as right till he finds it to be otherwise ; and it would be an overwhelming mistake for him to find anyone had deceived him, for it would make him disbelieve everything from that quarter."

This baby is now nine months old and has already shown many of these characteristics which were written from a photograph at the age of three months, by Mrs. Charlotte Fowler Wells, of New York. ED. P. M.

HOW TO TALK AND DEBATE.

BREVITY. BREVITY is as valuable in speaking as in writing, and a good short speech will always have better reception than a long one whether good or bad, unless the topic requires extensive treatment, and then conciseness must be aimed at for the sake of compressing into the fewest possible words the several statements

and deductions from them. We do not expect a Chancellor of the Exchequer to unfold his budget in a ten minutes' speech, but we do expect order and conciseness in the statement of details, and as much simplicity as possible in the arguments used to enforce the conclusion which he wishes "the House" to agree to. A young speaker should study conciseness and neatness of expression; the capability for ornament and energetic declamation will come in time, and it should be remembered that it requires skill in managing an audience, and much ripe experience in the use of the orator's varied resources to turn humor to account, or to produce a good effect by means of declamatory energy.

DECLAMATION.

DECLAMATION is, perhaps, too much indulged in by modern orators, and the reason is obvious. To build up is a much more quiet affair than to pull down, and it is always easier to declaim than to persuade, to denounce the wrong than to prove the right, and though much of the most telling oratory which books and newspapers have preserved to us consists of grand declamatory passages, it is doubtful whether oratory is not degraded by an excessive use of this method of giving energy to a speech.

EXTEMPORANEOUS ORATORY.

EXTEMPORANEOUS ORATORY is very apt to assume the declamatory form because that is the most easy, and usually the most telling. The reader may perhaps expect us to give minute instructions as to how perfection in extemporaneous speaking is to be attained, but we must frankly avow our inability to do so. The gift of speaking without notes, without a written speech to assist, but solely by the invention at the time of delivery of the matter spoken, is not vouchsafed to all, and no amount of culture or elaborate study will make every aspirant to oratorical fame proficient in impromptu eloquence. Self-possession and a thorough knowledge of the question to be considered, a natural ease of speech, and experience in the formation of sentences; a gentlemanly deportment, and, above all, a determination to be satisfied with oneself, are the requisites for speaking impromptu. The art may be acquired by any one possessing abundance of moral courage, firmness and self-will, and continual practice is requisite, even if the aspirant has the gift by nature, or perfection of its use can never be attained.

WRITTEN
SPEECHES.

A WRITTEN SPEECH has the advantage of a more mature consideration than can be given to one which is manufactured in the presence of the audience ; yet the latter, if well accomplished, always possesses a charm of freshness in style and a happy abandonment of manner unattainable when the pen is used to smooth the way. Every speaker who finds himself under the necessity of preparing a written speech should endeavor to learn it by heart, and deliver it gracefully with the aid of notes or headings only ; and as the experience ripens, even these may be done without, and a scholastic address composed in the study may be delivered from the rostrum with much of the charm of an extemporaneous production.

But here occurs a difficulty—suppose some important passage should evade the memory at the very moment the speaker requires it. The speaker halts and gets confused—he has forgotten the first word of his next paragraph, and the audience grows impatient. He must either look to his notes, which should contain the headings in regular order, or fall back on his impromptu powers, and by a strong mental effort recover the lost line. The best way to guard against such accidents is to write out the speech several times, every time condensing it into shorter paragraphs, and always arranging them in the same form on the paper.

Many speakers noted for their ease of delivery and the accuracy of their memory, especially when having to quote passages of poetry, owe their proficiency to this plan of previous preparation. If you have occasion to remember anything which you have seen in a written or printed form, you mentally cast your eye on the page containing it, and the passage is at once remembered. It will be found in practice that if a passage is copied from the top of one page to the bottom of another, it is not so easily learned or remembered as if it occupied a similar place in every copy.

In the case of a passage in any book, the mind remembers its position on the page before it remembers the words, and in preparing a written speech it will be found a great help if, in every copy made, the same mechanical order is observed—every sheet being written on one side only, and each separate paragraph, passage or note having the same position in every copy made.

TEMPER
AND PERSON-
ALITIES.

IT is most important to check the slightest inclination to an indulgence of temper. A speaker who exhibits petulance is sure to lose ground with his audience, and the slightest personality is pretty sure to be met with expressions of dis-

approbation. There are many clever men to be met with at debating rooms who prostitute their abilities by abusing or satirizing all who disagree with them; but no amount of absolute cleverness in turning the laugh against an antagonist will suffice to atone for the ungentlemanly act involved in an attack or sarcasm directed against the person of the speaker. However you disagree, and however zealously you oppose a man, you are bound to give him credit for sincerity and ability. Inexperienced debaters should bear in mind that unless men differed in opinion there could be no debate, and that as we are all fallible an opponent may be as near the truth as we are in the end. Proper courtesy need never interfere with vigour of expression or sincerity of opinion.

REDUNDANCIES. PRUNE down your periods as you would your sentences in writing; go as straight to the question as possible, and avoid the vulgar mode of introducing it by means of an anecdote, and, still more, of first recapitulating what each previous speaker has said. If recapitulation is necessary to enable you to start from a certain point in the argument, be as brief and as clear as possible, and sum up the several statements into a few words so that they can stand apart in your speech as a preface does in a book.

Discussion is most profitable when every speaker admits as much as possible what has been advanced by an opponent. To dispute every trivial statement, much less to ignore important facts, which have been advanced against you, is to show smallness of mind and a love of quibbling. Some debaters seem to entertain an idea that they are bound to disprove every word that an opponent has advanced, and hence lead their audience with them into a quagmire of words, themselves playing the part of will-o'-the-wisp, very much to the damage of the whole affair. We say again, acknowledge all you can, and narrow the argument as much as possible. This will prove that you have liberality of mind, and will gain you a respectful hearing, and often save you from being chopped into mincemeat by some ungentlemanly wit who may succeed you.

OPENING A DEBATE. THE opening of a debate should be in the manner of a formal speech. Pleasantries should be avoided, for they rob the question of its due importance. The exordium should be very brief, and of a calm, complimentary nature, such as to put the audience in the proper humor to hear you out. If you begin with a

joke or anecdote, or a personal allusion, you at once lose dignity, and increase the risk of after failure. The statement of the question should be simple, and the mode in which you intend to treat it clearly set forth, and then it would be well to embody the whole tenor of your intended address in a general proposition.

This is an honest way of debating ; if you lead your hearers on, and withhold from them any general statement of your own views, you will weaken your cause by the creation of suspicion, whereas by plainly stating : “ I hope to prove to you by means of the facts which I shall advance, and that so-and-so, etc., and have no doubt that before I sit down you will conclude with me that, etc., etc.”

By such a plan your hearers are apprised of your intentions ; they know what you propose attempting to prove ; and if you be in ever such a minority at starting, you have only to argue your case with clearness, and to give dates and authorities for your facts, and you will be pretty sure to make many converts to your view of the question.

DIVISION OF THE SUBJECT. IF the subject admits of it, it should be divided into parts, so that it may be reviewed in a methodical manner. Suppose we were to debate “ whether capital punishment ought to be abolished.” We should first have to define capital punishment and state the method of its administration. The subject would then naturally separate itself into several heads ; as First : Are we justified on moral and religious grounds in taking away the life of a person legally convicted ? Secondly : Does such a punishment tend to deter others from the committal of similar crimes ? Thirdly : Do public executions tend to lower the tone of public morals ? Fourthly—supposing the speaker to contend for the abolition of capital punishments—what form of secondary punishment could best be substituted for that which involves a sacrifice of the life of the criminal ?

It is evident that in each of these several divisions statistical facts might be judiciously adduced in support of the speaker’s arguments, such as Parliamentary returns on the amount of crime at various periods, and especially of the crimes for which capital punishment has been, or is still regarded as necessary. The opinion of eminent jurists and of great moral reformers might be sought and arranged as illustrative of the several divisions, and the peroration would afford the proper opportunity for picturing the condition of the criminal under

sentence of death, the assembled mob witnessing his execution, and the probable results to the community, especially as to the safety of life which might be expected to flow from an abolition.

THE AFFIRMATIVE. THE affirmative is the setting forth of an argument in accordance with the terms of the propositions to be discussed, and it is advisable for the proposer—who is generally engaged to open the question—to state the proposition in such a form as that he can take the affirmative side ; to open a question in the negative is a bad practice, and invariably creates discontent ; hence the proposition should be so framed that the opener may advance his views without being compelled to negative his own proposition.

THE DEBATE. THE debate once opened, succeeding speakers should confine themselves to the most salient points advanced by the opener, and it is the duty of the chairman to check any tendency to discursiveness, for when the debate assumes a grave and earnest tone, an inexperienced or sophistical speaker will frequently turn it aside from its legitimate channel, and open the way for much quibbling on secondary questions.

However much importance a secondary question—arising out of the debate—may assume, a methodical speaker, when he gets an opportunity to rise, will soon set all right by gathering up the scattered threads and setting the debate afloat again, free from all minor entanglements ; and it is the duty of every one engaged in the debate to keep as close to the question as possible, to narrow it and reduce it to a few plain propositions, that all may understand what is being discussed, and in what special points the several speakers who may be engaged in the debate disagree.

THE REPLY. THE reply requires even more skill than the opening, and in taking notes for reply continually prune them down to a few leading particulars ; for while it is impossible to answer every argument advanced against you, it is a sign of weakness to omit noting anything which has gained the applause of the room, or which the opener himself may feel to be powerfully against him. To review the whole debate—except in a few words—so as to present a clever summary, would be injudicious, and the small twaddle in which many speakers indulge should be passed by

without even a word of notice. The debater should cultivate his skill in presenting a methodic reply, weaving in at the proper moment whatever of important matter has been advanced in favor of or against him; but the whole case should be stated in the opening, and in clenching argument saved up to operate as a settler in reply.

Pronunciation and accent must be attended to, and the aspirant for oratorical fame must give frequent attention to such matters.

The use of pauses in speech may be readily learned by a perusal of a good work on punctuation, for pointing is equally necessary whether we use the tongue or the pen. This is especially the case when a speaker has occasion to quote a passage from an author. Next to proper emphasis, proper pausing is most essential to the effectual rendering of either poetry or prose.

(To be continued.)

DEEMING'S PHOTOGRAPH.

IN reply to Mr. Gilby's letter (which is given in another column), we desire to express our sincere thanks to our Australian correspondent for so valuable a curiosity, especially as we were not able to obtain a copy of Deeming's photograph from Melbourne.

The one before us appears in every way to be an authentic and reliable representation of the man about whom there was so much controversial evidence.

In the first place—Phrenologically speaking—we notice a great width of head from ear to ear, denoting immense animal and physical power. The indications of quality are conspicuous by their absence.

The Observing faculties are particularly strong and active. Those qualities must have greatly aided his executive power in whatever he undertook. He possessed large Form, Size, Weight and Order, together with large Secretiveness, great reserve power and ability to mind his own business and attend to his own concerns. His lips were remarkably compressed, indicating a man who was non-committal and concentrated in his action. They are also characteristic of marvellous self-control, coolness and reserve. Evidence must have come very slowly from him in any particular which concerned himself at any period of his life. His jaw indicates immense

power and concentrated strength, together with firmness and remarkable stability of purpose. He must have possessed an iron will and a very determined spirit to go through with any action that he had set himself.

His ears were irregular, especially his right one, and particularly wanting in refinement. His nose indicates executiveness and strength of purpose, and the eye indicates penetra-



DEEMING'S PHOTOGRAPH.
THE NOTORIOUS "WILLIAMS."
(*The only true likeness.*)

tion. His motive temperament must have aided largely in giving grip and strength of fibre to his muscles. The distance from the ear to the centre of the frontal bone is so strongly marked that he must have shown exceptional diplomatic power, and had he been of a higher cast would have undoubtedly shown superior abilities in organising and scheming. He appears to have had no fear, but superior courage in

carrying out his plans, also a hardness of temper and lack of sympathy which can hardly be equalled. Acquisitiveness is strongly represented in the width of his head and breadth of his nose, in short, the photograph represents a very clever, scheming, observing, reticent, executive mind.

In the June number of the *Phrenological Magazine* [page 250], 1892, we give Dr. Lyle's account of Deeming, to which we refer our readers. There is a portrait of Deeming in the May number of the *Review of Reviews*, page 440, which gives him the same hard features, combined with the air of the clever gentleman: this portrait is without his hat; the one we give above was the last one taken of him.

THE EDITOR.

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., JUNE, 1893.

THE FOURTH DIMENSION. "THE Fourth Dimension: Mathematical and Spiritualistic," is the subject of Professor Hermann Schubert's long article in the *Monist*. He sums up his article by saying:—"If, therefore, there really is behind such phenomena as mind-reading, telepathy, and similar psychical phenomena, something besides humbug and self-illusion, what we have to do is to study privately and carefully by serious experiments the success or non-success of such phenomena, and not allow ourselves to be influenced by the public and dramatic performances of psychical artists. The high eminence on which the knowledge and civilisation of humanity now stands was not reached by the thoughtless employment of fanciful ideas nor by recourse to four dimensional worlds, but by hard, serious labour, and slow, unceasing research. Let all men of science, therefore, band themselves together and oppose a solid front to methods that explain everything that is now mysterious to us by the interference of independent spirits. For these methods owing to the fact that they can explain everything, explain nothing and thus oppose dangerous obstacles to the progress of real research to which we owe the beautiful temple of modern knowledge." I agree with W. T. S. when he says he thinks that few if any of the more intelligent researchers in psychical matters would dissent in the least from this

appeal for experiment in order to eliminate as far as possible the necessity of referring to any agencies, the laws governing which lie beyond our knowledge. But they would say, and rightly so, that if they came across phenomena absolutely inexplicable, excepting on the theory of fourth dimensional space, we should not be so unscientific as to refuse to admit the possibility of the phenomena, or provisionally to admit that the fourth dimensional hypothesis may be correct.

HOUSING OUT CHILDREN. MISS FORENCE DAVENPORT HILL practically points out the impossibility of dealing with children in a lump. We are glad she sees that even necessary knowledge of their physical condition cannot be obtained where children must be dealt with in crowds; how much more necessary is it when considering the mental condition of these little individualities? The question of the re-homing of orphans, or the boarding-out system, is worthy of the attention of all truly philanthropic minds. Phrenologists who are Guardians, or who have local control in Public Institutions, must agitate for a nobler understanding of and training for our children who are huddled together in our poor-houses.

EXPERIENCE AND ITS PRICE. EVERYONE who has watched the Hull strike and its disastrous consequences must have queried in their own minds the reason why the settlement could not have come weeks ago. On the one side the ship-owners have withdrawn the preference attaching to the federation ticket, and Unionists will suffer no disability from being members of a Union. On the other side, the Unionists consent to work side by side with non-Unionists, and the foremen and stevedores are not to be members of the Union.

The balance-sheet of profit and loss can be reckoned thus: Credit side there is practically nothing to let down but the *status quo*, plus an indefinite quantity of moral lessons which have been brought home to all parties in the course of the struggle, and which may be appreciated in years to come. On the debit side we have thousands of tons of shipping absolutely lost to Hull. Comparing this year with last, a certain amount of trade permanently diverted from the port, eight weeks of semi-starvation endured by the dockers, an expenditure running far into five figures by the Shipping Federation, of not less than £12,000 by the Dockers' Union and their friends, &c., &c.

These facts preceed our intentional remarks regarding the Heads of Organised Labour. (1) They should be men selected for their ability in the management of men. Men whose large Firmness, Self-esteem, Combateness, and Executive Power are balanced by their Benevolence and Conscientiousness. (2) And, moreover, they need to be men whose domestic propensities and selfish faculties are guided by their intellectual and intuitional qualities. (3) They should be men of comprehensive minds, well developed heads, and well balanced organisations.

THE IMPERIAL INSTITUTE. THE Imperial Institute has been duly opened. The architect has certainly the right kind of head on his shoulders. He has proved himself capable, not only in his profession, but has showed common sense in the carrying out of his work. He has inherited his talent for architecture, and has been an abstainer for twenty years.

Fowler Institute.

MEMBERS' NOTES.

*Our doubts are traitors,
And make us lose the good we oft might win
By fearing to attempt.*

—SHAKESPEARE.

THE Members' Meeting which was held on Monday, May 8th, at the above Institute was one of great interest. Mr. Lepage read a most carefully prepared paper on Eyesight, which contained much instructive and useful information. After giving a clear and minute description of the Anatomy, and the various muscles which move that organ, Mr. Lepage went on to explain why defective sight is so on the increase, and the best way to prevent it. He thought it very essential that every Phrenologist should be thoroughly acquainted with its Anatomical and Physiological laws, and went on to show how the colour of the iris is usually in accordance with the general colouring of the individual, so that we have every variety of shade from the dark brown of the brunette and the grey or blue of the blonde, to the colourless iris of the Albino. In the infant the eye is the first and chief organ through which the intellect is developed ; at six days he will recognize a candle flame, while he will be six weeks or more before he uses his second sense, hearing. Mr. Lepage pointed out how careful parents should be to protect young children from the glare of bright lights as a frequent cause

of impaired sight, and urged upon them the necessity of allowing their children to be in the fields as much as possible, they being their best friends in early life, toning up the system, and strengthening the eyesight. Mr. Lepage also mentioned civilization as the cause of the myopic or the nearsighted eye, and showed how the natural condition of aboriginal man was farsightedness, and said that among breeders of animals it was well known that where animals are too highly or finely bred, the eye is the first to suffer. Nearsightedness is fast spreading among the Germans, and in his opinion the cause was to be found in the shape of the head. The broad flat face, or German type, has not the orbit of the more narrow, sharp-featured face of the English and American type ; the eye of the German standing out more prominently, and, in consequence, less protected, is thereby more prone to grow into a nearsighted eye. Mr. Lepage also pointed out overwork, ill-health, and injudicious living, as cause of diseased sight, recommending those who were obliged to sit looking at white paper or at minute work for hours together, to direct their vision every now and then to something green, a green glass being better than nothing. Whenever an eye finds relief in a shaded or coloured glass something is going wrong with the interior of that eye, and he advised those to apply at once to a thorough optician, and not endeavour to remedy the evil by using cheap glasses, &c. The boy who is colour-blind will remain so always ; and as forty in every thousand of the male sex are colour-blind, it is essential that they know their defect, and train their course accordingly. The question now is, how are we to prevent deterioration of vision ? The fault lies at our own doors. Let us all try to correct the now existing evils so that future generations will, instead of censuring us, will thank us for our forethought and wisdom. Mr. Lepage then exhibited his diagrams, and afterwards distributed some most useful rules for the preservation of eyesight. The meeting was thrown open for discussion, in which Messrs. Whittaker, Ramsey, Tovey, and Coleman took part.

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THE June Members' Meeting will be held at Grove Park on Saturday, the 24th instant. See Members' Card for particulars.

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THE Annual Members' Excursion will be held on Saturday, July 22nd. If a sufficient number of names are submitted before the end of June the Excursion will be to Hythe. Times of departure, &c., may be had on application to Mr. L. Lepage, Hon. Sec.

* *

MISS E. RUSSELL forwards the following information :—The capacity of the human stomach and intestines to bear abuse is evidenced by the fact that an insane patient who died at the Prestwich Asylum had in his abdominal cavity eighteen hundred and forty-one foreign substances, including nails, tacks, glass, pebbles, hair, &c. The weight of this heterogeneous mass was eleven pounds and ten ounces. Is there any wonder that he went insane?

WE are indebted to Mr. Smith for the following interesting fact :— The captain of one of the steamers running between London and Australia has a remarkable development of the organ of Philoprogenitiveness. He is very fond of children and takes no pains to conceal the fact. When relieved by one of his officers from duty on the bridge, he is to be seen going round the ship and slipping bags of sweets into the hands of the little ones accompanying their parents on the voyage. He always takes a large supply of sweets with him for this purpose, and invariably wins the affections of the children on his ship. Nothing gives him more pleasure than a romp with his own children who await his return with the greatest impatience. This captain is also very interested in animals. Dealers in live stock have come to know this, consequently his steamer carries more deck freight in the way of horses, dogs, fowls, pigeons, &c., than any other in the Australian trade. When one considers the terrible mortality among seaborne animals it seems almost incredible that all the four-footed passengers that have travelled with the captain have not only reached their destination alive, but have been landed in excellent condition. His large organ of Philoprogenitiveness, however, explains it. He understands animals better than many veterinary surgeons do, and on more than one occasion has shown his superior knowledge of what they require, to that of those whose occupation solely consists in taking care of them. He does everything in his power to secure their health, happiness, and comfort, of which they seem quite conscious, and endeavour to show their appreciation.

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A CASE of great rarity is just reported from the French Academy of Science, of a case of sclerema, or petrifying of the skin. The infant is about eighteen months old. When last made the subject of a clinic its flesh was cold and almost as hard as marble, yet it still continues to live, the lips and eyelids being the only movable parts of the body. The lining of the lips and the eyelids, and a small place under each arm are the only parts which show any warmth or sign of human flesh. The child was in a perfectly healthy condition until it received a fall striking on the back of the head in June of last year, from which time the disease has existed and seems to be the result of the shock to the nerves. The physicians give no hope of recovery.

E. CROW.

WHETHER thrallèd or exiled,
Whether poor or rich thou be,
Whether praised or reviled,
Not a rush is it to thee :
This nor that thy rest doth win thee,
But the mind that is within thee.

—George Wither.

THE OPEN COURT.

WITH the view of learning all the facts pertaining to Phrenology and the principles which underlie phrenological phenomena, the Magazine invites all who are able to contribute to this object to send for publication brief articles giving the results of the study and experience relating to any of the following questions :—

1. What objections do friends bring against your arguments in favour of Phrenology ?
 2. What proofs have you noticed in your own family and those of others in support of Phrenology ?
 3. What benefits have arisen from the early examination of your children's heads ?
 4. What are the mental requisites for a good practical phrenologist ?
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Hygienic and Home Department.

THE TEETH OF IDIOTS.

A PECULIAR tendency in idiots to imperfections and disease in the teeth has been noticed by several physicians, and it has been studied by Mme. Sollier in 100 cases of idiots taken at random. The multiplicity and variety of the dental lesions were remarkable, and the conclusion has been drawn, that idiocy, with or without epilepsy, predisposes to arrests of development and to anomalies of dentition. The effect rarely appears in the first teeth, but almost wholly in the second.

VARIETY OF EMPLOYMENT.

USING the familiar story of vigour of Mr. Gladstone in the 84th year of his age, as a text, the *New York Tribune* says :—

Continuous employment of the same physical powers on the same lines involves exhaustion and deterioration. It is varied and symmetrical exercise of all the muscles that lies at the base of any sound system of physical training. The same principle is rightly applied to the mental functions. It is not work that breaks down the men of our time, although it is the busiest of all the ages. What is destructive to nervous force and intellectual vigour is continuous concentration of purpose upon the same object. What the great

majority of workers need is not the rest that comes from complete cessation of activity, but rather the rest that is involved in change of employment and thought.

Mr. Gladstone's career has shown that a prodigious amount of work can be done without producing physical or mental exhaustion, provided it be constantly varied. His outdoor life has come into notoriety from the unusual form of his recreation—that of felling trees in Hawarden Park, but the importance of such exercise has been exaggerated. While he has invariably arranged his life so as to allow the natural man a fair degree of fresh air and physical exercise, he has not followed any system of hygienics.

What he has been careful to do is to avoid continuous intellectual labour on the same level. He has never been so deeply immersed in public affairs as to lose sight of his early classical studies, or his refined taste for Italian literature, or the varying phases of religious or economic controversy, or the trend and tendencies of English fiction. Always at work in Westminster or in his library, he has never lacked either inclination or leisure for taking up subjects of opposite kinds. This has been the secret of the wonderful intellectual vigour which he has never failed to display.

It is not hard work that kills men in this overwrought, busy world. It is the dead level of continuous absorption in business or thought that slowly paralyses the worker. Sir Henry Maine, starting with delicate health, and pursuing with unremitting zeal his studies respecting the origin of law, was fast falling into a London grave when he received a commission for India. For a long period he had a complete change of thought and pursuit, and he returned to England with many years of successful labour in reserve. He had not been idle in India, but he had been enabled to work and to think at a fresh level and in a new way. That is what Mr. Gladstone has done all his life.

“SCIENCE,” says Sir James Sawyer, M.D., “shows that a man's normal power of resisting the inroads of infective disease is diminished or lost when his body is under the influence of alcoholic drinks.”

THE average weight of a skeleton is about 14 pounds.

The brain of a man is twice as large as that of any other animal.

The average height of an Englishman is 5 feet 9 inches.

The average weight of an Englishman is 150 pounds ; of a Frenchman, 136 pounds ; a German, 146 pounds.

The average number of teeth is 32.

APPLES, if eaten by a person in a state of intoxication, have a wonderful effect in restoring lucidity of thought and sobriety, those of an acid flavour being the most efficacious. As a cure for confirmed drunkenness, a diet of stewed apples has been considered, and in many cases found, most successful; in fact, stewed fruit of any kind has a sobering effect upon those labouring under intoxication, so much so that in many homes established for the cure of habitual drunkards a systematic course of fruit diet has been adopted with very great success.

HEREDITARY tendencies, moral, mental or physical, may be stamped out and the standard of the race raised. Enlightenment as to matters of heredity should be widespread, and teachers and parents alert to repress or develop as each individual case may require. Instead of allowing a child just to "grow," like Topsy, we should adopt Frœbel's method, and from the cradle guide and develop each child as an individual, always taking into account individual peculiarities and inherited tendencies, so that its life may be a symmetrical, well-rounded whole. There must be still room for individuality, and the true disciple of Frœbel delights in drawing out, and repressing only when necessary. Our children are crowded into the large public schools and put through a common drill which meets some cases and misses more; where many things of first importance receive no attention whatever; and in consequence children cultivate all sorts of deformities. It is the duty of everyone to help elevate the standard of public schools, the parents co-operating with the teachers in the education of our youth, morally, mentally, and physically.

ONE of the strangest things to me is that those who have the care of children never try to weed out their defects while they are little and the task would be comparatively easy. Among the many mothers of my acquaintance I have seen very few who have tried to do this. There is a certain family where the father has bequeathed certain ways which have always stood in the way of his success to his little son. This boy is his father over again. Not the least attempt is made to curb these unpleasant characteristics. He is left to grow up with habits that must make him unlovable, and it seems strange that his parents do not see how it will be, but they are blind to any faults in their son. Lazy children are left in their own lazy ways because it is easier to let them than to correct them. They are allowed to leave toys anywhere about, and after ten or fifteen years of this want of training, their mother wonders that Johnnie or Jennie is so disorderly. There need be no excuse for wonderment. It is truer with children than with other growths that "as the twig is bent the tree's inclined." Few plants left to grow wild will develop symmetrical forms. It is equally true with other growths as with physical.

NEXT to knowing when to seize an opportunity the most important thing in life is to know when to forego an advantage.—*B. Disraeli.*

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.]

ON Wednesday evening, May 3rd, Miss Maxwell read an interesting paper on "Individuality," from which we give a few extracts :—

"The economy of nature in the use of her instruments is wonderful, and the very fact that she does not employ the same instrument for any two varieties of action, shows that she cannot do it, and that therefore she is not able to produce complicated emotions from an individual organ."

"What then is the function of the organ of Individuality ?

"Its distinctive office is to observe things. It constitutes the door through which the cognisance of external objects enters the mind. Before we can know the uses, properties, causes, &c., of things, we must first know that such things exist."

The location of Individuality both in brain and skull, and the means of estimating the size and power of the organ were given.

"It is divided into two parts, the lower called Physical Observation, which gives a desire to see mere physical objects and to identify them in a general manner, and the upper part, Mental Observation, which gives ability to identify individual powers of mind and to observe definitely. Without it, indeed, it is doubtful if we could form clear notions or distinct ideas upon any subject. Men who give their attention with alacrity to the dry details of things, have always a conspicuous development of the forehead directly and immediately above the root of the nose, and it is equally certain that men of superior talents who do not trouble themselves about mere statistical details, and who have not the disposition to master them, are only endowed with a scanty development of the same part."

"One having very small Individuality will regard things as it were in a mass, and see nothing which is not forced upon his attention."

"All voluntary motion originating in the mind is communicated to the organ of Individuality, and from thence transmitted through correspondent nerves to that part of the body where the mind directs motion to be made. Hence, the organ of Individuality is the one that constitutes our individualism or personal identity, and by which we identify all individual objects in the external world."

Thomas Moore, G. Crabbe, Tennyson, Keats, and Sir Walter Scott were given as instances, as possessing Individuality largely developed.

"This faculty enabled Scott to describe with such glowing truthfulness the charming scenery of his native land in 'The Lady of the Lake,' and the incidents of the Battle of Flodden Field in 'Marmion,' in which everything that could make a battle intensely real is described in the most vivid and vigorous style."

Some discussion followed upon Magnetism and Individuality, and also upon the statement made that "Individuality when large, separates the eyebrows and causes them as they approach the nose to arch, but when small, the eyebrows nearly meet and are almost horizontal."

At a recent meeting of the British Phrenological Association Mr. D. E. Samuel occupied the chair, and Mr. James Webb gave a lecture, entitled "Some of our Statesmen Phrenologically Considered." After defining the several organs and their situation about the head, Mr. Webb proceeded to explain the difference between a Conservative and a Liberal phrenologically considered.—*Evening Standard*.

At a Wednesday evening meeting at the Fowler Institute, on May 17th, an interesting lecture was given by Mr. A. Hubert on "The Harmony between Phrenology and Physiognomy." The lecture was illustrated by about fifty slides, including portraits of Mr. Gladstone, the late Earl Derby, Mr. J. Chamberlain, Lord R. Churchill, Duke of Devonshire, Sir J. Lubbock, Mr. Charles Darwin, &c., whom he described phrenologically and physiognomically. At the close he successfully examined a gentleman who was a total stranger to him. Mr. Wm. Brown occupied the chair.—*The City Press*.

THE FOWLER INSTITUTE.—On Wednesday, April 26th, a lecturette on the "Relative Value of Mind and Body," was given at the Fowler Institute by Mr. F. T. Ashby, who spoke principally on the Temperaments. At the conclusion an animated discussion took place.—*The City Press*.

THE Fellows of the Fowler Institute have during the month been in request at Bazaars. On May 4th, 5th, and 6th, Mr. J. Baldwin, F.F.I., was in request at St. Mark's Church, Battersea. At the Wesleyan Church, Ferndale Road, W., Mr. Eagle, A.F.I., and Mr. Lepage, F.F.I., "gave short lectures on Phrenology, and examined a great number of individual heads." The *West London Mercury*, of May 6th, says, "The Fowler Institute is to be congratulated on sending forth those possessing information so accurate and observation so acute." Miss E. Russell, F.F.I., attended a sale of work in connection with the Regent's Park Baptist Chapel, May 17th and 18th.

Notes and News of the Month.

MAKING ONESELF AGREEABLE.

THE true art of being agreeable is to appear well pleased with all the company, and rather to seem well entertained with them, than to bring entertainment to them. A man thus disposed, perhaps, may have not much learning, nor any wit; but if he has common sense and some-

thing friendly in his behaviour, it conciliates men's minds more than the brightest parts without this disposition. It is true, indeed, that we should not dissemble and flatter in company, but a man may be very agreeable, strictly consistent with truth and sincerity, by a prudent silence when he cannot concur, and a pleasing assent when he can. Now and then you meet with a person so exactly formed to please, that he will gain upon every one that hears or beholds him; this disposition is not merely the gift of nature, but frequently the effect of much knowledge of the world, and a command over the passions.—ADDISON.

* *

THE number of Protestant native Christians in India and Burmah increased from 492,882 to 648,843 in 1881 to 1890.

* *

OUT of a population in the United States of 62,622,250, according to the last census, the total of the foreign-born class who were immigrants was nearly 10,000,000.

* *

“THE average African, if at all educated,” declares Bishop Smythies, of Central Africa, “is a much more ready speaker and a much better preacher than the English clergy, when at three-and-twenty they are ordained deacons.”

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OWING to the numerous requests which have been received of late for photographs of Mr. Fowler, he has consented to allow the enclosed plate to accompany the June number of the *Phrenological Magazine*. The photograph was taken on March 8th.—Sub-Ed. *P.M.*

* *

MRS. CARNEY, an American schoolmistress, is famous through writing, in 1845, only four lines, namely, “Little drops of water, Little grains of sand, Make the mighty ocean, And the pleasant land,” which are probably familiar to everybody who speaks English.

* *

IN Finland, above all other countries, do women enter into the business of life. They are clerks, doctors, dentists, builders, managers of small companies, and bank cashiers. They are especially sought for in the last capacity, on account of their reputation for honesty.

* *

A “YOUNG ladies' telephone school” has been established by the government in the city of San Salvador for the purpose of training young señoritas for the service of the American Telephone Company there. This is a decided innovation, for work is not considered at all good form by the ladies of San Salvador or of the other Southern republics.

* *

PFARRER JOHANNES HANNSBERGEN, the oldest priest in the diocese of Salzburg, has just died at the age of 98. The *Daily News* Correspondent in Vienna tells us that the old man lived like a Spartan, never tasted coffee, tobacco, or snuff in his life, and not only never rode in a

railway train, but never even saw one. On the 27th of August he celebrated the 60th anniversary of the first Mass he ever read. Early in the morning of that day he confessed, then gathered a fresh nosegay to decorate his tall hat, which was new in 1848. In this festive garb he went to church. When the Archbishop of Salzburg came to congratulate him, he replied in a beautiful Latin speech. During his long career he wrote 2,751 sermons. The old man always felt proud that he had christened the children, parents, and even grandparents of those in whose midst he had lived his pastoral life.

* *

"ALL is not gold that glitters," and everything is not going to be lovely at the fair at Chicago. The theatres will not pay expenses and even now the companies there are playing to empty benches. Those who expect to go to the fair are saving their money for that purpose, and those who do go will have no money left to spend on the theatres, and those who do have money will be too tired to go. It will be about equal to a journey to California on foot to cover everything, and what applies to the theatres applies equally well to the stores. Who will want to pay two prices in Chicago for what they do not want and which they can find at home? The only people who will thrive will be the restaurant and saloon keepers. People must eat and drink whatever it costs, but in that, as no one expects to get the worth of his money, no one will be excessively disappointed in paying much and getting little.

* *

THE ancient city and seaport of Havre has a grand old man compared with whom Mr. Gladstone may be considered no more than middle-aged. Dr. De Boissy is 100 years and some days old. In honour of his having completed a century he has been fêted at a dinner given in his honour by the medical faculty of his native place. In accordance with French custom he presided himself. After eating an excellent dinner he made a lively and amusing speech, which was much applauded. His father, he declared, lived to be 108 years old, and as for himself he had every hope of going on for a long while yet to come, labouring in the cause of suffering humanity. During the cholera epidemic, the year before last, Dr. De Boissy is said to have greatly distinguished himself, and to have gained a medal of honour for the arduous work he performed.

* *

MARION CRAWFORD'S belief in Occultism is described in the *Bookman*. He says: "All religions are merely the efforts of man to know his own soul. All religions are more or less perfect forms of self-hypnotism. It is when a man is in the self-hypnotic trance as produced by the wise men of India and Japan, that he sees his real soul best. This real soul is called the dominant self, and lies latent, a prisoner as it were, in every human being. It is an exceedingly dangerous thing for a man uninstructed in the processes and precautions of the East to attempt to see his dominant self. It is like letting one of the genii in the 'Arabian Knights' out of its copper kettle; you have no means of knowing whether it will prove to be a good or an evil spirit." Mr. Crawford

maintains that in the hypnotic trance, the adept not only contemplates his dominant self in the present, but also in the past, and to a limited degree in the future. "They can see the ripples a little ahead."

* *

NEW AND IMPORTANT WORK ON PHRENOLOGY.—*The Encyclopædia Dictionary of Phrenology*, by Alfred T. Story, author of *Indications of Character in the Face*, *A Manual of Phrenology*, &c. This work, of which it is proposed to publish the first edition by subscription, has been very carefully compiled by the author, with the assistance of several able coadjutors. It will be found of the greatest use to all interested in Phrenology. It is proposed to publish a first edition of 2,000 copies at the price of 1/- each. Special terms will be offered to lecturers and others ordering a quantity. Anyone desiring to insert an advertisement in the book will oblige by communicating with the publisher, L. N. Fowler.

Book Notice.

A Metaphysical Octave; Notes towards Theological Harmony, by C. Hellmann. London: Eliot Stock, 62, Paternoster Row. This booklet, with Evidence for the first, and Eternity for the last note of its octave, is well worth a careful perusal. The writer, evidently acquainted with Phrenology, has indeed touched the metaphysical notes in a manner that will surely help to bring about the much desired theological harmony. Reason and thought, as well as clear, spiritual insight, are evident throughout the book. The various parts of man's nature and all his faculties, being "in correspondence with their own environment," is taken as the ground of belief that man is in correspondence with a Supreme Power, that his life is a devolution from a Supreme Being, and that his capacity for the spiritual appears guarantee for a spirit world, and a spirit world for a Supreme Spirit. The writer goes on to show that differences in religious opinions, and the diversity of opinion as to what is truth, depends greatly upon hereditary mental bias, and the influences brought to bear upon the mind. The responsibility of living being greater than that of dying, the education of the higher faculties at an early age is held to be of vital importance. The conception of eternity differs according to the particular bent of the individual mind, for each anticipates that which he most desires.

Correspondence.

DEAR EDITOR,—Being a subscriber to the *Phrenological Magazine* I have waited anxiously for the appearance of something reliable in the columns of the *Phrenological Magazine* in regard to the notorious Deeming, *alias* Williams. I have hoped you would have been successful in your writing to Melbourne for the required information.

Prior to Deeming's trial and execution, I collected all the photos, so called, that appeared in our illustrated newspapers for the purpose

of forwarding them to you so that the readers of the *Phrenological Magazine* might be posted up in the phrenological character of so noted a criminal ; but finding the photos so dissimilar I committed them to the kitchen fire.

Fortunately I have now secured an original photo, which I enclose herewith to you. This photo was taken the day Deeming arrived in Melbourne from Western Australia, in charge of the Detective.

A friend of mine had a friend who paid a visit to Melbourne just at that time and secured the enclosed photo for him, which was exhibited in my friend's shop window from that time (a few days before Deeming's final trial) forward for several weeks. I made several attempts at prevailing upon my friend to hand this photo over to me but till one month ago he clung to his prize.

I have obtained an enlargement of the picture for my own benefit, and have much pleasure in now presenting you, Sir, with the original.

I am, yours faithfully,

SAMUEL GILBY.

Sydney, N. S. W.,
March 28th, 1893.

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 photograph ; 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 6s., for twelve 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.]

ELLEN M. (Concord).—This lady has a strong constitution and is adapted to a responsible sphere of life. She partakes much of her father's general character, and can do that which requires a masculine as well as a feminine mind. She is in her element when taking responsibilities. She has an organization that can manage and direct others. Is naturally methodical, orderly, and does things thoroughly. She is executive, and, if necessary, forcible. Is firm, persevering, and has presence of mind in times of danger. Is not one of the half-way kind, but does the thing as a whole, or would prefer not to do any of it. She is not brilliant, particularly witty, or imaginative, but she has sense, judgment, and an eye to business. Is whole-hearted, and can look after business, or home, and children. Is ambitious, independent in thought and feeling, and decidedly positive in her likes and dislikes. She would go a long way to accommodate her friends, and her enemies had better look out for themselves. She is not a copious talker, nor is she brilliant in style, but sound, sensible, and conscientious ; can be relied upon in times of danger. She has a strong moral brain, and should be characterised for her keen sympathy. She is comparatively ingenious, and can turn off work with despatch. She is liable to over-work and break down before her life-work is finished, for she is so anxious to be doing.

LYONS (N. S. Wales).—The photo of this gentleman indicates

strength of constitution and good vital powers ; there is every indication of strength and vigour, he has good sustaining powers, and capacity for hard work. His bodily powers are well adapted to an active out-door pursuit, and engaging in physical labour. He has a practical cast of mind, and an active one ; is all alive to his surroundings and thoroughly in touch with his work. His mind easily assimilates and adapts itself to its surroundings. He is an experimentalist, and a man of experience rather than of reason. The elements of cautiousness and of prudence enter largely into his disposition, giving him forethought and ability to use his judgment, to avoid unnecessary dangers ; he is not hasty, generally speaking. He has good mechanical ability, and will learn best what he sees, for his perceptive faculties are all large. He is a careful worker, plodding than otherwise, but very enthusiastic and full of hope and life. He is economical and thrifty, candid and open-minded ; rather sensitive, and his love of approbation is strong. The social faculties are well represented.

“GOUJOU, Mosgow.”—The photos of this lady indicate a finely organized and susceptible mind. She has a predominance of the mental-vital temperament. All the actions of the mind are vigorous and accompanied with great force of character. She is intense in her feelings, both in enjoyment and suffering. Her sympathy is one of her leading characteristics, what she feels and does for others far outweighs her thoughts of self ; she is very kind-hearted, amiable and attentive. She is energetic and thorough in her actions, has considerable abilities as a worker, and would prefer the active side of life. She is candid and out-spoken, free in thought and action, and very expressive. She has sound judgment, and good practical talent, accompanied with considerable taste and artistic skill. She is very neat and systematic, and a lover of order. Her social faculties are well represented, giving her warmth of feeling and an emotional nature. She is quite affectionate and constant, and when attached is a desirable companion. Love of home is strong. She has considerable patience, is cautious and prudent, quite economical. She is very sensitive. All the moral and religious faculties are strong, but she is not very hopeful.

H. W. C. (Overton).—The photos of this gentleman indicate a well-balanced temperament ; the body is in good proportion to the brain, and the mind is evenly developed. He has a practical and available mind ; good powers of observation and reasoning faculties, also capacity to compare, observe and reason from what he sees. He has a scientific cast of mind, is a close observer, a lover of experiments, and a man of large experience. He should be conspicuous for his love of regulating his actions and work by a strict sense of order, he is a quick and systematic worker, and given very much to plan and lay out what he does so as to economise time. His organ of colour is good, giving him ability to blend and arrange colours with good effect. He is energetic, spirited, and rather plucky. Prudence and forethought are prominent in his character. Love of children and the disposition to make pets of animals is strong. The social faculties as a group are well developed, he has a warm-hearted and a sensitive nature, and is much attached to home. He is fairly patient and disposed to wait for opportunities, has contented mind and a happy easy disposition.

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SIR ROBERT S. BALL, F.R.S.,
ASTRONOMER ROYAL OF IRELAND.

THIS gentleman possesses a compact and remarkably well-balanced organization. His nature is full of the milk of human kindness. He has large Intuition, which enables him to understand men in a truly royal way. He is unique in his adaptability of mind. His head is high from the opening of the ear to the coronal region, and also deep from the opening of the ear to the frontal angle, giving him unusual moral aspirations and intellectual

ability. His scientific, observing and intuitive faculties are particularly strong : they give him more than ordinary ability to collect information, gather facts, and ascertain data for future use. He is not one however to allow his observations to guide him, without considerable reflection and maturity of thought. His large Comparison and Intuition make him take a delight in ascertaining definite and logical facts. His mind does not jump to conclusions, but prefers to weigh and balance evidence. He is a great seeker after truth. His sympathies are exceedingly large, which must influence his character in a marked degree. He collects information with as strong a desire to benefit the masses as to gratify his own wishes. He will always have his store-house of knowledge full ; but he believes thoroughly in the idea of growth and progress rather than in stereotyped or fossilized ideas that were once considered to be the best possible facts. His Veneration is large and gives him a distinct respect for superiority wherever he finds it, but he is not a man worshipper, nor does he take the evidence of one man as conclusive. He has marked geniality of character. He should be able to describe what he knows, and write what he thinks in an exceedingly acceptable manner. He is not pedantic, proud, or haughty in disposition, but inclined to explain what he knows in a clear, forcible and enthusiastic manner. His social brain is strongly marked which indicates that he understands the claims of society and the wants of the family, and uses those faculties as a medium for touching the hearts of the people. He should be strongly attached to children and able to understand their wants and requirements. His perfecting abilities are above the average. He is a complete master of whatever he undertakes, and has special power to embellish his ideas. His Sublimity and Ideality make him a great lover of nature. He delights in investigating subjects that are out of the common, that are wonderful and great, yet he possesses so much simplicity of character that he can bend himself to reach the youngest enquirer. He has a good hold on life, which is indicated physiognomically as well as phrenologically. He possesses a superior quality of organization which gives him great taste and fineness of conception. He is not wanting in Language, and should be able to express himself appropriately and to the point without becoming wearisome or verbose. His Order is particularly well developed, giving him the power to plan, arrange, and lay out his ideas according to method and system. He does nothing in a reckless, careless manner. He is very exact and accurate in his estimates. He does not trust everything to memory, but

prefers to give all his important facts from notes. He is energetic, forcible, and wide awake. He will not be known particularly for being severe, caustic, or argumentative for the sake of it. His vital temperament, joined to a distinctly mental bias, gives him unusual power in expressing himself with warmth, ardour, and enthusiasm. He is not so reserved as to be difficult to approach, but is sufficiently dignified to know his own position and be able to keep it. His power of body and mind seem to harmonize well, and both his nose and ears indicate strength and vitality. He is quick to distinguish the forms and outlines of things, and his memory of special events should be a great aid in his scientific pursuits.

THE EDITOR.

POWER AND ITS INFLUENCE.*

BY L. N. FOWLER.

MAN'S ambition leads him to desire unlimited power over mind and matter. Hence he seeks to pierce the veil of futurity and make matter subservient to his wishes. There are many ways of showing power, and there are many faculties which aid in giving it.

Let us examine Power under its various aspects.

Sometimes where there is the least outward or physical show there are indications of power. Such as the seed in the wooden shell, which under favourable conditions bursts out into beauty, strength, and at last, power.

The Egyptians used small pieces of soft wood which, when soaked, were driven into small openings in the rocks and which succeeded in splitting rocks from sixty to a hundred feet long.

Think of the marvellous power which shows itself in the complexity of our bodies.

“Strange that a harp of a thousand strings,
Should keep in tune so long.”

The power is truly marvellous which comes through our bones and muscles, and which is increased through lifting, wrestling, and physical exercises.

Examine the power of the Swede as compared with those who do not exercise.

Consider the wonderful power of the skin which covers these bones and muscles and which contains its two million glands.

* Notes of a lecture given on June 7th at the Fowler Institute.

Think of the power in the miles of arteries and veins, of capillaries and nerves ; in the blood with the millions of millions of blood corpuscles, each a microcosm in itself.

Think of the power of the senses, the eye whose cones are estimated at over three millions, and its roots at over thirty millions.

Above all, the most wonderful and powerful of all, the brain itself, with its six hundred million cells, each cell consisting of several thousand visible molecules, and each molecule again of many millions of atoms.

Phrenology can explain why there are different kinds of power. We have power exhibited through Approbateness, which gives its ambition. The spider shows its power and approbation when it has caught a fly ; a man shows his when he has caught a hare ; another, when he has taken a fish in a net ; another, when he has taken wild boars ; another, when he has taken bears ; another, when he has taken "Samaritans." This faculty stimulates vanity or love of power for its own sake. Alexander may be taken as an example of this pure love of power in its extreme. His desire was to conquer, not to inherit or to rule. When news was brought in that his father, Philip, had taken some town, or won some battle, instead of appearing delighted with it, he used to say to his companions, "My father will go on conquering till there be nothing extraordinary left for you and me to do." He is said even to have been mortified at the number of the stars, considering that he had not been able to conquer one world. Such love of power was justly foredoomed to disappointment.

Power again is exhibited in the acquisition of wealth, or a continual and restless search after fortune, "which," says Bacon, "takes up too much of their time who have nobler things to observe." Under this point Acquisitiveness is the faculty under continual activity. Vanderbilt was an example. As regards the fame which power gives we must not confuse name and essence. To be remembered is not necessarily to be famous. There is infamy as well as fame, and unhappily almost as many people are remembered for the one as the other, and not a few for a mixture of both. Who would not rather be forgotten than recollected as Ahab or Jezebel, Nero, Messalina or Heliogabalus, King John, or Richard III. ?

To be nameless in worthy deeds exceeds in power an infamous history. The Canaanitish woman lives more happily without a name than Herodias with one.

Kings and generals have been noted for their power, and have been remembered as much for their deaths as for their

lives, for their misfortunes as for their successes. The hero of Thermopylæ was Leonidas, not Xerxes. Napoleon loved power, but he was a great genius rather than a hero. What came of all his victories? They passed away like the smoke of his guns, and he left France weaker and poorer and smaller than he found her. Power has to be studied from its various standpoints.

What one man values as power another does not. One man values the power another has in being able to rule his own spirit and control his own desires. Another values the power that a man has who is ruler of a city or nation. Some statesmen and generals have wielded immense power during their lives, and the newspapers have chronicled every word and movement they made. But the powerful influence of the philosopher and poet is more lasting and enduring.

The men of greatest lasting power in the world have not been generals, but *thinkers*.

Rulers and kings who reigned over our ancestors have for the most part long sunk into oblivion, but the lives of men who have put forth thought cannot be compressed into any biography; they have lived not merely in their own generation, but for all time. Power is found in oratory, through the action of the faculties of large Sublimity, Language, Ideality, Comparison, Human Nature, and a wide range of oratory there is. Power of another kind is seen in Alimentiveness and Approbateness, or ability to eat and drink to excess, and ambition. Power is also seen in the autocrat, who with large Self-Esteem is able to domineer over others.

Power is also shown through large Causality. Some reason about things for the sake of the argument, whether they have very much to reason about or not. Locke, Bacon, Hobbes, and Berkeley, Hume, and Hamilton, were powerful in reasoning ability, and Phrenology points out wherein they were powerful, yet different. It is a mistake therefore to associate power with strength, or wealth only. What a much greater power there was in the work of Columbus than in that of Nero, though the credit of power is naturally given to Nero, because of the association of forcible deeds. What wonderful power there was in Prometheus, who was the personification of forethought, and who discovered the art of procuring fire.

Cerebral power was shown by our men of science, for it was not wealth that made them powerful, but brains. The power they showed came from humble beginnings. Ray was the son of a blacksmith, Watt of a ship-wright, Franklin of a tallow-chandler, Dalton of a handloom weaver, Laplace of a

farmer, Linnæus of a poor curate, Faraday of a blacksmith, Lamarck of a banker's clerk ; George Stevenson was a working collier ; Davy was an apothecary's assistant ; Wheatstone was a musical instrument maker. Galileo, Kepler, Cuvier, and Sir Wm. Herschel, were all children of poor parents. Newton was a powerful man and wielded immense influence through his discovery of gravitation.

Cerebral power was shown by Prof. Simpson with the practical application of anæsthetics, and Darwin with the creation of modern natural history. These men, among others of similar power and advanced thought, have made our history and moulded our opinions ; and though during life they may have occupied comparatively an insignificant space, in the eyes of their countrymen they became at length an irresistible power, and have now justly grown to a glorious memory.

We are introduced to many wonderful and powerful experiences, through the Psychical Research Society, of mind transference, and this subject is bound to receive more and more attention. Pythagoras, Socrates, Appolonius, Merlin, Roger Bacon, Savonarola, Faustus, Paracelsus, and others were cited as possessing different kinds of power.

The lecture was also illustrated by paintings of persons who had shown exceptional power in various directions, such as Garibaldi, Elizabeth Fry, A. Lincoln, Weston, Australian and New Zealand Natives.

SCHOOL - FLOGGING, CONSIDERED IN REFERENCE TO ITS EFFECT ON BOYS OF DIFFERENT TEMPERAMENTS.

By E. J. HYTCHE.

THE prevalent ignorance of the constitution of man cannot be more strikingly illustrated than by a reference to the methods adopted for the development of the mental faculties. The effects of this ignorance are not limited to any period of life ; for, in tracing our own histories, we perceive that at every era we have been subject to external influences which were calculated to retard rather than accelerate the growth of mind. But at no period have these mal-influences been more powerful than during the time allotted to school-training ; for then we were the passive victims of the unskilfulness of professed educationists—unskilful, because

necessarily devoid of that knowledge which is the prerequisite of success. It is to the ignorance of schoolmasters that we must ascribe the use which has been so universally made by them of flogging. For had these hard-working men been aware that it is as natural for a well-developed organ to act without compulsion, as it is for the well-strung sinew to delight in displaying its vigour, they could not have imagined that the fear of disgrace or pain would incite, when the most powerful of all motives—the pleasure of exercise—was found unavailing. Moreover, had teachers appealed to facts, they would have perceived that, as there are idiosyncrasies in the powers of assimilation and digestion, so there are natural differences in mental power, varying from the capacity of an idiot to the grasp of a Franklin. And the same reason which precludes the punishment of those who possess naturally weak digestive organs—namely, that the inability was *not* self-caused—would have prevented the chastisement of those who, like Mr. Combe, possessed feeble calculating power, or, like Gall, were ill-fitted to appreciate outline. Mrs. Maclean, then, uttered a philosophic axiom, when, referring to the principles, or *no*-principles, displayed in mental culture, she said—

“ How much they suffer from our faults,
 How much from our mistakes ;
 How often, too, mistaken zeal
 A pupil's misery makes ! ”

The disuse of flogging appears to be a necessary deduction from Phrenology : and this inference becomes strengthened when the question is considered in relation to those temperamental constitutions which are traceable in every school. If we examine a school, the first feature observed is the marked differences in temperament. Nor is this a worthless feature ; for according to the kind of temperament is the development of a specific class of organs. I shall therefore discuss the effect of punishment on each kind of temperament, first dividing my subjects into three classes, namely, the motive, vital, and mental.

The most prevalent temperament in schools is the motive, predominating, as it does, in 70 out of every 100 boys. In connection with this temperament there is found a great tendency to physical exercises, accompanied with quickness in performing feats of muscular dexterity. In the school vacuity or wandering of mind is displayed ; the thoughts cannot be fixed on study ; and, whilst the body is restless, the intellect appears lazy and dormant. Study is sometimes commenced with vigour, and a determination to succeed ; but the fixity of intellect cannot be long retained, and the

body solicits, if not demands, that action which is a part of its food. Transfer the boy to the play-ground, and all his faculties become alive ; ceasing to be the dunce, he is the recognised dux, and affords sure evidence that the power to do, and the will to do, are rarely separate. One fact, however, is observable—that amidst this ultra-activity the exercise to which he is prone is that which necessitates muscular action ; and that for *direct* mental employment he exhibits similar disinclination to that which he displayed in school. The truth is, the motive temperament does impart an irrepressible proneness to physical exercises ; and I have never yet met a person in whom it predominated, who, whatever his intellect, could study, unless he had *first* partially tired his physical system by active exercise.

As regards intellectual development, boys in whom this temperament prevails rarely possess much *size* of the reflecting group, but the organs of perception are usually large. Hence it is that the majority of school-boys are fonder of facts than of metaphysical subtleties, and exhibit a deeper acquaintance with external nature than with books. The organs of Alimentiveness, Approbateness, and Combateness, are usually found large in boys of the motive temperament ; for the very pursuits to which they are inclined, by administering to, are calculated to increase the power of these organs. Adhesiveness is also generally found well developed. These organs indicate the existence of an energy which makes them too earnest to do things by halves, and hence they perform every thing or refrain altogether. Now, when a lad with these characteristics is chastised, it is rarely for want of activity, or because he is obstinate or self-willed ; but usually because, disregarding the lesson assigned, he evinces that he would rather be engaged in bird-nesting than in conning the brain-confusing rules of Lindley Murray. The fact then is, disguise it as we may, that the motive are chastised for obeying natural and healthy impulses, and that which is an innate excellence, fitting them, as it does, to cope with natural obstacles, is deemed a species of crime ; and thus the judgment of Roger Ascham was not the decision of prejudice—"The wisest of your great beaters do as oft punish nature as they do correct faults, yea, many times the better nature is sorer punished." And what is the result ? Lads with the organization predicated perceive that an attempt is being made to destroy their *individuality*, and conform them to some ideal model, with which, from its contrareity to their taste, they have no sympathy. Combateness awakens to resist the aggression, and becomes a prominent feature from its con-

tinuous action, until, in the sequel, the animal organs, ever difficult to govern, are rendered unduly active, if not rampant. Thus, then, as regards the motive temperament, it is shewn that to prescribe flogging is like attempting to drive out of the system one disease by introducing the virus of another, whereby the first is not only left untouched, but we find two diseases rioting in the system instead one only. Such is the quackery of education, of all quackeries the worst, because irremediable.

And the result which is predicable of the motive is illustrated by the second class—that is, the lymphatic or vital. The per-centage of this temperament is about 20. In this case there is both physical lethargy and mental apathy, and this dead level is rarely altered by those occasional excitements to which other lads are subject. During school hours, if not asleep, they are drowsy ; if spoken to, they in vain attempt to comprehend your meaning ; and for them there is no opiate like a book. If they succeed in learning a lesson, they stammer it out half asleep, and rarely retain the impression. Unlike the motive, for the lymphatic, the play-ground has no attraction ; the very fact that sports and pastimes demand bodily exertion includes a reason why he refrains. Whether, then, in the play-ground or school, he is in a dormant state ; and, like the boa-constrictor, he appears to possess only sufficient energy to awake and eat, and then to sleep again.

Now, as a means of inciting this sluggish temperament, flogging is altogether inoperative, at least for good. It does not succeed even in awakening the latent animal passions to resent ; for the very fact that resistance pre-supposes considerable exertion, at once quiets the irritation of the violated feelings. Moreover, instead of any improvement being effected in the character, it is necessarily deteriorated ; and the lethargy which was innate becomes cultured instead of repressed. For, as the lymphatic are unable to bear fatigue without recourse to sleep, drowsiness usually supervenes on flogging ; and thus the inactivity of the temperament becomes deepened by the temporary excitement. To say, then, nothing of the extreme cruelty in “punishing, as we often do, rather the weakness of nature than the fault of the scholar,” we perceive that no remedy was ever less calculated to remove a chronic disease than is flogging to overcome the lethargy blended in the lymphatic temperament.

The remaining class to be considered is the nervous or mental. In lads *under fourteen* the average is scarcely five per cent. This is essentially the temperament of *mental*, as the motive is of *physical* action. The intellect, if not

manly in grasp, is at least so in pursuit : no pleasure equals that of study ; physical exercise is neglected, and the brain is tasked to the utmost. Boys of this character are never happy except when engaged with their books ; they read during their meals ; books are their bed-companions ; never behind, but always before, with their lessons, they evince that, with a temperament like theirs, if there be mental power, it *must* work. This procedure unhappily precludes physical education. If the lymphatic boy slinks from the play-ground, it is because he loves sleep ; but if the mental relinquishes it, it is because it prevents study.

In this case, at least, it will be admitted that no stimuli are required—least of all, those which are founded on anticipations of pain. Training, indeed, is desirable ; but to be sound, it should be based on direction rather than excitement ; and the due development of the physical structure, without which the brain ill-nourished must decline, should be the principal object. But yet excitements are applied, as if the natural tendencies were not sufficient without being lashed into a fever-heat. It is true that the appeal is chiefly addressed to Approbativeness ; but, inasmuch as the principle of corporal punishment is known to be recognised, and its practical use occurs daily, there is a possibility before him, and Cautiousness is too ready to insinuate, that *he* too may be a victim : knowing, that unless the lesson be acquired, chastisement will ensue, the learner tasks every faculty to the uttermost to preclude the anticipated disgrace. And thus he is seen with hectic flush, a thin unfleshy cheek, and an unnaturally bright eye—all telling that the brain never sleeps, that it has been fed at the expense of the body, and that, as a consequence, consumption will speedily claim another victim. Well would it be if teachers recollected that such intellect needs no forcing-house ; and that to stimulate the naturally too active brain is to educate it for the madhouse or the grave.

Thus it appears that school-flogging is essentially injurious to every temperament, and more calculated to enfeeble the mind than to increase its powers. Nor would it be too much to affirm that it has destroyed the energies of thousands ; in the one case, by breaking down Hope and Approbativeness—the best incitors of the backward ; and in the other, by causing the brain to be tasked beyond the natural power, so that, at least, it displayed the fatuity of senility in early youth. Cardinal Wolsey, therefore, merely noted a fact when, in inditing the rules of a school which he founded, he said—“ One point that we should think proper to be noticed as of first importance is, that the tender age of

youth should never be urged with severe blows ; for, by this injurious treatment, all sprightliness of genius either is destroyed, or is, at any rate, considerably damped." Happy for the world will it be when this doctrine is reduced to practice.

To indicate some of the tendencies of school-flogging, I shall relate two cases ; one of which reached my own observation, and the other was noted in the course of reading. With temperaments directly opposite, and characters equally diverse, the results were deplorable ; and both traced much that was undesirable in their characters to the evil influence of school-flogging.

C. A. possessed the lymphatic or vital temperament, with a dash of the motive. He manifested no intellectual energy ; and his perceptive organs, though large, were too sluggish to acquire the simplest lesson—in fact, immediately upon trying to learn a task, he went to sleep. Having an invincible repugnance to bodily exercise, the time employed by his class-mates in the play-ground was devoted by C. A. to sleep. His teacher knew nothing of mental philosophy—his educational creed being comprised in a few words—"If a boy *don't* learn, it is simply because he *won't* learn." Acting on this theory, and being naturally in temper a Wackford Squeers, whenever a boy had not acquired the lesson assigned, he was immediately lashed to the back of another boy, and flogged. For the space of two years C. A. underwent this punishment never less than once a day, and often thrice. In addition to the general absence of mental vigour, he had a defect which he has not overcome to this day—that inability to calculate which a phrenologist would predicate from his small organ of Number. His teacher, however, knowing nothing of innate deficiencies, referred the inability to obstinacy—and the customary remedy was employed. As might be expected, chastisement did not strengthen the feeble organs ; but, on the contrary, the faculties became perceptibly less active, and, as he believes, positively stunted. He complained of a haziness of perception, which prevented the least mental application ; and he learnt nothing, because he understood nothing.

Nor was the influence of punishment on Cautiousness of a more satisfactory character. Each morning C. A. might be found at the entrance to the school an hour before the commencement of the business of the day, in order that he might creep into his class unnoticed. Whilst standing by the door he would be found with pale cheek and stertorous breath ; cold, indeed, through fear, in the heat of summer. Cautiousness never slumbered, and at length he appeared to

have scarcely any instinct save fear. He became also a somnambulist. Every night, and generally several times in the same night, he arose from his bed, and with fierce gesticulations flogged the self-created image of his teacher. The day-scenes, also, were reproduced in his dreams: Cautiousness never tired, not even during sleep. The physical system, of course, became deteriorated: acid eructations, and sick headaches, from which he was never free, indicated that the digestive organs had ceased to fulfil their functions. Such, then, were the evil results of *attempting*—vain task!—to coerce, instead of to educe, the faculties.

I will now consider the effects of school-flogging as illustrated by one in whom there was the motive-mental temperament—a combination which indicates an equal bias to bodily and mental action: I refer to Martin Luther. In speaking of his boyhood, Luther writes—“My parents used me very harshly, and rendered me very timid. They thoroughly believed that they were doing me good *but they could not discriminate between minds differently constituted*. My mother chastised me one day so severely that the blood issued for some time.” According to Merle D’Aubigne, he was treated even more harshly at school; for although fond of study, he was equally fond of play, and sometimes preferred rambling in the woods of Eisenach to learning his lessons. To repress this truant disposition, Luther was flogged almost daily: on one occasion punishment was inflicted fifteen times successively. At first the organ of Cautiousness was alone affected; and he, who afterwards laughed at the thunders of the Vatican, shrunk from the presence of a superior, and drew his breath inly when addressed by his teacher. Referring to this period in after-times he said—“My heart was doubtless rendered timid by the threats and tyranny of my master to which I was exposed.” But at length this impression wore off; repetition of punishment steeled him against fear or disgrace; and he was accustomed to ascribe his remarkable firmness of character to the power of repressing his feelings which he acquired at school. The teacher of Luther observed the change—how the boy, fond of praise, became careless of censure—but, like many teachers in the present century, unable to perceive that they themselves have trained the animal organs, exclaimed—“It is of no avail that Martin is flogged; for he only becomes the more obstinate the more he is chastised.” But let not us, who peruse this chapter, in the life of the monk of Wittenberg, forget that if his animal organs sometimes became ungovernable, at least his teachers had done nothing to tame his fiery

spirit. It is in vain for us to treat men like brutes, and expect that they shall act like angels.

I have thus described the effects of school-flogging on boys of various and opposite dispositions ; and shewn that in every instance the result has been unmitigated evil. It does not enter into my view to consider the question in all its varied aspects ; but in shewing that it enfeebles the mind, that it trains men to become wild beasts, and that it consigns thousands to a premature grave, I have adduced sufficient evidence to prove that its infliction is most hurtful, and that John Locke, who shrunk from the idea of school-flogging as men shrink from a venomous reptile, was not actuated by any unreasoning impulse. Let these facts have but due weight, and flogging must cease without, as it already has *within*, lunatic asylums. Remembering that the will to do, and the power to do, are not necessarily combined, kindness will supplant force, and we shall train rather than coerce ; and it will be found, as it has ever been found in past ages, that, to use the eloquent language of Dickens, "men are best ruled by the strong heart, and not by the strong, though immeasurably weaker, hand !"

REPRESENTATIVE SKULLS.—No. IV.

No. XCIII.

THIS skull is very prominent in the base. There appears to have been unusual force of character, and its possessor must have been quite qualified to look out for his own interest.

A fine specimen of a selfish type of head. He had strong domestic feelings or attachment to family and sex. Exceedingly ambitious and loved display ; would be very fond of decorations and ornaments, but wanting in dignity and stability. Was very mindful of appearances, and much more vain than proud. It is not a skull that indicates a reliable character.

He had good powers of observation and imitation.

He had strong imagination with an artistic tendency.

The head does not indicate much nobleness of character, nor of the qualities that give taste and refinement, power to perfect. He was wanting in patience, stability, dignity and uniformity of mind ; yet it is a skull that indicates a good deal of power and versatility of talent.

The quality of organization was capable of considerable culture, but the type as a whole was lower, and not self-

sustaining. He had a sharp, active, reflective intellect, but not the amount of balance of power to be self-directing. The lower basilar brain predominated in strength, and although there was considerable general imagination the tone of mind was not high. His aspirations were altogether of a worldly selfish nature. His leading tendencies were to please, be popular, and to say and do that which would attract the most attention. His greatest defect was the want of stability, firmness, perseverance and dignity. In some respects he must have been bright and showy, but not self-possessed or dignified. He must have been strongly interested in that class of subjects which would allow of extravagant expressions.



Spirituality was large, which must have entered generally into his conversation. Conscientiousness was not defective, although it could not have had very much influence in his character. He was prepared to take extravagant views of subjects that excited his imagination or his love of the marvellous. He was exceedingly secretive and given to actions and language that had strong leanings to the romantic, but his secretiveness, acquisitiveness, and executiveness were such as to stand out very distinctly where there was no chance of saying or doing anything out of the ordinary way.

L. N. FOWLER.

As in nature, as in art, so in grace, it is rough treatment that gives souls, as well as stones, their lustre.—*Dr. Guthrie.*

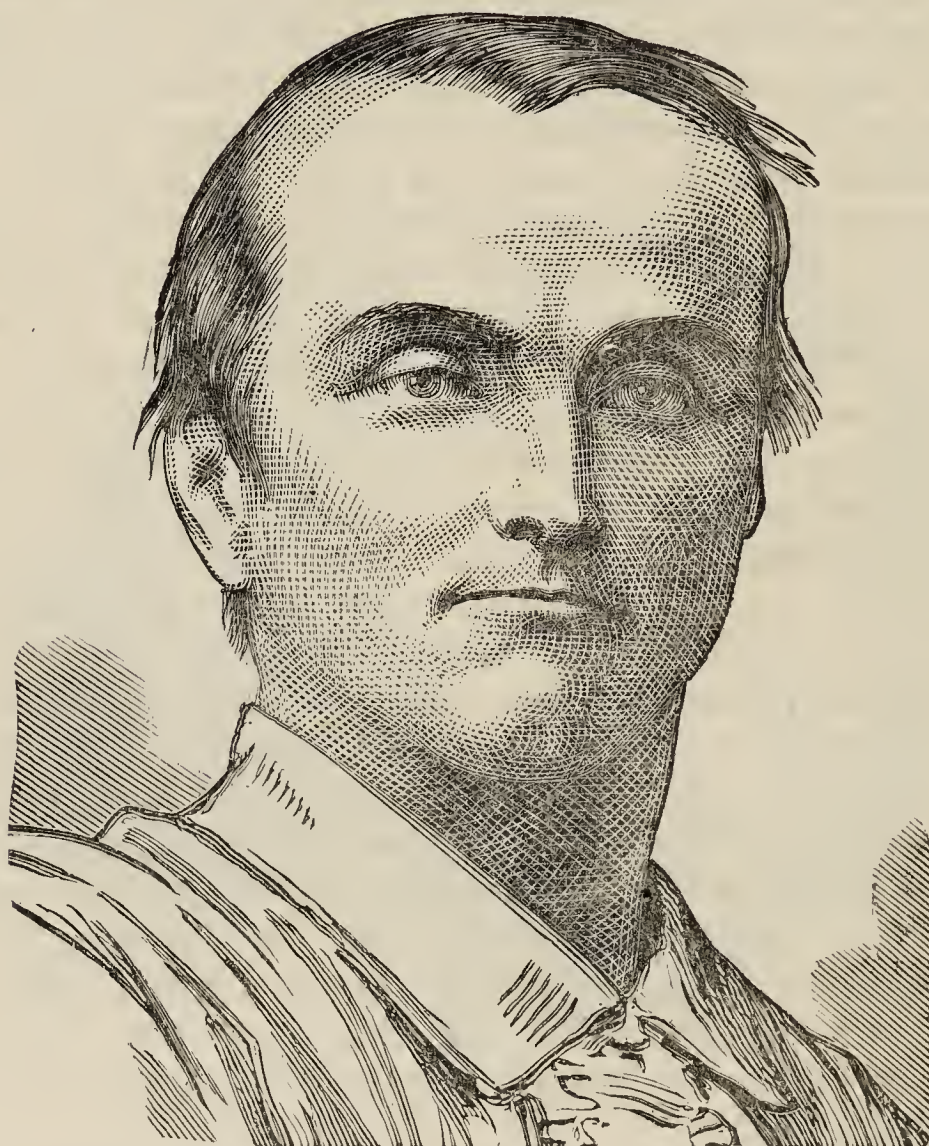
ATHLETICS AND BRAIN CULTURE.

BY JAS. COATES, F.A.S.

ONE of the most notable personages of the present time is the Right Honourable Wm. Ewart Gladstone (Commoner of England), Prime Minister of Great Britain. He is a living embodiment of constitutional vigour and brain power. As Britons admire, if not almost worship physical prowess, next to intellectual greatness, it is not surprising Mr. Gladstone's political opponents in and out of Parliament are filled with admiration for one—whom in the language of Mr. Balfour “has behind him fifty years of a great Parliamentary career, and whom we all recognise as one of the greatest Parliamentary figures which has adorned this House since Parliamentary history began.” While conceding at once that Mr. Gladstone owes much of his constitutional vigour to heredity, it must also be conceded, that this vigour has been maintained by a well disciplined life—muscular exercise, in which pedestrian “strides across country” and “tree-felling” have formed the leading features. In no other way can the youthfulness, brightness, powers of introspection, reflection, identity and memory, characteristic of this remarkable octogenarian be accounted for, than that the muscular exercise of the body—within reasonable limits—contributed to the health and vigour of the brain. It may not fall to us or to any, to have the heritage of constitutional vigour and mental stamina of Mr. Gladstone, we all can be benefitted by the example of a great life. His transcendent genius of hard work, his capacity for taking infinite pains, mental stamina and grasp, have been the fruitage of a life, in which the culture of the physical—and that by no hard and fast athletic rules—formed an important and leading feature.

The other extreme we find in modern athletics where physical culture is in the ascendant; the discipline of the mind is left to chance, the human passions allowed full play, and no restraint whatever is exercised in the control or direction of the propensities, and the senses, save that which is required by spasmodic periods of “training,” of individuals and teams, whereby they may succeed in “breaking records,” “recapture a Challenge Cup,” or “stand a bruising,” for the delectation of well clad brutes, or the brutish elements of well clad patrons of the turf and ring and other British sports. Athletes, gymnastic, regulated or natural, as the result of industrious and laborious occupations are not so valuable as when accompanied with careful discip-

line of the mental powers; indeed, physical culture without brain culture may, for the time being, bring forth plaudits from the unthinking and ever admiring crowd of physical prowess, but all such men noted as strong men, wrestlers, runners, football players, cyclists, etc., have been cyclopic; they have worshipped the gigantic and savage, they have sacrificed all to human strength, and eventually—because lacking brain culture—they have been and are



WESTON.

broken daily on the wheel of their own sensuousness, in the presence of their own chosen gods, Mars, Venus, and Bacchus. It is perfectly safe to say that the majority of athletes, who for a time may pride themselves on the strength of youth, never reach the moderately full age of fifty, none sixty. On the other hand, how many notables are to be found, disciplined in body and brain, have lived to the bright old age of eighty and ninety.

We have referred briefly to Mr. Gladstone as an example of the harmonious cultivation of the body and the mind. To certain athletes of the training of the body, without discipline

of the mind, we may briefly—without offence to living or dead—refer to Mr. Thomas Carlyle as an example of brain culture, minus body culture or athletics. In point of heredity or bodily constitution and genius, he is the only man I can compare to Gladstone. Had he been able to take a leaf out of the latter's life, the gruesome exaggerations, pessimistic philosophy, and the unmannerliness which belittled this great man, would have disappeared; the bodily ills—the dyspeptic demon—would have been barely known. The great Carlyle, belittled and lowered himself, not because of, but from the want of that physical culture his temperament required, to have what John Gilpin sought “to keep the balance true.”

The importance of the value of athletics of some sort by men of culture, has been recognised by their recreations. To men who sit at their desks, there is no tonic so valuable as a tramp across country. So we find philosophers, politicians, poets, and the literati generally, regulate the oscillations of mental ponderosity, by equally excellent oscillations of their pedal extremities. Men of big brains, who have strong legs have adjusted the balance so excellently between mental effort and physical exercise, as to enhance the former by the exercise of the latter. Not only have such men prolonged their lives, but their physical exercises have contributed to the vividness, power, and beauty of their mental productions. Who shall say the virility, stamina, insight to character, and the portraiture of individuals which characterised the ever perennial writings of Dickens, were not largely due to the health and inspirations his brain received through tramps “o’er moor and fen,” and actual contact with tramps and vagabonds, while thus enjoying his pedestrian excursions, in London byways, and along country hedge rows.

Professor Wilson, “Christopher North,” whose perfect manly form, beautifully balanced temperament, and noble face, so frequently illustrate our phrenological literature, presented a magnificent physique, the endurance of which was strengthened by actual exercise. He performed great pedestrian feats in his hours of leisure, and even at his studies neglected no manly exercise which would help to keep the balance true between body and brain. Of physical exercises, walking was the recreation he enjoyed the most. His long swinging strides, in the open air, were the exercise which caused every muscle to vibrate, threw every nerve into healthy tension, and sent invigorating blood on healthy life waves to his magnificent brain. “Christopher North” was something more than a metaphysician and a philosopher, *he was a man*, as perfect in brain as in brawn.

Wordsworth, Tennyson, Mill, and Fawcett were all pedestrians, enthusiastic in the enjoyment and descriptions of the value of walking as a health exercise. For brain workers there is no exercise so replete with endurance, recuperation and health. Nothing is so calculated to sweep away headaches, brain-fag, melancholy *ennui* and ilk-like cobwebs of the brain, as a brisk and at the same time *well ordered* walk. It is, of all exercises, the one most readily within the reach of all. In my experience as a Health adviser, I have found apart from constitutional bias—inability or aversion to exercise—ministers, lawyers, writers and other professional men suffering from “brain troubles,” who largely do so because of the neglect of athletics, or of walking exercise, as the simplest form of athletics.

The general idea is, in order to be a “brainy man,” one needs to be a physical wreck. Our intellectual men are represented as large brained, pale faced, hollow cheeked, spindle-shanked sort of creatures, while the athlete is represented as having the head of a gladiator, the neck and shoulders of a bull, arms and legs like the Philistines our Illustrated Bibles represent as binding Samson in the jeering presence of Delilah. So that under false impressions the modern maiden learns in a large measure to disdain the man of intellect as lacking in the manly virtues of physique and stamina, and is enamoured by the young footballer, or athlete generally, charitably expressing the hope, “If he has not mental culture just now, he has enough at least for business purposes, and in time, he may devote himself more to study, and to home, when the fascination of athletics, now in the ascendancy, loses its hold.”

A good physique is to be prized, and women are not alone in their admiration of physical beauty, manliness, endurance and health. But something more is desirable, viz., “a sound brain in a sound body” (new version). This is the sermon preached by Combe’s physiology. This has been the basis of lectures on Health, by phrenological lecturers and writers, before “Combe’s First Lectures” were instituted, and before ambulance lectures became so fashionable. Physical culture is valuable, and physical prowess is much to be admired; but without brain culture, and the moral discipline which should accompany it, man becomes a brute, magnificent, if you will, but still a brute—and, like all human brutes, must deteriorate, and get “knocked out of time” by some other brute in their brutal career, as the history of strong men and athletes generally furnishes, alas, too abundant evidence.

Brain culture, lacking physical training, is also disastrous.

Constitution or no constitution, the need of appropriate physical culture is coming home to our pedagogues, and is one that should form an important feature in the curriculum of every well-appointed school; while cricket, football, baseball, boating, foot-racing, etc., should find a suitable place in recreation hours. The young man, whose strength is devoted to sustaining his body in an upright position, by the assistance of a wall or a chimney-piece, who finds it necessary to the evolution of an idea to mould and smoke a cigarette, and who esteems physical exercise a bore, never can excel in brain culture. On the other hand, large numbers of our students break down at their studies, while honestly endeavouring to overtake them, because they have either believed themselves unable, or have not taken time for physical exercise.

While not claiming too much for athletics they must have an important place in the training of the men who are to be. We want another Charles Kingsley—to live and preach a gospel of muscular Christianity. A Voltaire—to lead our young men to seek “a body of an athlete with the soul of a sage.” Healthy exercise of limb and lung is essential to healthy brains. Athletics have their place in brain culture. The strong brain, supported by strong and well exercised limbs, belongs to our intellectual giants, of whom William Ewart Gladstone is a most notable example. The strong limb without the strong brain, belongs to the *genus homo* of the physical brute order. John Sullivan to wit. Then we have the strong brain and the neglected physique—and think of the mighty dead—poor Carlyle, of Southey, and of Keats, men of brains, but poor in body. What health Southey had, came in a large measure from pedestrianism, and Keats failed to have, through lack of physical stamina.

The coming educator must aim at an all-round training, which will bring into true play the limbs as well as the brains.

ROBERT BROWNING, HIS PHRENOLOGICAL CHARACTERISTICS AND WRITINGS.

BY JESSIE A. FOWLER.

WE labour under one slight difficulty in speaking on Robert Browning and his works, as the latter are not so universally studied as Ruskin's, Carlyle's, and Emerson's. Some people believe with Count Tolstoi in giving a trenchant denunciation of poetry and so they will not take the trouble or spend the time in extracting the marvellous beauty of Browning, or of

gathering the strength and inspiration that is to be found in his works.

* By the accompanying picture of Robert Browning we get a fair introduction to the man.

In the first place, Browning was blessed with a superior constitution, a fine physique, a well toned body ; few poets can boast of so unique an organization. In some men's minds the artistic profession of a poet seems to belong to a man who is ready to become an inmate of one of Her Majesty's Lunatic Asylums. Browning does not much resemble a lunatic—at least, not such as I have seen. One has therefore in the first place to disabuse the minds of a large number of unpoetical people of the idea that all poets are of an unsound mind.

In the second place, Browning possessed not only a fine constitution, but a harmoniously balanced head ; and we are led to suppose that he must have had a correspondingly well balanced mind. There were no great extremes, such as an overbalancing intellect with a small base of the brain ; or a very high and narrow head.

Neither Ruskin or Carlyle as Leaders of Thought can be considered as evenly balanced as Browning.

His Temperament, which was mental-vital, was a source of great advantage to him. He had not the irritable restless extreme of the motive, or the nervous excitable extreme of mental, or the sluggish extreme of the vital. He was marvellously equipped in this respect. Look for a moment at the proportion of his head. In such a cranial development such as his, it is absolutely impossible to name one faculty as his ruling characteristic, for there were many whose influence was about equal. He was not a one-sided, but an all-round kind of man. Look at the well-proportioned brow which gave him the keenest interest in nature, and all scientific subjects. Look at the central faculties from the root of the nose to the crown of his head, how remarkably prominent they are, especially memory of historical events, power of analysis, criticism, intuitional ability, and general insight into character, matters and things ; superior sympathy, and respect for the intellectual and moral worth of his fellows, and a Supreme Creator.

Not only do we look to the size of his head for the charm and grace of his character, but to the superior quality and tone of his whole organization. He was in every sense a man, although he had his faults, peculiarities, and shortcomings, and of course every man and woman has these. His head is remarkably high from the opening of the ear to the crown, which must have given him high aspirations. His

* Up to the moment of going to press we have been unable to get permission to use the cut of R. Browning we had hoped to reproduce.

moral and self perfecting faculties were decidedly influential in adding elevation and breadth to his mind, and richness of resource. His vast sympathies were strongly indicated by the height in the region of Benevolence, joined to his large Intuition and Social faculties, these favoured his taking a deep interest in the welfare of others and placing a high value on humanity for humanity's sake. His Intuition was so distinctly marked that he was able to touch the core or centre of a person's life and character, hence it is not so much a point for wonder that in his work on "Men and Women" he so truly depicted their characteristics. His head was broad in the region of Sublimity, Ideality, Spirituality and Imitation, which being so, made him particularly gifted in imagination; it gave him scope and breadth of mind, also refinement in the choice of his expressions. His Language was a marked feature of his character; he could show it in abundance whenever the necessity called it out. He knew the value of language although he seemed to involve his thoughts sometimes into a labyrinth which took study and meditation from the ordinary scholar to extricate.

Though clever, and reaping his share of praise, he was not burdened with much vanity. His Veneration must have been a distinctly humbling feature of his character. He must have had around him men and women of all shades of opinions, for his Conscientiousness was less influential than his Benevolence, hence he must have been more tolerant with the views which others held, than critical over their differences, though strict in carrying out his duty and obligation. He was cautious without showing fear, and hopeful and buoyant without being speculative. His Utopia was a practical one. He reasoned from common sense principles first. His Reflective faculties made him profound in his thoughts and interested in deep study; but he was even more at home in combining, comparing, arranging, estimating, and reducing to practice what he knew, as well as in perfecting, refining, improving, and adding proper light and shade. When once started on any work he must have accumulated a mass of energy, fire, and enthusiasm to have forced him to continue his theme until his thoughts were exhausted on the subject. His memory was excellent, hence he could store up ideas and facts for future use.

Profoundly he realized that there is no more significant study than humanity. The development of a human soul. It was true of him as Ben Jonson wrote of Shakespeare, "Hee redeemed his vices with his virtues: there was ever more in him to be prayed than to be pardoned." In the

balance of triumphs and failures however, is to be sought the relative measure of genius—whose equipoise should be the first matter of ascertainment in comparative criticism. To praise a man because of his optimism, is like commending a peach because it loves the sunshine, rather than because of its distinguishing bloom and savour. The primary vehicle of an artist must be his power of expression. In the instance of a poet like Browning, his vehicle was language emotioned to the white-heat of rhythmic music by impassioned thought or sensation which scattered to the four winds of heaven pessimistic philosophy.

Physiognomically, his features indicate strength, hospitality, sympathy, creative talent and warmth; ardour and strength of attachment are also noticeable features. As to Browning's physiognomy and personal traits, this much may be granted: if those who knew him were told he was a Jew they would not be much surprised. In his exuberant vitality, in his sensuous love of music and the other arts, in his combined imaginativeness and shrewdness of common sense, in his superficial expansiveness and actual reticence, he would have been typical enough of the potent and artistic race for whom he has so often of late been claimed. What, however, is most to the point is, that neither to curious acquaintances nor to intimate friends, neither to Jews nor Gentiles, did he ever admit more than that he was a good Protestant, and sprung of a Puritan stock.

Robert Browning was born in the unromantic environments of Camberwell on May 17th, 1812, and died at Venice on December 13th, 1889.

His father was like so many others, a writer of a great deal of unpublished verse of rather an old-fashioned didactic character.

Robert began to write poetry at a very early age, and was also fond of drawing. Though he did not become a painter, he developed into one of the greatest poets and subtlest and strongest thinkers of the century. He ardently studied the works of Keats, Shelley, Scott, Byron, Wordsworth and Coleridge.

It is perhaps fortunate that his father withheld his youthful effusions from the public; but in after years some of the great poet's manuscripts fell into his own hands, and he discovered that he had been an ardent admirer of Byron, and that his verse was "full and melodious." From the worship of Byron the boy naturally soared to a love of Shelley directly he became possessor accidentally of a piratical copy of his exquisite poems.

Even three years after Shelley's death it was very difficult to obtain a copy of his poems. No respectable bookseller would even acknowledge that he was acquainted with his name. Mrs. Browning at last obtained from the publishers the original editions of both Shelley and Keats, and presented them to her son.

Let us pause for a moment and try, in some degree, to imagine the rapture of delight experienced by the boy-poet as he turned the leaves containing the poems of these illustrious master singers. But, although he loved and admired them both so profoundly, he never imitated either.

At twelve years of age young Browning went to school at Dulwich, and later to University College, London. When twenty years old he wrote "Pauline," and published it a year later, when he was twenty-one. In the same year Tennyson published "The Miller's Daughter," "The Dream of Fair Women," "The Palace of Art," and other of his most beautiful and popular poems. "Pauline" was almost unnoticed; but it was so greatly admired by Dante Gabriel Rosseti, then a very young man, that he copied the whole of the poem from the book in the British Museum. John Stuart Mill, too, desired to review it in Tait's magazine, but it had already been dismissed by that magazine with contempt. Fortunately the poet was not dependent for fame and fortune or mere bread and cheese upon the wisdom and critical powers of the editor of that luminous periodical, or of any other. If he had been, the result would have been starvation. Genius is sure to conquer in the end; but in the meantime the poet is face to face with famine. We must admit that out of a hundred books of poetry published, ninety-nine are very likely to be bad or indifferent, but the man of real critical power and insight should be on the look out for the exception, and should, in addition, feel a pleasure in introducing it to a public eager to welcome originality and real power—"There are so many echoes and so few voices."

In 1834, when young Browning was twenty-three, he set out on his travels, which extended to Russia. The next year he published "Paracelsus," and in this poem Browning showed his daring originality, his utter disregard and apparent contempt for the conventional forms of fashionable poetry; and in the long soliloquies he displayed the germ of that profound insight into the workings of the heart and conscience so wonderfully manifested in his "Andrea del Sarto," and other masterpieces in "Men and Women." Macready's admiration for his poem "Paracelsus," led to the meeting of the great poet and actor. The latter hoped he had found a

real dramatic genius, and those hopes led to the production on the stage of "Strafford" on May 1st, 1837, the poet then being only twenty-five. Miss Helen Faucit performed with grace and charm the part of Lady Carlisle, and Macready sustained the part of Strafford. After five nights the play was withdrawn, as it was not considered a financial success. But what a masterpiece for a young man of twenty-five to write ! The wonder is, not that it did not run over five nights, but that such a play, so full of genius, poetry, and exalted thought and passion should see the footlights at all ! We must again rejoice that Browning was independent and that he could, in spite of every possible discouragement and disappointment, pursue the course marked out by his splendid genius, without heeding the clamour of blame or the sneers of envy and mediocrity. He wrote more plays, which managers and publishers returned with and without thanks.

In 1840 he published his most daringly enigmatic poem "Sordello," as if in defiance of his critics ; and we must admit that even his most enthusiastic admirers have been conquered by the inextricable jungle of thought contained in this unique poem. Between 1841 and 1846 he published in pamphlet form "Bells and Pomegranates." These were issued cheaply, for, as the author said, "a pit audience" ; but the pit audience unfortunately did not arise from that deep place to welcome them. The first of the series was that lovely, powerful and tragic dramatic poem "Pippa Passes," which alone marks, with triumphant certainty, Robert Browning as a poet for all time. This was followed by "King Viator and King Charles," and that masterpiece of marvellous word-painting, wit, and humour, and poetry, "The Pied Piper," originally written to please Macready's son. Lucky boy ! The rest of the series are nearly all included in "Men and Women." However people may differ about the merits and demerits of "Paracelsus" and "Sordello," no one, with the slenderest pretensions to a love of literature in its highest form can possibly differ about the beauty, the variety, the insight into the heart and conscience of many-sided, suffering, hoping, and struggling humanity, displayed in this splendid work of a man of genius whose name will live as long as a love of English literature exists in our minds and hearts.

In 1846, when he was thirty-four, Robert Browning married the already famous poet, Elizabeth Barrett. They travelled to Italy which became their home for many years. In Paris they made known their marriage to Mrs. Jameson, the eminent art critic—a dear friend of Mrs. Browning's. Before departing together from Paris, Mrs. Jameson, in writing to a

friend, alluded to her unexpected companions, and added : "Both excellent, but God help them ! for I know not how the two poet heads and poet hearts will get on through this prosaic world." This kindly friend was not the only person who experienced similar doubts. One acquaintance, no other than the then Poet Laureate, Wordsworth, added : "So, Robert Browning and Elizabeth Barrett have gone off together, well, I hope they may understand each other, nobody else could." As a matter of fact they did, and to such good intent that they seem never to have had one hour of dissatisfaction, never one jar in the music of their lives. There was something deeply pathetic in Miss Barrett's conscious joy. So little actual experience of life had been hers, that in many respects she was a child, and she had all the child's yearning for those unsullied hours that never come when once they are missed. But it was not till love unfastened the inner chambers of her heart and brain, that she realized to the full what she had often doubted.

"How supreme a thing where life is."

It was in some such mood she wrote the lovely forty-second of the "Sonnets from the Portuguese," closing thus :—

"Let us stay
Rather on earth, Belovèd, —where the unfit
Contrarious moods of men recoil away
And isolate pure spirits and permit
A place to stand and love in for a day,
With darkness and the death-hour rounding it."

As for Browning's love for his wife, nothing more tender and chivalrous has ever been told of ideal lovers in an ideal romance. It is so beautiful a story that one often prefers it to the sweetest or loftiest poem that came from the lips of either. That love knew no soilure in the passage of the years. Like the flame of oriental legend it was perennially incandescent, though fed not otherwise than by sunlight and moonshine. If it alone survive, it may resolve the poetic fame of either into one imperishable luminous ray of white light : as the uttered song fused in the deathless passion of Sappho gleams star-like down the centuries from the high steep of Lencadoe.

It was in Pisa, to where they had now travelled, that Browning first saw in manuscript those "Sonnets from the Portuguese" which no poet from the Portuguese had ever written, which no other woman than his wife could have composed. With what love and pride he must have read those outpourings of the most sensitive and beautiful nature he had ever met, vials of lovely thought and lovelier

emotion, all stored against the coming of a golden day. She says :—

“How do I love thee ? Let me count the ways.
 I love thee in the depth and breadth and height
 My soul can reach, when feeling out of sight
 For the ends of Being and ideal Grace.
 I love thee to the level of every day’s
 Most quiet need, by sun and candle light.
 I love thee freely as men strive for Right ;
 I love thee purely as they turn from Praise.
 I love thee with the passion put to use
 In my old griefs, and with my childhood’s faith.
 I love thee with a love I seemed to lose
 With my lost saints,—I love thee with the breath,
 Smiles, tears, of all my life !—and, if God choose,
 I shall but love thee better after death.”

Even such heart-music as this cannot have thrilled him more than these two exquisite lines, with their truth almost too poignant to permit of serene joy—

“I yield the grave for thy sake, and exchange
 My near sweet view of heaven for earth with thee !”

In September, 1855, the poet dedicated “Men and Women” to his wife, in the following exquisite lines :—

“This to you—yourself my moon of poets !
 Ah ! but that’s the world’s side, there’s the wonder ;
 Thus they see you, praise you, think they know you !
 There, in turn, I stand with them and praise you
 Out of my own self I dare to phrase it.
 But the best is when I glide from out them,
 Cross a step or two of dubious twilight,
 Come out on the other side, the novel
 Silent silver lights and darks undreamed of,
 When I hush and bless myself with silence.”

Italy continued to be Browning’s home until the death of his beloved wife, which terrible loss came to him in 1861. Ten years later he published his “Balanstion’s Adventure,” a transcript from Euripides which is one of the most delightful productions of his genius. This was preceded by “Dramatis Personæ,” which contains some of his noblest work, “Apt Vogler,” being especially beautiful and sublime ; and his longest dramatic poem, “The Ring and the Book,” which is as full of marvellous mastery of knowledge and detail as the best work of Carlyle.

His great analytical power and imaginative insight into character are triumphantly displayed in this most characteristic work of the great poet.

BROWNING AND THE WONDER FACULTY.

That Browning was a phrenologist there can be but little doubt. He recognised that the deep rhythm of life must electrify a poet's volatile essence into a living rhythmic joy, that in this deep sense, and this only, the poet is born not made. The depth of his insight depends upon the depth of his spiritual heritage. If wonder dwell not in his eyes and soul there can be no "far Ken" for him. And here we recognise in Browning that he was the first writer of our day to indicate this transmutive, this inspired and inspiring "wonder-spirit" which is the deepest motor in the evolution of our modern poetry.

Characteristically he puts his utterance into the mouth of a dreamy German student, who says: "Keep but ever looking, whether with the body's eye or the mind's, and you will soon find something to look on! Has a man done wondering at women?—there follow men, dead and alive, to wonder at. Has he done wondering at men? There's God to wonder at. And the faculty of wonder may be, at the same time old and tired enough with respect to its first object, and yet young and fresh sufficiently, so far as concerns its novel one."

This "wonder faculty" is akin to that insanity of the poet which is but impassioned sanity. Plato sums the matter when he says, "He who, having no touch of the muse's madness in his soul, comes to the door and thinks he will get into the temple by the help of Art—he, I say, and his poetry are not admitted."

Of Browning's work on "The Ring and the Book," we have Carlyle's memorable criticism. Meeting Browning one day soon after its publication, he hailed him with enthusiastic praise in which lurked damning irony: "What a wonderful fellow you are Browning, you have written a whole series of 'books' about what could be summed up in a newspaper paragraph!" Here Carlyle was at once right and wrong. The theme, looked at dispassionately, is unworthy of the monument in which it is entombed for eternity. Here, as elsewhere, Browning's real subject is too often confounded with the accidents of the subject.

His triumph is, not that he has created so huge a literary monument, but rather that, notwithstanding its bulk, he has made it shapely and impressive.

In his "Men and Women" are some of the worthiest poems of his pen. The influence he exercises through these and the incalculably cumulative influence which will leaven many generations to come, is not to be looked for in individual only, but in the whole thought of the age which

he has moulded to new form, and to which he has imparted a fresh stimulus. For this a deep debt is due to Robert Browning. But over and above this shaping force, this manipulating power on character and thought, he has enriched our language, our literature, with a new wealth of poetic diction; has added to it new symbols; has enabled us to inhale a more liberal if an unfamiliar air; has, above all, raised us to a fresh standpoint, a standpoint involving our construction of a new definition. Tried by the severest tests, not merely of substance, but of form, not merely of the melody of high thinking, but of rare and potent verbal music, the larger number of his "Men and Women" poems are as treasurable acquisitions, in kind, to our literature, as the shorter poems of Milton, of Shelley, of Keats and of Tennyson. But again, we must realize that his primary importance, not greatness, but importance, is in having forced us to take up a novel standpoint involving our construction of a new definition.

Browning's music is oftener harmonic than melodic: and musicians know how the general ear charmed with immediately appellat melodies, resents, wearies of a more complex, and above all a more novel creative method. He is among poets, what Wagner is among musicians; as Shakespeare may be likened to Beethoven, or Shelley to Chopin.

One enthusiast over Browning truly says: "Who takes to Browning's style can find at will scattered broadcast in his work, the thrill of interest in humanity, in youth, manhood, and old age. He seemed to understand the grandeur of each, the terror of hate, the force of tyranny, the splendour of heroism, or the pathos of effort unrewarded. He too seemed cognisant of the origin and principle of soul-life, which sets these many souls working for good or ill, and the why of them all that seems to make life worth enjoying too. In mankind, as poetically interpreted by Browning, the main-spring, the nerve-force which moves the mechanism or vitalises the functions of man's soul is and must be, not natural perversity, which is a resistant force, but the active and propelling force of faith and love.

Browning makes apparent that after God, the initial spasm of life, the first force that moves the soul and keeps it living, is man's necessary upward strain, the faith and love whose reach exceeds their grasp! the progress which is the necessity of the soul's principle of movement."

He has abstracted from all earthly things the essence of the beautiful, and the Beautiful, so Goethe intimates, is higher than the Good, because the Beautiful includes the Good.

It was Browning's sincerity and depth of vision that made him a poet, as Carlyle says is the making of every poet, and he continues, "See deep enough and you see musically ; the heart of nature being everywhere music if you can only reach it." Another thing that this great song-writer taught us was, "to use our energies, to give play to our talents for the good of others. And why? Because God uses us to help each other so, lending our minds out."

THE BROWNING SOCIETY.

To the Browning Society, Mr. Russell Lowell who had many points of genius in which he resembled Robert Browning, spoke of the great poet as follows :—

"The fashion of this world passed away, but the fashion of those things which belonged to the world of imagination—and it was most emphatically in that world that Mr. Browning had worked—endured and never passed. . . . He had fully demonstrated that he stood in no need of a Browning Society to reinforce his native vigour, for, in spite of the indifference of the public, he had constantly gone on from that time to this, producing and deepening the impression which he had made upon all thinking minds. It had been said that he had no sense of form, but that question depended on the meaning to be attached to the word.

"If form meant the use of adequate and harmonious means to produce a certain artistic end, then he knew no one who had given truer examples of it than the great poet after whom that Society took its name. . . . Every one who read Browning with attention, and who loved him, must at the same time admit that he was occasionally whirled away by the sweep and torrent of his abundance. But after making these deductions, there was no poet who had given us a greater variety, or who had shown more originality. Mr. Browning abode with them. He was not a fashion nor did he belong to any one period of their lives. What they felt more clearly than anything else was his strength."

I should like to add my opinion that Browning's sweetness was equal to his strength, and his intellectual subtlety and extraordinary dialectical power greater than either ; and as for his humour it was almost Shakespearian in its sunny glow and genial breadth of toleration and sympathy with every possibility of human nature.

In private life Browning was cordial and sympathetic, his conversation being full of intelligence, naturalness and humour. He was passionately fond of music, and his fine head and noble leonine countenance were often to be seen at the Monday Popular Concerts.

(To be continued.)

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., JULY, 1893.

A NEW EXPERIMENT. THE French are to the front again in experiments. In a paper just read before the Paris Academy of Medicine, Dr. Polaillon explains an interesting operation recently made of grafting a piece of a dog's skull into a human one. Dr. Ricard, a young practitioner, performed the operation on a woman of forty-five, who had suffered from a tumour in the frontal bone. As it grew out of the bone, a part of the latter had to be removed to get rid of the tumour. The brain thereby was laid bare, and cerebral hernia ensued. Dr. Ricard, seeing this, thought of removing a piece of living bone from a dog's skull and cutting it exactly to fit into the void in the woman's forehead. He was careful in taking antiseptic precautions. The grafted piece was knit with the frontal bone into which it was inserted, and the patient is now quite well. Dr. Polaillon speaks of this operation as the first successful one of the kind ever performed, and regards the success as due to the advances latterly made in surgery and antiseptic science.

WONDERFUL RECOVERY OF SPEECH. DR. LIVINGSTONE, a resident of the little village of Bennettsville, Chenango county, N. Y., has regained the power of speech and hearing after having been a deaf mute for nearly 65 years.

His wonderful recovery has excited much comment, and is regarded by many as a miracle. The old man is very well known in his own as well as adjoining counties. One night about two weeks ago he awoke in the night with a very severe pain in his head, as if he had been struck with a club.

He called out to his wife, who was sleeping beside him. At the sound of his voice she awoke, astonished to hear him pronounce her name. She had never before heard him speak. As soon as she recovered from her surprise she asked him what was the matter.

Her words were the first he had heard since he was an infant and the revelation of his changed condition astounded him. The pain in the meantime grew less acute, and he and his wife talked until morning of his wonderful recovery.

The news spread quickly, and all the next day the doctor

was overwhelmed with congratulations. Conversation at first caused him great annoyance, but he has gradually become accustomed to it. His vocabulary, which at first was limited, has increased, and he has no difficulty in expressing himself.

When Dr. Livingstone was three years old a severe attack of scarlet fever left him entirely deaf. The few childish words he knew gradually were forgotten and by the time he was six years old he became a mute. Despite his past affliction the old man is intelligent and well read. He is at a loss to account for his strange good fortune, and the physicians in the neighbourhood can shed no light on the mystery.

Dr. Livingstone is anxious to have his case investigated by the medical fraternity in hope that some explanation as to his recovery can be given. The pain which he felt in his head gradually passed down his spine into his legs and then left him entirely. Though 71 years old he is in excellent health.

COLOUR-BLINDNESS A PHRENOLOGICAL DEFECT. THIS subject was ably treated in a recent paper by Mr. G. L. Lepage, F.F.I., and we give the following facts to enforce the importance of the remarks then made. The *Pall Mall Budget* gave some information, by "One who had investigated the subject," and we gladly credit him with the responsibility of his information, at the same time urge upon the general public the great necessity of ascertaining whether a mental defect in the organ of Colour exists in all those connected with coloured signals, &c.

Until within recent years colour-blindness was looked upon merely as a physiological curiosity. As soon, however, as the fact was established beyond a shadow of doubt that the colour-blind are always with us, and that their number increases with the increase of population, the question at once assumed quite a different aspect. It became necessary, on the one hand, to ascertain the exact nature and extent of the defect, and, on the other hand, to discover means for its detection. The importance of the latter will be readily appreciated when it is borne in mind that coloured signals are used to indicate safety and danger both in the marine and railway services.

In view of this fact the question of testing the colour-vision of sailors and railway employées is one of paramount importance. As regards the former, some of the tests adopted by the Board of Trade are so altogether unsatisfactory and inadequate that it is a mere matter of chance whether a colour-blind candidate is rejected or not.

So far as the British railways are concerned the testing for colour-blindness is in a most deplorable condition. The writer was, some time ago, commissioned by a contemporary devoted to railway matters to inquire into the methods employed for examining the colour-vision of railway servants. The information then obtained revealed a state of things bordering on the chaotic. Nearly every company had a test of its own; most of the tests were next to useless, and the testing was in the majority of cases carried out by incompetent persons. Among the tests employed are to be found boards with four or six colours painted in a definite position; pieces of cardboard with four colours; coloured glasses and papers; tubes, flags, and a variety of other more or less useless contrivances. Apart from the worthlessness of most of the tests used, there is no guarantee whatever that the examiners themselves are not colour-blind. It is not perhaps quite clear why a railway clerk, an inspector, or a superintendent should be considered a competent authority on colour-blindness, yet some of the companies entrust these officials with the responsible duty of testing the colour-vision of their servants. The number of persons employed in working the railways of the United Kingdom is about 400,000. Railway employ  es generally belong to a class with a very high percentage of colour-blind, and it may therefore be assumed that some 16,000 of that number would have a defective colour-vision. If properly examined they would be excluded from positions in which colour-blindness is a source of great danger to life and property. As it is, a considerable portion of them remain in active service. Putting it at a very low estimate, there must be at least 4,000 men employed on railways who cannot distinguish between red and green signals. In other words, at least one out of every hundred engine-drivers, firemen, pointsmen, shunters, and others directly connected with the passenger service, is unfit for the work he has to perform. It is earnestly to be hoped that a uniform, reliable test will soon be introduced.

PHRENOLOGY AND LUNATICS. WE are glad to note that a wise selection of Chairman has been made by the City of London, visiting Lunatics Committee in the person of John Lobb, Esq., C.C., M.L.S.B., Vice-President of the Fowler Institute. He is a man of practical insight into human nature; and now that a new asylum has just been built for several more hundreds of lunatics, and insanity seems on the increase, it behoves the Government and all who have power in selecting the Visiting Committees of such Institutions, to make a wise choice. All

such men and women should have some knowledge of Phrenology and a practical grasp of the workings of the mind, to see that the best means are adopted to ameliorate the condition of these poor unfortunates.

It is a step in the right direction that lady guardians are being placed on the committees of Institutions for Lunatics. Miss Hughes, lady guardian of the Lewisham Workhouse, has been called to such a position, and being a strong believer in Phrenology, and deeply interested in the subject, will, without doubt, have a salutary influence over her fellow committeemen.

A day or two ago Mr. Milligan, a busy worker on Board of Works, guardian for the Wandsworth Workhouse, and on committees too numerous to mention, wrote us from Portsmouth saying, "I am here at Portsmouth visiting lunatics, and find Phrenology useful as a guide when I am questioning such unfortunates." As a member of the Institute, and also a member years ago of the Bradford Phrenological Class convened by myself, I am pleased that he has such an admirable occasion to use his phrenological knowledge. To say that Phrenology is making no progress is to speak without the book of facts.

Fowler Institute.

MEMBERS' NOTES.

"Man was born to be rich, or inevitably grows rich by the use of his faculties ; by the union of thought with Nature. Property is an intellectual production."

MANY weary brains will be glad to know how they can make ideas flow, when over-tired and exhausted. According to Dr. Lander Brunton this can easily be accomplished. This eminent physician has made experiments on himself, and thinks he has solved the problem of making ideas flow almost at will.

One night, after a long day's work, he was called upon to write an article immediately. He sat down with pen, ink and paper before him, but not a single idea came into his head, not a single word could he write. Lying back, he then soliloquised :—"The brain is the same as it was yesterday, and it worked then ; why will it not work to-day ?" Then it occurred to him that the day before he was not so tired, and that probably the circulation was a little brisker than to-day. He next considered the various experiments on the connection between cerebral circulation and mental activity, and concluded that if the blood

would not come to the brain the best thing would be to bring the brain down to the blood. It was at this moment that he was seized with the happy thought of laying his head "flat upon the table. At once his ideas began to flow and his pen to run across the paper." By and by Dr. Brunton thought "I am getting on so well I may sit up now." But it would not do. "The moment," he continues, "that I raised my head, my mind became an utter blank, so I put my head down again flat upon the table, and finished my article in that position." But how many are there, who, after a long day's work, would not go to sleep in this position?

We should like further evidence and experiments on this point.

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THE following useful hints on the effect of pure air, and how to breathe, have been forwarded to us by Miss Maxwell, F.F.I. :—

Major-General Drayson asks the question in his article on "The Art of Breathing," what does moderate exercise do? It increases the rate of breathing, and hence gives a larger supply of oxygen to the blood. He again asks, why take the exercise to obtain this result? Increase the rate of breathing and the same result is gained provided we can obtain pure air, even though we are sitting still. "I have," says he, during several years taken very little exercise, yet I have obtained very much the same results by increasing the rate of my breathing during one or two hours a day, and when necessary I can walk ten or twelve miles at a rate of about four miles an hour. It has also been stated by others that persons suffering from toothache have hurried off to the dentist to have the tooth out and on reaching his house have found themselves free from pain and changed their minds; this loss of pain has been attributed to fear, but I attribute it to the rapid breathing caused by the walk to the dentist's. By the action of the will the rate of breathing may be increased to fifty breaths a minute whilst reposing in an armchair, and I can state that I have driven away headache, toothache, and other difficulties by breathing rapidly for several minutes.

Another effect I have experienced from rapid breathing is the cure of restlessness and sleeplessness, from which those who use their brain much, frequently suffer. But remember the air breathed must always be pure. Colds, sore throats and coughs, which frequently lead to more serious illnesses, are often the result of the impurity of the blood, whereas a person who does not breathe impure air would not even suffer from the first difficulties.

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SOME most peculiar and interesting particulars with reference to Jacques Inaudi, the marvellous calculator, have been forwarded to us by Mr. Ramsey.

Inaudi was born in Piedmont, his parents being the poorest of the peasants. He began life by tending sheep on the mountains, and from

sheep tending he became an exhibitor of a pet dormouse, wandering from town to town and living by the pennies his spectators threw him. In the course of his strollings Inaudi crossed from Italy to France, and here made a discovery which turned the course of his life into a brighter channel. All through his life he had been unable to prevent himself from calculating, his head seemed full of figures, and it struck him that these figures would draw him many more pennies than his dormouse could. It was by accident he discovered the value of this talent. Wandering into a restaurant one day he found the proprietor puzzling over a sum he had on the table, and which he could not make right. Inaudi, after a few minutes said, "If you wish, sir, I'll do that sum for you." "You?" cried the man eyeing the tramp. "Yes, I of course; not my dormouse," laughed Inaudi. "Try it then," said the proprietor offering him his pencil. "No pencil for me" cried Jacques. "I can't read or write. Read me the numbers." The man read them aloud, and in an instant to his great astonishment Inaudi gave the correct answer. During a journey a short time after this he was offered a position in a theatre in Paris, where his extraordinary mental calculations soon made him a "celebrity." That was twelve years ago, but to-day Inaudi is more famous than ever.

Standing with his back to a blackboard he listens to questions which his audience give him, such as multiply 653 by 982 almost instantly he gives the answer 641,246. He will subtract, divide, square, and cube numbers, and extract roots with the same ease. Here is an example of a more complex character which was given him: "Find a number of 4 figures, the sum of which is twenty-five, the sum of the digit in the place of hundreds and of that in the place of thousands is equal to the figures in the ten's place, and the sum of the figures occupying the ten's and thousand's place is equal to the figures standing in unit's place. If you besides reverse the number it will be increased by 8·082. Inaudi in three minutes gave the correct answer—1789. He will often work two problems at once, talking while he does them. He seems unable to drive the figures out of his mind and will often repeat the problems after several days. Inaudi explains very clearly his methods of work. In multiplying he goes from left to right for example:

To multiply 653 by 982 his method is as follows:—

$$\begin{array}{rcl}
 600 \text{ by } 900 & = & 540,000 \\
 600 \text{ „ } 82 & = & 49,200 \\
 982 \text{ „ } 50 & = & 49,100 \\
 982 \text{ „ } 3 & = & 2,946 \\
 \hline
 & & 641,246 \\
 \hline
 \end{array}$$

Inaudi is a wonderful mathematician, but in no way is his appearance peculiar except in the height and breadth of his forehead. How it is he is able to make this calculation is the question of the Paris scientists. Surely such evidence ought to be explained by Phrenology.

THE Annual Members' Excursion is arranged for Saturday, July 22nd, and the minimum number of names were sent in before the end of June, so the excursion will be to Hythe, an exceedingly interesting spot on the South coast, within a coach drive of Folkestone, while one of the chief attractions of the place, and our trip there, will be to see the large number of skulls which are stowed away in the crypt of the Parish Church. The train leaves Charing Cross, Cannon Street and London Bridge as under : 7.40, 7.48, 7.55. All further particulars can be had on application to Mr. L. Lepage, Hon. Sec. See advertisement.

* *

I SHOULD be glad to receive further communications or items of interest from members on Phrenology and kindred subjects for their column. If each member of the Fowler Institute would make the effort to send one short paragraph monthly, it would greatly add to the interest of the column for all readers.

E. CROW.

Notes and News of the Month.

ANIMALS ARE MUCH LIKE CHILDREN.

NATURALISTS have frequently commented on the similarity of traits displayed by children and young quadrupeds. Love, hate, fear, and joy are feelings which are apparently shared in common by human beings and dumb animals, and those who have made a study of animal life declare that a certain amount of play or recreation is as much a necessity to certain young animals as to children.

By careful observation the writer is convinced that the following games are played by young animals in much the same manner as by children : Tag, in a variety of ways ; running races, jumping matches, wrestling bouts, ball playing and "hide and seek."

* *

ODDITIES ABOUT MEMORY.

THE memory remains intact and in perfect working order in cases where the left side of the brain is badly diseased, from which it may be inferred that the right side of the brain is the seat of this remarkable faculty. From the physiologist's point of view the power of memory is badly diminished by too much food, by an excess of physical exercise and by education. If this is true the illiterate has a better memory than the educated man of the period. It has also been proved that the memory is better in the morning than in the evening, in summer than in winter, and much better in warm than in cold countries.

CHARACTER is mainly moulded by the cast of the minds that surround it.

Hygienic and Home Department.

PHYSICAL TRAINING AND NATURAL DIETETICS.

ELLEN L. HART.

FROM earliest times many of the wisest men and greatest thinkers have studied the problems of health and disease with a view to discover a panacea for the ills of life ; the most celebrated physicians, from Aristotle downwards, have written upon the same subject after spending years in attempts to discover a cure for the various ailments of the body. The theory and practice of medicine has been the subject of research for many ages, but instead of a universal cure we have the diseases multiplied tenfold, the supposed remedies a hundred-fold, and find the human race retrograding instead of advancing in physical development.

If the time and experience devoted to the investigation and discovery of the cures of disease had been directed to the removal of the causes that make disease possible, we should not have to deplore the physical, mental, and moral deterioration so prevalent amongst civilised nations.

The study of medical science in the uses of drugs and other chemical compounds has hindered the work of health reform, the maintenance of health has sunk into the background, whilst prominence has been given to the cure of disease ; fortunately the reign of medicine is not so supreme as of yore, and the spirit of enquiry has led many to think for themselves. Doctors, moreover, give valuable testimony to the worthlessness of drugs.

The celebrated Dr. Gregory declares that, "More than ninety-nine parts in a hundred of all that has been written on the theory and practice of medicine, for more than one thousand years, is absolutely useless, and worthy to be known but as a matter of curiosity, or a miserable warning and example of the worst errors to which we are prone."

What was the testimony of Baillie, in his day the undisturbed monarch of practice ? In the prospect of going to render up his great account, he said : "He had no faith in medicines whatever ; he neither knew their manner of action, nor the principle which should regulate their administration."

Radcliffe said : "On entering my profession, I thought I knew a hundred remedies for every disease ; now alas ! at the close of my career, I leave a hundred diseases without a remedy."

Dr. James Johnson (Physician in ordinary to the Queen)

says : "I declare my honest conviction, founded on long observation and reflection, that if there were not a single surgeon, man-midwife, chemist, or druggist on earth, there would be less sickness and mortality than now prevail."

Dr. Truman, in his work on food, says : "No disease can be cured by drugs without injury to the health, for the remedies employed for that purpose always cause some excessive and unnatural action of the body which lessens its power. The administration of drugs goes on the principle of administering a lesser evil to avoid a greater."

Authorities might be multiplied as to the mischief of medicine, and those physicians are wisest who use it least. The celebrated Sydenham is reported to have said, when on his death-bed, and surrounded by physicians, who were lamenting his loss to the world : "Never mind ; I leave three good physicians behind me." They crowded over him with eager looks, each hoping his name would be pronounced. He remained for some time silent, then said, "Yes, I shall leave three very good physicians—air, exercise, and diet."

Such evidence as this has had great weight, and there are many who believe *less* in medicine and *more* in diet. There is every indication in the present day that the attention of the thinking public is directed to health questions. What is needed is a universal knowledge of health laws, chiefly those relating to food, which is the first essential of healthy existence.

We hear a great deal of physical training, and as an aid to health such training is invaluable ; but there is a more important want, that of ensuring and sustaining the physical powers and developing the body to the highest point of strength and vigour of which it is capable. In order to do this improvements must be instituted in the dietary of all classes, and from earliest infancy the laws of health must be observed. Pure water, cleanliness, proper clothing, fresh air, and exercise are all necessary to healthy existence, but without proper food will fail to bring about the desired results. The adoption of dietetic principles will ensure physical development and prove the chief means of improved health.

In a lecture on Physical Culture delivered at the Society of Arts, April 25th, 1888, Miss Chreman remarks :—

"That harmonic development of body and mind, that wholeness and fulness of life, which we call health, has not yet become the direct care and interest either of the physicians or of the educators of our youth. The fact that health is the *natural and only right condition of existence* has as yet no national acceptance, and consequently the truest element of

education, the noblest branch of medical science, viz., the maintenance of that condition of soundness in which life must be for the wholesome and thorough performance of any or all of its duties, has little interest and no standard; its results are unlooked for, unrealised, and unpaid."

This is true enough, but unfortunately few persons hitherto have had any opportunity of learning the way to health, or the means whereby so desirable a condition can be obtained.

Calisthenics, gymnastic and athletic exercise are all excellent in their way, and physical training, when conducted on scientific principles, is a vital part of the education of the young. The exercise of the bodily faculties acts as a stimulus to all the latent energies, drawing out and utilizing the powers of the system, but not conferring strength or of itself developing fresh power, that is only supplied through the food, and the quality of the increased energies depend upon the kind of the food eaten.

It will thus be seen how necessary the knowledge of true dietetic principles becomes in relation to physical culture, and how indispensable it is that the body should be nourished and sustained by the elements that are required and best adapted for the purpose. Space will not admit of a detailed reference to the course advised to the would-be seeker after a natural condition of body—it must of necessity vary according to individual temperament and organisation; but there is nothing objectionable or difficult in the rules laid down, and the results will far exceed the most sanguine hopes, and well repay any trifling self-denial.

KEEP UP THE INFLUENCE OF THE HOME.

MOTHERS are apt to become discouraged and think all their efforts have availed nothing.

When the boys have grown away from parental care, when they seem to find all their enjoyment outside of home, when they prefer the club-room, when the daughters become frivolous and ungrateful, then the mother's heart sinks within her, and she thinks, "What have I done, or what have I not done, that it should come to this!"

She remembers all the nights of patient watching, when they were little and helpless; the years of care and anxiety, the fond hopes, the ambitions, she has had for her children, and now they are out in the world and they have forgotten it all.

She has tried to be patient with them, she has endeavoured

to make home pleasant and attractive for their sake, and it causes her many a heartache that no memories of the past seem to appeal to them now.

Be patient still, dear mother! You do not know how many times a thought of you and the good old home has kept them from harm. That is the one great safeguard of their lives, and though wandering far away, they will return.

How the notes of a familiar song will revive memories of an innocent childhood and the wise teaching of a God-fearing parent!

Said an aged grandmother to a gay young lad who had come to see her in his college vacation, "Arthur, I pray for you every day of my life."

"That's right," replied the jovial young fellow. "You keep right on praying, grandmother. I can't go to the dogs while I have you to back me."

And she kept on praying, faithful soul, to the end of her life. She never gave him up, and when others spoke discouragingly of his wild and thoughtless ways she would relate some anecdote of his childhood, and say, "He was such a dear boy, he will come out all right, I know."

And although her kind voice is now silent, and the patient hands long since folded to rest, her simple faith in his manhood speaks to him still through the years, and draws him from many an evil.

Sometimes parents give up a refractory child. They say: "We have done all we shall for him. If he chooses to go to the bad it is not our fault."

It may not be the fault of anyone but himself, but don't let him get off so easily. Do not withdraw the influences of home, and let him feel there is nothing to restrain him from wrong-doing. Let the clear and loving light of home be for ever undimmed. Let its silent reproach go with him everywhere.

I call to mind with admiration the words of a brave mother who said, "My children shall find it a hard road to destruction. I will pray for strength from above to keep them from it. While I live and breathe I will never give them up, never, never, *never!*"

SHE WAS TIRED ANYWAY.

L—— had been trotting her little feet off waiting upon the elder members of the family, as little children can. At last, weary from slipping down from her chair so often, and

out of patience at the demands made upon her, she exclaimed :

“ Well, I guess I get tired as anybody, if 'tis only a small tired ! ”

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. J. A. STEPHENSON has been giving a course of lectures on “ Phrenology and Physiology ” in the Primitive Methodist Schoolroom, Petts Hill, Staffs. The lectures were highly appreciated by the large audiences which attended, and the public examinations gave great satisfaction. The lecturer was very well supported by private consultations.

TEA PARTY AND ENTERTAINMENT.—The Oldham Enterprise and Perseverance Lodges of the I.O.G.T. held a public tea party in the Mission-room, Rothwell Street, on Saturday. A good number sat down to tea, after which an excellent entertainment was gone through. A lecture on “ Phrenology : What it is, and What it teaches,” by Mr. Brierley, was much enjoyed. Brother Jenkinson, D.M. and S.D., of Failsworth, addressed the meeting on the temperance question.—*Oldham Chronicle*.

PRIMITIVE METHODIST CHAPEL, HIGHER OPENSHAW.—On Saturday a phrenological lecture was given by Mr. J. F. Brierley, of Oldham. The subject of the lecture was “ Phrenology : What is it, and what are its uses ? ” The lecture was most instructive and interesting throughout. There was a good attendance. At the close of the lecture several persons were publicly examined. The accuracy of the delineations were acknowledged by all present. The chair was occupied by Mr. Lloyd Young. A vote of thanks was given to the lecturer.—*Gorton Bradford and Openshaw Reporter*.

WE would direct our readers to the January number of the *Phrenological Magazine* for a character sketch with portrait of the Duke of York, and to March, 1892, for one of Princess May.

THINE to work as well as play,
Clearing thorny wrongs away ;
Plucking up the weeds of sin,
Letting heaven's warm sunshine in.—*Whittier*.

The Employment Bureau.

[The Employment 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 employées. This department has already become of practical value. All letters of enquiry to be directed to the Employment Bureau, Fowler Institute, Ludgate Circus, E.C. Principals requiring special Teachers, Students (certificated) requiring employment either in schools or families, Typewriters, Skilled Artists, Musicians, Literary or Journalistic Workers, Builders, Architects, Decorators, Phrenologists, Shorthand Clerks, Secretaries, good Readers, who have satisfied L. N. Fowler as to their abilities, may find a medium through which to be successful in obtaining suitable positions.]

A YOUNG LADY of good birth, education, appearance, and of literary tastes, desires daily employment in an office. She writes a good and rapid hand.

A FOREIGN LADY well qualified to teach Slöyd, art needlework, kindergarten, clay and card work, Swedish drill, German, Danish and French will be glad to hear of pupil. She has had six months' experience in London, and has been found to be most attentive and painstaking with her pupils.

A YOUNG GENTLEMAN desires to hear of some secretarial work, is a good art critic, would not object to journalistic or light literary work, or reporting. Writes shorthand well. Has large Causality, Comparison, Human Nature, Order, and Sub., Small Hope and Self-Esteem.

Book Notices.

Biographical Sketch of W. T. Stead, with Letters and Essays on Journalism, by E. H. Stout. Anyone intending to follow that profession will find the book of incalculable value as it is full of practical hints and helps. Mr. Stead believes the mission of the journalist to be unequalled in these days of rapid transit. Mr. Stout very truly says of Mr. Stead that "while some men only write to live, Mr. Stead lives to write," that he is the modern Sir Galahad, whose broad sword is the pen, whose holy grail is the sacrament of humanity's release from superstition, tradition and artificial bondage of every kind and class.

The Use of Alcohol in Health and Disease, by A. L. Fowler-Breakspear, M.D. (London: L. N. Fowler & Co., Publishers), is a capital brochure, giving the experience of a lady physician of forty years' practice. Every mother ought to have one for herself, and one to give away, for it contains valuable facts, which show the fallacy of the use of Alcohol in either health or disease. We cannot speak in too high terms of this pamphlet, for it comes at a time when Alcohol has a deadly hold on the women of England, despite the efforts put forth to stem its influence.

Correspondence.

DEAR EDITOR,—I cannot help thanking you for the benefit I have derived from a few months' study of your *Self-Instructor*. The advice is sound. I wish I had read it years since, it would have saved me much which I now have cause to regret.

Yours faithfully,

Doncaster,
May.

A. S.

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 photograph; 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 6s., for twelve 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.]

DAVID J.—The photo of this gentleman indicates a favourable development of the motive temperament, giving him toughness of organization and power to endure and sustain considerable effort. His muscular system is well developed. He has to guard against indigestion. The abdominal and nutritive systems are not so active; there are indications of weakness in these parts. He should be characterised by a fairly energetic nature, considerable pluck and courage, and an active will power, but he has more perseverance than decision. He has cautiousness and prudence, and is candid; has an open mind, and rarely keeps a secret; the spirit to confide is strong. He has considerable mechanical skill and ability to work by the eye; has a good eye for proportions, and would be a good workman. His memory of faces, of designs, and of things that he sees is very good. His memory of detail is not so strong. He is a neat worker, is a lover of order and having things in their place. His social faculties are strong. He is quite domesticated in his tastes.

A. P. (Melbourne).—This child has a favourable organization, mentally and physically. There is every indication of constitutional harmony, giving freedom of action throughout. The body is well-formed and healthy. The brain is active, of fine quality, and capable of accomplishing great results. The elements of Self-Esteem and Firmness enter largely into his character. He will do what he wants to, and will have his own way. He has every indication of an

energetic and persevering disposition ; there is great force of character. He will resist authority and resent any attempt at restraint. Much caution should be exercised in developing his character ; those faculties that are large must not be excited by an exhibition of the action of similar faculties in the parent. His attention must be directed to other things rather than forced to give up what he is doing. Authority must not be used ; direction must be given and suitable environment provided. He has a mind, which, if started right, is capable of wielding a strong influence over others, and of accomplishing a great deal in this life.

Heads (Oldham).—The photo of this lady indicates a very active organization. She has a strong hold on life, all the mental manifestations are active and vigorous. She has a broad head, giving her a practical cast of mind. Her abilities consist in her being able to deal with things off hand, and for her general practical judgment. She is energetic, and exerts considerable influence over those with whom she comes in contact, because of her vitality. She has a large social brain, and possesses strong affections. She has a good perceptive brain which gives her the power of gathering facts on general information. She is very enthusiastic, has plenty of resources, and does not easily give up.

A. B. (Wiltshire).—The photo of this gentleman indicates a fair organization ; the bodily powers are well represented, and are capable of sustaining himself in the ordinary labours of the day, but he must avoid unnecessary strain and not crowd two days' work into one. By living within his strength and paying attention to diet he will wear well. He is more especially organized for outdoor pursuits. He has large perceptive faculties, is energetic and persevering. He has a strong love and desire to travel. He has a fair memory ; he is neat, and the love of order is strongly indicated. His memory of faces, and forms and outlines is generally very good. The whole of his perceptive brain is active ; he will learn the quickest from what he sees, and his impressions from that source will be more forcible. He has good powers of language. He is not reserved, has scarcely enough caution, and the photo indicates candour and outspokenness.

C. R. F. (Tate).—This lady has an impulsive and susceptible nature, her disposition inclines her to be enthusiastic and ardent in her general actions. She should show a fondness for exercise and the love of motion. She is not over strong ; she may be quickly exhausted, but she soon recuperates. She is rather passionate and sensitive, is quickly impressed, and is strong in her likes and dislikes. She is rather hasty, is not quite cautious enough. She feels she must say and act just what she thinks ; she is too candid at times, and does not show so much control over herself as is desirable. She will learn by experience. She is rather self-willed, but is not so courageous. She lacks firmness of purpose, and is rather disposed to change. She has strong social faculties, is affectionate, and friendly in disposition. Her perceptive brain is good, and she will learn things rapidly.

THE Phrenological Magazine.

AUGUST, 1893.



(From photograph by T. H. Lord, Market Place, Cambridge.)

MISS A. M. J. E. JOHNSON, SIXTH WRANGLER.

THIS young lady possesses a balance of mind above the average. She has a superior quality of organization, and a favourable blending of temperaments. The force of her mind is forward from the ear, giving her an intellectual bias, and a mental grip above the average. There is a full frontal lobe, with a remarkable development of critical, analytical, and comparative memory. There is height, too, from the opening of the ear to the superior portion of the parietal bone, which indicates steadiness of purpose, great perseverance, and moral control. The lateral portions of the head are fully represented, though not so distinctly marked as either the intellectual or moral regions. The fulness to the curve of the brain under the parietal bone gives to her character, prudence, forethought, womanly tact, and reserve. She is a plodder, and not easily excited beyond the bounds of control. Her domestic nature shows geniality, and sincerity, rather than great sociability. She

takes her intellect with her into society, and does not fail to pass searching mental comments on the characteristics of the people she meets.

Her mind is all alive to what is taking place around her. She is quick to grasp ideas, and possesses great delicacy and refinement of mind. She is well developed in the central faculties, which give her a keen insight into matters and things, and remarkable penetration into intricate subjects. Her first impressions are usually her best, hence she can rely upon them. She is not wanting in Order, and must show method in her work, power to systematise her thoughts, ability to marshall her ideas appropriately, and see the fitness of one thing to another. She should have a good hold on life, and must have come from a good, healthy stock. Her mathematical faculties are distinctly marked, and round out the upper portion of her forehead.

THE EDITOR.

Newnham College has again carried off high honours among the wranglers, and here is a distinct proof of Phrenology as was the case of Miss Fawcett, and seldom shall we find two such capable women students in the Mathematical Tripos list. Miss A. M. J. E. Johnson, of Newnham College, Cambridge, has creditably secured the Sixth Wranglership, while it will be remembered Miss Fawcett was the true Senior Wrangler in 1890. Miss Johnson is the daughter of C. H. Johnson, Esq., and is a native of Cambridge, where she has achieved her highest success. Her brother was Fifth Wrangler a few years ago. She has just come of age so she has her life before her, and one that is full of promise.

ATOMS, MOLECULES, AND ETHER WAVES.

BY PROF. J. TYNDALL.

MAN is prone to idealisation. He cannot accept as final the phenomena of the sensible world, but looks behind that world into another which rules the sensible one. From this tendency of the human mind systems of mythology and scientific theories have equally sprung. By the former the experiences of volition, passion, power, and design, manifested among ourselves were transplanted, with the necessary modifications, into an unseen universe, from which the sway and potency of these magnified human qualities were exerted.

“ In the roar of thunder and in the violence of the storm was felt the presence of a shouter and furious strikers, and out of the rain was created an Indra or giver of rain.” It is substantially the same with science, the principal force of which is expended in endeavouring to rend the veil which separates the sensible world from an ultra-sensible one. In both cases our materials, drawn from the world of the senses, are modified by the imagination to suit intellectual needs. The “ first beginnings ” of Lucretius were not objects of sense, but they were suggested and illustrated by objects of sense. The idea of atoms proved an early want on the part of minds in pursuit of the knowledge of nature. It has never been relinquished, and in our own day it is growing steadily in power and precision.

The union of bodies in fixed and multiple proportions constitutes the basis of modern atomic theory. The same compound retains, for ever, the same elements, in an unalterable ratio. We cannot produce pure water containing one part, by weight, of hydrogen and nine of oxygen ; nor can we produce it when the ratio is one to ten ; but we can produce it from the ratio of one to eight, and from no other. So also when water is decomposed by the electric current, the proportion, as regards volumes, is as fixed as in the case of weights. Two volumes of hydrogen and one of oxygen invariably go to the formation of water. Number and harmony, as in the Pythagorean system, are everywhere dominant in this under-world.

Following the discovery of fixed proportions we have that of *multiple* proportions. For the same compound, as above stated, the elementary factors are constant ; but one elementary body often unites with another so as to form different compounds. Water, for example, is an oxide of hydrogen ; but a peroxide of that substance also exists, containing exactly double the quantity of oxygen. Nitrogen also unites with oxygen in various ratios, but not in all. The union takes place, not gradually and uniformly, but by steps, a definite weight of matter being added at each step. The larger combining quantities of oxygen are thus multiples of the smaller ones. It is the same with other combinations.

We remain thus far in the region of fact : why not rest there ? It might as well be asked why we do not, like our poor relations of the woods and forests, rest content with the facts of the sensible world. In virtue of our mental idiosyncrasy, we demand *why* bodies should combine in multiple proportions, and the outcome and answer of this question is the atomic theory. The definite weights of

matter above referred to represent the weights of atoms, indivisible by any force which chemistry has hitherto brought to bear upon them. If matter were a *continuum*—if it were not rounded off, so to say, into these discrete atomic masses—the impassable breaches of continuity which the law of multiple proportions reveals, could not be accounted for. These atoms are what Maxwell finely calls “the foundation stones of the material universe” which, amid the wreck of composite matter, “remain unbroken and unworn.”

A group of atoms drawn and held together by what chemists term affinity, is called a molecule. The ultimate parts of all compound bodies are molecules. A molecule of water, for example, consists of two atoms of hydrogen, which grasp and are grasped by one atom of oxygen. When water is converted into steam, the distances between the molecules are greatly augmented, but the molecules themselves continue intact. We must not, however, picture the constituent atoms of any molecule as held so rigidly together as to render intestine motion impossible. The interlocked atoms have still liberty of vibration, which may, under certain circumstances, become so intense as to shake the molecule asunder. Most molecules—probably all—are wrecked by intense heat, or in other words by intense vibratory motion ; and many are wrecked by a very moderate heat of the proper quality. Indeed, a weak force, which bears a suitable relation to the constitution of the molecule, can, by timely savings and accumulations, accomplish what a strong force out of relation fails to achieve.

We have here a glimpse of the world in which the physical philosopher for the most part resides. Science has been defined as “organised common sense ;” by whom I have forgotten ; but, unless we stretch unduly the definition of common sense, I think it is hardly applicable to this world of molecules. I should be inclined to ascribe the creation of that world to inspiration rather than to what is currently known as common sense. For the natural history sciences the definition may stand—hardly for the physical and mathematical sciences.

The sensation of light is produced by a succession of waves which strike the retina in periodic intervals ; and such waves impinging on the molecules of bodies, agitate their constituent atoms. These atoms are so small, and, when grouped to molecules, are so tightly clasped together, that they are capable of tremors equal in rapidity to those of light and radiant heat. To a mind coming freshly to these subjects, the numbers with which scientific men here habitually deal must

appear utterly fantastical ; and yet, to minds trained in the logic of science, they express most sober and certain truth. The constituent atoms of molecules can vibrate to and fro millions of millions of times in a second. The waves of light and of radiant heat follow each other at similar rates through the luminiferous ether. Further, the atoms of different molecules are held together with varying degrees of tightness—they are tuned, as it were, to notes of different pitch. Suppose then light-waves, or heat-waves, to impinge upon an assemblage of such molecules, what may be expected to occur ? The same as what occurs when a piano is opened and sung into. The waves of sound select the strings which respectively respond to them—the strings, that is to say, whose rates of vibration are the same as their own—and of the general series of strings these only sound. The vibratory motion of the voice, imparted first to the air, is here taken up by the strings. It may be regarded as *absorbed*, each string constituting itself thereby a new centre of motion. Thus also, as regards the tightly locked atoms of molecules on which waves of light or radiant heat impinge. Like the waves of sound just adverted to, the waves of ether select those atoms whose periods of vibration synchronise with their own periods of recurrence, and to such atoms deliver up their motion. It is thus that light and radiant heat are absorbed.

And here the statement, though elementary, must not be omitted, that the colours of the prismatic spectrum, which are presented in an impure form in the rainbow, are due to different rates of atomic vibration in their source, the sun. From the extreme red to the extreme violet, between which are embraced all colours visible to the human eye, the rapidity of vibration steadily increases, the length of the waves of ether produced by these vibrations diminishing in the same proportion. I say “visible to the human eye,” because there may be eyes capable of receiving visual impression from waves which do not effect ours. There is a vast store of rays, or more correctly waves, beyond the red, and also beyond the violet, which are incompetent to excite our vision ; so that could the whole length of the spectrum, visible and invisible, be seen by the same eye, its length would be vastly augmented.

I have spoken of molecules being wrecked by a moderate amount of heat of the proper quality ; let us examine this point for a moment. There is a liquid called nitrite of amyl—frequently administered to patients suffering from heart disease. The liquid is volatile, and its vapour is usually inhaled by the patient. Let a quantity of this vapour be in-

roduced into a wide glass tube, and let a concentrated beam of solar light be sent through the tube along its axis. Prior to the entry of the beam, the vapour is as invisible as the purest air. When the light enters, a bright cloud is immediately precipitated on the beam. This is entirely due to the waves of light, which wreck the nitrite of amyl molecules, the products of decomposition forming innumerable liquid particles which constitute the cloud. Many other gases and vapours are acted upon in a similar manner. Now the waves that produce this decomposition are by no means the most powerful of those emitted by the sun. It is, for example, possible to gather up the ultra-red waves into a concentrated beam, and to send it through the vapour, like the beam of light. But, though possessing vastly greater energy than the light waves, they fail to produce decomposition. Hence the justification of the statement already made, that a suitable relation must subsist between the molecules and the waves of ether to render the latter effectual.

A very impressive illustration of the decomposing power of the waves of light is here purposely chosen ; but the processes of photography illustrate the same principle. The photographer, without fear, illuminates his developing room with light transmitted through red or yellow glass ; but he dares not use blue glass, for blue light would decompose his chemicals. And yet the waves of red light, measured by the amount of energy which they carry, are immensely more powerful than the waves of blue. The blue rays are usually called chemical rays—a misleading term ; for, as Draper and others have taught us, the rays that produce the grandest chemical effects in nature, by decomposing the carbonic acid and water which form the nutriment of plants, are not the blue ones. In regard, however, to the salts of silver, and many other compounds, the blue rays are the most effectual. How is it then that weak waves can produce effects which strong waves are incompetent to produce ? This is a feature characteristic of periodic motion. In the experiment of singing into an open piano already referred to, it is the accord subsisting between the vibrations of the voice and those of the string that causes the latter to sound. Were this accord absent, the intensity of the voice might be quintupled, without producing any response. But when voice and string are identical in pitch, the successive impulses add themselves together, and this addition renders them, in the aggregate, powerful, though individually they may be weak. In some such fashion the periodic strokes of the smaller ether waves accumulate, till the atoms on which their timed impulses impinge are jerked asunder, and what we call chemical decomposition ensues.

Savart was the first to show the influence of musical sounds upon liquid jets, and I have now to describe an experiment belonging to this class, which bears upon the present question. From a screw-tap in my little Alpine kitchen I permitted, an hour ago, a vein of water to descend into a trough, so arranging the flow that the jet was steady and continuous from top to bottom. A slight diminution of the orifice caused the continuous portion of the vein to shorten, the part further down resolving itself into drops. In my experiment, however, the vein, before it broke, was intersected by the bottom of the trough. Shouting near the descending jet produced no sensible effect upon it. The higher notes of the voice, however powerful, were also ineffectual. But when the voice was lowered to about 130 vibrations a second, the feeblest utterance of this note sufficed to shorten, by one half, the continuous portion of the jet. The responsive drops ran along the vein, pattered against the trough, and scattered a copious spray round their place of impact. When the note ceased, the continuity and steadiness of the vein were immediately restored. The formation of the drops was here periodic; and when the vibrations of the note accurately synchronised with the periods of the drops, the waves of sound aided what Plateau has proved to be the natural tendency of the liquid cylinder to resolve itself into spherules, and virtually decomposed the vein.

I have stated, without proof, that where absorption occurs, the motion of the ether-waves is taken up by the constituent atoms of molecules. It is conceivable that the ether-waves, in passing through an assemblage of molecules, might deliver up their motion to each molecule as a whole, leaving the relative positions of the constituent atoms unchanged. But the long series of reactions, represented by the deportment of nitrite of amyl vapour, does not favour this conception; for, were the atoms animated solely by a common motion, the molecules would not be decomposed. The fact of decomposition, then, goes to prove the atoms to be the seat of the absorption. They, in great part, take up the energy of the ether-waves, whereby their union is severed, and the building materials of the molecules are scattered abroad.

Molecules differ in stability; some of them, though hit by waves of considerable force, and taking up the motions of these waves, nevertheless hold their own with a tenacity which defies decomposition. And here, in passing, Prof. Tyndall says that it would give him pleasure to be able to point to his researches in confirmation of the solar theory recently enunciated by his friend the President of the British Associa-

tion. But though the experiments which Prof. Tyndall made on the decomposition of vapours by light might be numbered by the thousand, he has, to his regret, encountered no fact which proves that free aqueous vapour is decomposed by the solar rays, or that the sun is re-heated by the combination of gases, in the severance of which it had previously sacrificed its heat.

II.

The memorable investigations of Leslie and Rumford, and the subsequent classical researches of Melloni, dealt, in the main, with the properties of radiant heat; while in my investigations, radiant heat, instead of being regarded as an end, was employed as a means of exploring molecular condition. On this score little could be said until the gaseous form of matter was brought under the dominion of experiment. This was first effected in 1859, when it was proved that gases and vapours, notwithstanding the open door which the distances between their molecules might be supposed to offer to the heat waves, were, in many cases, able effectually to bar their passage. It was then proved that while the elementary gases and their mixtures, including among the latter the earth's atmosphere, were almost as pervious as a vacuum to ordinary radiant heat, the compound gases were one and all absorbers, some of them taking up with intense avidity the motion of the ether-waves.

A single illustration will here suffice. Let a mixture of hydrogen and nitrogen in the proportion of three to fourteen by weight, be enclosed in a space through which are passing the heat rays from an ordinary stove. The gaseous mixture offers no measurable impediment to the rays of heat. Let the hydrogen and nitrogen now unite to form the compound ammonia. A magical change instantly occurs. The number of atoms present remains unchanged. The transparency of the compound is quite equal to that of the mixture prior to combination. No change is perceptible to the eye, but the keen vision of experiment soon detects the fact that the perfectly transparent and highly attenuated ammonia resembles pitch or lampblack in its behaviour to the rays of heat.

There is probably boldness, if not rashness, in the attempt to make these ultra-sensible actions generally intelligible, and I may have already transgressed the limits beyond which the writer of a familiar article cannot profitably go. There may, however, be a remnant of readers willing to accompany me, and for their sakes I proceed. A hundred compounds might be named which, like the ammonia, are transparent to light,

but more or less opaque—often indeed, intensely opaque—to the rays of heat from obscure sources. Now the difference between these latter rays and the light-rays is purely a difference of period of vibration. The vibrations in the case of light are more rapid, and the ether waves which they produce are shorter, than in the case of obscure heat. Why then should the ultra-red waves be intercepted by bodies like ammonia, while the more rapidly recurrent waves of the whole visible spectrum are allowed free transmission? The answer I hold to be that, by the act of chemical combination, the vibrations of the constituent atoms of the molecules are rendered so sluggish as to synchronise with the motions of the longer waves. They resemble loaded piano-strings, or slowly descending water jets, requiring notes of low pitch to set them in motion.

The influence of synchronism between the “radiant” and the “absorbent” is well shown by the behaviour of carbonic acid gas. To the complex emission from our heated stove, carbonic acid would be one of the most transparent of gases. For such waves olefiant gas, for example, would vastly transcend it in absorbing power. But when we select a radiant with whose waves the atoms of carbonic acid are in accord, the case is entirely altered. Such a radiant is found in a carbonic oxide flame, where the radiating body is really hot carbonic acid. To this special radiation carbonic acid is the most opaque of gases.

And here we find ourselves face to face with a question of great delicacy and importance. Both as a radiator, and as an absorber, carbonic acid is, in general, a feeble gas. It is beaten in this respect by chloride of methyl, ethylene, ammonia, sulphurous acid, nitrous oxide, and marsh gas. Compared with some of these gases, its behaviour in fact approaches that of elementary bodies. May it not help to explain their neutrality? The doctrine is now very generally accepted that atoms of the same kind may, like atoms of different kinds, group themselves to molecules. Affinity exists between hydrogen and hydrogen, and between chlorine and chlorine, as well as between hydrogen and chlorine. We have thus homogeneous molecules as well as heterogeneous molecules, and the neutrality so strikingly exhibited by the elements may be due to a quality of which carbonic acid furnishes a partial illustration. The paired atoms of the elementary molecules may be so out of accord with the periods of the ultra-red waves—the vibrating periods of these atoms may, for example, be so rapid—as to disqualify them both from emitting those waves, and from accepting their

energy. This would practically destroy their power, both as radiators and absorbers. I have reason to know that a distinguished authority has for some time entertained this hypothesis.

We must, however, refresh ourselves by occasional contact with the solid ground of experiment, and an interesting problem now lies before us awaiting experimental solution. Suppose two hundred men to be scattered equably throughout the length of Pall Mall. By timely swerving now and then a runner from St. James's Palace to the Athenæum Club might be able to get through such a crowd without much hindrance. But supposing the men to close up so as to form a dense file crossing Pall Mall from north to south; such a barrier might seriously impede, or entirely stop, the runner. Instead of a crowd of men, let us imagine a column of molecules under small pressure, thus resembling the sparsely distributed crowd. Let us suppose the column to shorten, without change in the quantity of matter, until the molecules are so squeezed together as to resemble the closed file across Pall Mall. During these changes of density, would the action of the molecules upon a beam of heat passing among them, at all resemble the action of the crowd upon the runner?

We must answer this question by direct experiment. To form our molecular crowd we place, in the first instance, a gas or vapour in a tube 38 inches long, the ends of which are closed with circular windows, air-tight, but formed of a substance which offers little or no obstruction to the calorific waves. Calling the measured value of a heat-beam passing through this tube 100, we carefully determine the proportionate part of this total absorbed by the molecules in the tube. We then gather precisely the same number of molecules into a column 10·8 inches long, the one column being thus three and a half times the length of the other. In this case also we determine the quantity of radiant heat absorbed. By the depression of a barometric column, we can easily and exactly measure out the proper quantities of the gaseous body. It is obvious that 1 mercury inch of vapour, in the long tube, would represent precisely the same amount of matter—or, in other words, the same number of molecules—as $3\frac{1}{2}$ inches in the short one; while 2 inches of vapour in the long tube would be equivalent to 7 inches in the short one.

The experiments have been made with the vapours of two very volatile liquids, namely, sulphuric ether and hydride of amyl. The sources of radiant heat were, in some cases, an incandescent lime cylinder, and in others a spiral of platinum

wire, heated to bright redness by an electric current. One or two of the measurements will suffice for the purposes of illustration. First then, as regards the lime light : for 1 inch of pressure in the long tube, the absorption was 18·4 per cent. of the total beam ; while for 3·5 inches of pressure in the short tube, the absorption was 18·8 per cent., or almost exactly the same as the former. For 2 inches pressure, moreover, in the long tube, the absorption was 25·7 per cent. ; while for 7 inches, in the short tube, it was 25·6 per cent. of the total beam. Thus closely do the absorptions in the two cases run together—thus emphatically do the molecules assert their individuality. As long as their number is unaltered, their action on radiant heat is unchanged. Passing from the lime-light to the incandescent spiral, the absorptions of the smaller equivalent quantities, in the two tubes, were 23·5 and 23·4 per cent. ; while the absorptions of the larger equivalent quantities were 32·1 and 32·6 per cent. respectively. This constancy of absorption, when the density of a gas or vapour is varied, I have called “the conservation of molecular action.”

But it may be urged that the change of density, in these experiments, has not been carried far enough to justify the enunciation of a law of molecular physics. The condensation into less than one-third of the space does not, it may be said, quite represent the close file of men across Pall Mall. Let us therefore push matters to extremes, and continue the condensation till the vapour has been squeezed into a liquid. To the pure change of density we shall then have added the change in the state of aggregation. The experiments here are more easily described than executed ; nevertheless, by sufficient training, scrupulous accuracy, and minute attention to details, success may be ensured. Knowing the respective specific gravities, it is easy, by calculation, to determine the condensation requisite to reduce a column of vapour of definite density and length to a layer of liquid of definite thickness. Let the vapour, for example, be that of sulphuric ether, and let it be introduced into our 38-inch tube till a pressure of 7·2 inches of mercury is obtained. Or let it be hydride of amyl, of the same length, and at a pressure of 6·6 inches. Supposing the column to shorten, the vapour would become proportionately denser, and would, in each case, end in the production of a layer of liquid exactly 1 millimeter in thickness.* Conversely, a layer of liquid ether, or of hydride of amyl, of this thickness, were its molecules freed from the thrall of cohesion, would form a column of vapour 38 inches

* The millimeter is $\frac{1}{25}$ th of an inch.

long, at a pressure of 7·2 inches in the one case, and of 6·6 inches in the other. In passing through the liquid layer, a beam of heat encounters the same number of molecules as in passing through the vapour layer ; and our problem is to decide, by experiment, whether, in both cases, the molecule is not the dominant factor, or whether its power is augmented, diminished, or otherwise overridden by the state of aggregation.

Using the sources of heat before mentioned, and employing diathermanous lenses, or silvered mirrors, to render the rays from those sources parallel, the absorption of radiant heat was determined, first for the liquid layer, and then for its equivalent vaporous layer. As before, a representative experiment or two will suffice for illustration. When the substance was sulphuric ether, and the source of radiant heat an incandescent platinum spiral, the absorption by the column of vapour was found to be 66·7 per cent. of the total beam. The absorption of the equivalent liquid layer was next determined, and found to be 67·2 per cent. Liquid and vapour, therefore, differed from each other only 0·5 per cent. : in other words, they were practically identical in their action. The radiation from the lime-light has a greater power of penetration through transparent substances than that from the spiral. In the emission from both of these sources we have a mixture of obscure and luminous rays ; but the ratio of the latter to the former, in the limelight, is greater than in the spiral ; and, as the very meaning of transparency is perviousness to the luminous rays, the emission in which these rays are predominant must pass most freely through transparent substances. Increased transmission implies diminished absorption ; and, accordingly, the respective absorptions of ether vapour and liquid ether, when the lime-light was used, instead of being 66·7 and 67·2 per cent., were found to be—

Vapour	...	...	...	33·3 per cent.
Liquid	...	...	...	33·3 „

no difference whatever being observed between the two states of aggregation. The same was found true of hydride of amyl.

This constancy and continuity of the action exerted on the waves of heat when the state of aggregation is changed, I have called “ the thermal continuity of liquids and vapours.” It is, I think, the strongest illustration hitherto adduced of the conservation of molecular action.

Thus, by new methods of search, we reach a result which was long ago enunciated on other grounds. Water is well known to be one of the most opaque of liquids to the waves of obscure heat. But if the relation of liquids to their vapours

be that here shadowed forth ; if in both cases the molecule asserts itself to be the dominant factor, then the dispersion of the water of our seas and rivers, as invisible aqueous vapour in our atmosphere, does not annul the action of the molecules on solar and terrestrial heat. Both are profoundly modified by this constituent ; but as aqueous vapour is transparent, which, as before explained, means pervious to the luminous rays, and as the emission from the sun abounds in such rays, while from the earth's emission they are wholly absent, the vapour-screen offers a far greater hindrance to the outflow of heat from the earth towards space than to the inflow from the sun towards the earth. The elevation of our planet's temperature is therefore a direct consequence of the existence of aqueous vapour in our air. Flimsy as that garment may appear, were it removed, terrestrial life would probably perish through the consequent refrigeration.*

MOTIVES AND HABITS AS STIMULANTS TO ACTION.

BY L. N. FOWLER.

THIS is an important subject to study, particularly in regard to Phrenology.

Phrenology points out those relations established by nature between given developments and conditions of brain and corresponding manifestations of mind. Its simple yet comprehensive definition is that motives arise from the wants, appetites, and impulses of our natures. They vary in quality, intensity, and importance. There are many kinds of motives. There are good motives and bad ; there are high motives and low ; there are wise motives and foolish ; honest and dishonest motives. Motives, and actions, and results go together, whether high or low, wise or foolish, good or bad. We must reap the kind of seed we sow and take the results of the motives that actuate us. Motives foreshadow results. Man's success and failure

* In this very interesting account of a recent incursion into that ultra-sensible world, mentioned at the outset of this paper, we can, as investigators of mental science, trace mental combinations as here illustrated by chemical affinities. The combinations exist whether belief in them exists or not. Mental science accounts for the various attitudes of disposition and character when other sciences can only surmise and conjecture. Mental combination should be carefully studied, analysed, and dissected by the light of modern phrenological discovery.—ED. P. M.

depend much upon his motives. His character to a great extent is formed by the motives that stimulate him to action. His health, integrity, length of life, happiness, and destiny depend much upon his motives and his habits of life. If the true motives for all marriages could be made known at the altar what a letting go of hands there would be. If the real motives for joining the church were made known at the communion table many would be astonished, and the number of communicants would be greatly diminished. If every congregation knew the motives why their pastor became a preacher there would be a plenty of gossip. If we all had a correct knowledge of the motives that actuate us, and looked at those motives in the light of truth, we would be self-condemned. We should analyze our motives, see from what faculty they arise. If the real motives for war were known there would be much less fighting. Motives based on justice, if modified by sympathy, regulated by prudence, and guided by experience, result in good to all and evil to none. Motives, resolutions, and actions are triune, three in one, and are not easily separated: they are like father, son, and spirit. A desire or need for food produces a motive to obtain it. Having a motive to obtain the food a resolution is formed which leads to action, and food is obtained.

To have a motive without resolution or action, or, to have resolution without motive or action, or, to have action without motive or resolution, is like having a fire-place without coals, coals without a fire-place, or fire without coals to burn. The three combined are like a threefold cord, not easily broken. Motives can be cultivated, enlarged, and elevated according to the enfolding of the mind.

The motives of a man should be higher than those of the boy; more expanded in a statesman than in a farmer; more elevated in a clergyman than in a butcher. A man of *family* should have more motives than one with none. Motives that lead one to sacrifice others for self are not so pure as those that lead us to sacrifice self for others. We have a glorious example of self-sacrifice for the salvation of others. The missionary's motives are different from those of the aristocratic swell. Reformers have all had their distinct motives. It is difficult to change motives when they become established by the force of circumstances and habits. Natural inclinations joined to motives and habits make a powerful combination. Many a man is strong enough to hold a bull by the horns, but not strong enough to hold his temper. Many a woman can hold her family together, but is not able to hold her tongue. Many a young man is very courageous

on the battle field, but he is a coward when Eve—dissipation and companions—tempt him. A young man can live on music and poetry while courting, but when married he wants some bread ; and some think it is jolly to spend a lot of money in getting married and in having a honeymoon, but it is not easy to fill eight mouths, and cover eight backs and sixteen feet, and fill eight empty heads. A young lady is strong enough to dance all night, but ask her to sweep the floor or get the breakfast, and she is too weakly. She can carry a heavy load of fashion but not one pound of sugar home from the grocery. Motive has very much to do with our inclinations and strength ; tell a person he can't do a thing and he will think he can. It is very difficult to make a good motive take the place of a bad one, especially where habit goes with the bad motive, but the effort should be made. It is very difficult for a new motive to take the place of an old one where all the associations favour the old one.

Before we commit ourselves to a certain course in life, we ought to become thoroughly acquainted with our motives ; whether it is business, marriage, preaching, making money or giving it away. A wrong motive will end wrong : a right motive will end right. It is very difficult to establish motives for action that go contrary to inclination, habit, and fashion. Having started wrong and being governed by wrong motives, it is very difficult to change from wrong to right. Can the Ethiopian change his skin ? Very much depends on starting right and keeping so. Motives that are all worldly and selfish will end there. Motives that are all social will stop there. Motives that are all intellectual will terminate there. Motives that are moral will take that direction. Cause and effect are inseparably connected with motives and actions. Many men are not prepared or willing to take the results of the motives by which they are governed. It would appear that a large majority of men are intellectually and morally blind, and do not see or care for consequences, otherwise they would alter their motives. Morality and motives should not be strangers. Motives that lead a young man to live on others without doing anything ; to go into business only on borrowed capital ; or get credit where ever he can ; or marry his wife to get her money to pay his fast debts ; or leave his country to avoid paying his debts, are all on a sandy foundation. But motives are true that lead a young man to earn his own living ; to start in business with what capital he has ; to pay as he goes along ; to borrow of no one ; to marry for love ; to let his wife have her own money ; to live a temperate life ; to live an honest, pure life ; to be true to himself, his

wife, and neighbour. Such a man is doing business on a sound foundation. Good motives put into practice are like lamps in a dark place, salt to the meat, a friend among enemies, a spring of water in a desert. When motives rise to the climax of unselfishness and disinterestedness (as was the case with Jesus Christ) then the man becomes a moral light in the world, an example for others. Absalom left his father's house with a lie in his mouth ; a few days after they found his body hanging, his hair having caught in the branches of a tree. Joseph left his father's house on an errand and never returned, but he made a home for his father and all the family in Egypt. A motive and habit combined give a power few are able to overcome or control without aid from a higher source than their own strength. The Saveroni of Naples live only in the present and expect to die next day, and make no provision for the future. They only want a bed to lie on and are content. Motives depend very much upon the largeness or smallness of the mind. Some minds are stunted from various causes. Some have no education, others no contact with others. Some are snubbed continually, others are sickly and have fits. Good motives are like good thoughts put into action, and do not die. They are always coming to the surface again and again. They make us mediums for good, and angels of mercy. A man guided by good motives will never know, in this life, how much good he has done. The more our motives administer to our present animal nature at the expense of our spiritual and future wants, the more do we show our affinity to the animal kingdom. The farther our motives reach into the future and benefit others, the more do we show the God-like principle, and prove that we have a kindred spirit. The background of a picture is the foundation to paint the picture on. The motives of the man are the background of his life. The higher, and more true and pure our motives, the nearer the angels ; the lower and more selfish, the nearer the monkey and the donkey.

A son of righteousness lighteth everyone who cometh into the world. Good motives are the saviours of the race. A man of pure motives, put into action, is a blessing to all who come in contact with them. Ten such would have saved Sodom and Gomorrah.

The different faculties furnish motives for action according to their activity and strength—Aquisitiveness, Conjugality, Self-Esteem, Approbateness, Conscientiousness, Benevolence, Constructiveness, Alimentiveness, Causality.

It was sense of duty that made Sir George Tryon stick to his post while there was one man on board. Conscientious-

ness gives a strong motive for action ; when nothing else will stir a man to act, this faculty will. Moral principle, sense of justice, regard for duty, feeling of moral accountability, are all strong motives or incentives to duty.

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 persons, who have been actuated by a wrong motive in an unguarded moment, feel guilty and condemned, when they are conscious of having done wrong ? This cannot be the result of education nor of circumstances, for, without this faculty of Conscientiousness, a man would not feel condemned. A person having Conscientiousness large will be led by conscientious motives according to the light that is in him, though that light may not correspond with another man's.

The motives that are actuated by this organ will make a peaceable man fight for his country, fight for his friends, fight for his convictions.

Acquisitiveness has strong motives of another character. It stimulates the desire to acquire property, to amass wealth to even hoard and lay up curiosities. It gives the motive to collect many things of a kind, such as pencils, knives, tiny charms, as well as old books, vases, paintings. It makes the motive keen to accumulate money as an end not as a means, and when it is acquired to keep it. It is the great *nerve* of commerce, manufactures, inventions, and business in all its multifarious forms, and the improvements with which mankind are blessed.

We little realize how stimulating to action this faculty is, and how many motives result from it. 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 help afforded by the other faculties, directly to the influence of this love of money. Without the motive of action caused by 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 deserts or wildernesses, in whom it is generally small, would live from hand to mouth, providing nothing for a rainy day, and idling away his life.

Self-Esteem is another faculty that stimulates motives for action. It furnishes the motive for creating self-respect, self-confidence, independence, nobleness, manliness, and love

of liberty and freedom. This faculty willingly assumes responsibility and combats the opinions of others when adverse to its own. It stimulates dignity and gives the motive to domineer over others, especially weaklings who will submit without a struggle. Its motive is to accumulate power and authority.

Conjugality gives a powerful motive for action. It stimulates the desire for attachment to one conjugal partner, and furnishes an exclusiveness of love. Its stimulus is so strong as to concentrate the whole soul on the one beloved, magnifying excellencies, and overlooking faults. It has a different stimulus to any of the other social faculties. This faculty will stimulate that of Combativeness and Conscientiousness to fight for its own, and expresses a very distinct motive for action.

Benevolence has a wonderful power over the mind in giving a motive for action. Peabody had not only a motive to accumulate money or riches from the stimulus of Acquisitiveness, but he also had a double motive : to have the pleasure of doing good with it, to gratify his Benevolence. Sympathy, compassion, fellow-feeling, are great motives for action, and what magnificent motives they are ! Though it is blessed to receive it is much more blessed to give. This faculty 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.

Constructiveness is another kind of motive to stimulate us. Mechanical ingenuity is so strong in some that they cannot keep their fingers off machinery ; they have a passion to pursue the fine arts, and the motive from such a passion creates the desire to work out the talent. Some men of feeble intellects often possess this motive in a remarkable degree while men of gigantic minds are sometimes destitute of it. It was a strong motive in Michael Angelo to build, in Canova to use his chisel, and Benjamin West with his brush.

Causality is a faculty that has also a very distinct influence in giving a motive to the mind, every effect must have a cause, and every cause must produce an effect. Causality has an innate desire to ask a reason for everything and to investigate causes.

A doctor was once asked if he knew of a case when cause followed effect. He said "No ;" he was then asked when he followed a patient to the grave was not cause then following effect ?

Alimentiveness is a powerful stimulus, for hunger is a incentive to work and it renders important assistance in great

selecting the kinds of food best calculated to nourish the body. When the system needs a further supply of food and drink, and produces hunger and thirst, and when it is unperverted it is a sure directory as to the quantity and the quality of food necessary for the purposes of nutrition and health.

ROBERT BROWNING, HIS PHRENOLOGICAL CHARACTERISTICS AND WRITINGS.

By JESSIE A. FOWLER.

(Continued from page 293.)

LET us now consider briefly the part of Robert Browning's works that bears upon the great subject of humanity in all its splendid variety and glorious, many-sided beauty.

"PAULINE" AND "PARACELSUS."

It is quite certain that neither Shakespeare nor Milton ever met with such enthusiastic praise and welcome as Browning encountered on the publication of "Pauline" and "Paracelsus." Shelley (as far above Browning in poetic music as the author of so many parleyings with other people's souls is the superior in psychic insight and intellectual strength,) had throughout his too brief life not one such review of praiseful welcome as "Pauline" received.

Fortunately the deep humanity of his work in the mass conserves it against the mere veerings of taste. A reaction against it must inevitably come ; but this will pass, what in the future, when the unborn readers of Browning will look back with clear eyes untroubled by the dust of our footsteps, not to subside till long after we too are dust, will be the place given to this poet we know not, nor can we more than speculatively estimate. That it will, however, be a high one, so far as his mightiest accomplishment is concerned, we may rest well assured : for indeed, " it lives, if precious be the soul of man to man."

In "Paracelsus," Browning's already powerful genius found expression. The poem is, of a kind, an epic ; the epic of a brave soul striving against baffling circumstances. It is full of passages of rare technical excellence, as well as of conceptive beauty ; so full, indeed, that the sympathetic reader of it as a drama will be too apt to overlook its radical shortcomings, cast as it is in the dramatic mould. The poem is a soul-history of the medical student who began life so brave of aspect and died so miserably at Salzburg ; it is also the history

of a typical human soul. It may be noted, in exemplification of Browning's artistic range, that, in the descriptive passages he paints as well in the elaborate pre-Raphaelite method, as with a broad synthetic touch. But oftener he prefers the more succinct method of landscape-painting, the broadest impressionism, and where, in modern poetry, is there a more superb union of the scientific and the poetic vision than in this magnificent passage—the quintessence of the poet's conception of the rapture of life?—

“The centre-fire heaves underneath the earth,
And the earth changes like a *human face* ;
The molten ore bursts up among the rocks,
Winds into the stone's heart, outbranches bright
In hidden mines, spots barren, river-beds,
Crumbles into fine sand where sunbeams bask
God's joys therein. The wroth sea's waves are edged
With foam, white as the bitten lip of hate,
Where in the solitary waste, strange groups
Of young volcanoes rise cyclops-like,
Glaring together with their eyes on flame—
God tastes a pleasure in their uncouth pride.
Then all is still ; earth in a wintry clod :
But spring-wind, like a dancing psaltress, passes
Over its breast to waken it, rare verdure
Buds tenderly upon rough banks, between
The withered tree-rests and the cracks of frost,
Like a smile striving with a wrinkled face ;
The grass grows bright, the boughs are swell'n with blooms,
Like chysalids impatient for the air ;
The shining dorrs are busy, beetles run
Along the furrows, ants make their ado ;
Above, birds fly in merry flocks, the lark
Soars up and up, shivering for very joy ;
Afar the ocean sleeps ; while fishing
Gulls flit where the strand is purple with its tribe
Of nested limpets ; savage creatures seek
Their loves in wood and plain—and God renews
His ancient rapture.”

In these lines, particularly in their close, is manifest the influence of the noble Hebraic poetry. It must have been at this period that Browning conned over and over with an exultant delight the simple but lordly diction of Isaiah and the other prophets, preferring this Biblical poetry to that even of his beloved Greeks.

There is an anecdote of his walking across a public park, probably Wimbledon Common, with his hat in his left hand, and his right waving to and fro with fine declamation, while the wind blew his hair round his head like a nimbus : so rapt in his ecstasy over the solemn sweep of the Biblical music, that he did not observe a small following consisting of several eager children, expectant of thrilling stump oratory. He was

just the man however to accept an anti-climax genially, and to dismiss his disappointed auditory with something more tangible than an address.

BROWNING AS A SCIENTIFIC POET.

The poet precursor of scientific knowledge is again and again manifest : as for example in—

“Hints and previsions of which faculties
Are strewn confusedly everywhere about,
The inferior natures, and all lead up higher,
All shape out dimly the superior race,
The heir of hopes too fair to turn out false,
And man appears at last.”

Those who are interested in Browning's inspiration from, and treatment of, science should read the excellent essay on him as a “scientific poet,” by Mr. Edward Berdoo, F.R.C.S., and in particular compare with the originals the references given by Mr. Berdoo to the numerous passages bearing upon Evolution and the several sciences from Astronomy to Physiology.

There are lines, again, which have a magic that cannot be defined. If it be not felt, no sense of it can be conveyed through another's words. So there is one passage, beautiful in itself, which has a pathetic significance for the small development of hope and faith. Gordon, our most revered hero, was wont to declare that nothing in all non-scriptural literature was so dear to him, nothing had so often inspired him in moments of gloom :—

“I go to prove my soul !
I see my way as birds their trackless way.
I *shall arrive* ! What time, what circuit first,
I ask not : but unless God send His hail
Or blinding fireballs, sleet or stifling snow,
In some time, His good time, I shall arrive :
He guides me and the bird. In His good time.”

Artistically we must admit that “Paracelsus” has its faults, which are obtrusive enough to any sensitive ear : but in the main it has a beauty without harshness, a swiftness of thought and speech without tumultuous pressure of ideas.

Speaking of Browning's most imperishable and his most immaculate dramatic poems, we must not lose sight of “*Pippa Passes*.” It is not only worthy from a technical point of view but also from its profound simplicity. It can be read and re-read, learned by heart, and the more it is known the wider and more alluring are the avenues of imaginative thought which it discloses.

It has, more than any other long composition by its author, that quality of symmetry that was recorded of Leonardo da

Vinci, in the Latin epitaph of Platino Piatto ; and, as might be expected, its mental basis, what Rosetti called fundamental brain-work, is as luminous, depth within depth, as the morning air.

The art that is most profound and most touching must ever be the simplest. Whenever Dante, Shakespeare, or Milton are at white heat they require no exposition, but meditation only ; the meditation akin to the sentiment of little children who listen, intent upon every syllable, and passionately eager of soul, to hearth-side tragedies. The play of genius is like the movement of the sea. It has its solemn rhythm : its joy, irradiate of the sun ; its melancholy in the patient moonlight ; its surge and turbulence under passing tempests, below all, the deep oceanic music. There are, of course, many to whom the sea is but a waste of water, at best useful as a highway and as the nursery of the winds and rains. For them there is no hint " of the incommunicable dream " in the curve of the rising wave, no murmur of the oceanic undertone in the short leaping sounds, invisible things that laugh and clap their hands for joy and are no more. To them it is but a desert, obscure, imponderable, a weariness. The " profundity " of Browning, so dear a claim in the eyes of the poet's fanatical admirers, exists, in their sense, only in his inferior work. Mere hard thinking does not involve profundity any more than neurotic excitation involves spiritual ecstasy.

Many will agree with his poem commencing " Fear death ? " and continuing,—

" Yet the strongest man must go :
For the journey is done and the summit attained,
And the barriers fall,
Though a battle's to fight ere the guerdon be gained,
The reward of it all
I was ever a fighter, so—one fight more
The best and the last ! "

And with God be the rest ! "

and admit that it is a glorious bit, a soul-inspiring poem beyond the reach of praise : it shines like a fixed star. Or,—

RABBI BEN EZRA.

" Not on the vulgar mass
Called ' work ' shall sentence pass—
Things done, that took the eye and had the price,
O'er which, from level stand,
The low world laid its hand,
Found straightway to its mind, could value in a trice :
But all, the world's coarse thumb
And finger could not plumb,

So passed in making up the main account :
 Though hardly to be packed
 Into a narrow act,
 Fancies that broke through language and escaped
 All I could never be,
 All, men ignored in me.
 This I was worth to God, whose wheel the pitcher shaped, &c.

Ay, note the Potter's wheel,
 That metaphor ! and feel
 Why time spins fast, why passive lies our clay,
 Thou, to whom fools propound,
 When the wine makes its round,
 Since life fleets, all is change ; the past gone, seize to-day !
 Fool ! All that is, at all,
 Lost ever past recall ;
Earth changes, but thy soul and God stand sure :
 What entered into thee,
 That was, is, and shall be :
Time's wheel runs back or stops ; Potter and clay endure
 He fixed thee mid this dance
 Of plastic circumstance,
 This present, thou, forsooth, wouldst fain arrest :
 Machinery just meant
 To give the soul its bent,
 Try thee and turn thee forth, sufficiently impressed.

What though about thy rim
 Skull things, in order grim,
 Grow out, in graver mood, obey the sterner stress ?”

Then, again, you are familiar with the lines (from “*Abt Vogler*”) which commence—

“ Would that the structure brave, the manifold music I build
 Bidding my organ obey, calling its keys to the work.”

If Beethoven had written a poem, it would have been similar to this.

For lighter melody, blended with the humorous, and a subtle touch of sadness and pathos, “*Youth and Art*” illustrated Browning's other-sided genius.

By these, and other poems, Browning's universal genius is shown ; the breath of humour, the tender, exquisite pathos, the all-penetrating insight he had into the heights and depths of human *thought, aspiration, and passion* ; and, above all, the passionate love of truth, the manly honesty and directness of his nature with its intense scorn for all the tricks of the charlatan and shallow pretender.

“*Asolando : Fancies and Facts*,” was published a few days before the death of the author. He lived long enough to hear of its success.

How can I more fitly conclude these remarks than by quoting

the lines of the great poet's wife which were so exquisitely sung at the funeral at Westminster Abbey, when England proved her love and veneration for Robert Browning's genius and character?—

“What shall we give to our beloved?
The hero's heart to be unmoved,
The poet's star-tuned harp to sweep,
The patriot's voice to teach and rouse,
The Monarch's crown to light the brows?—
He giveth His beloved sleep.

“O earth so full of dreary noises!
O men, with wailing in their voices!
O delvèd gold, the wailer's heap!
O strife, O curse, that o'er it fall!
God strikes a silence through you all,
And giveth His beloved sleep.”

“PHRENOLOGY AS NOW TAUGHT. A DELUSION.”

MAN is above all things, more or less a reasonable being, and the writer will endeavour to show how far astray some pretentious objectors to phrenology have really gone, and how little they know of the subject under dispute, and the possibility of judging a person's capabilities or shortcomings from the formation of his head, and that reasonable beings admit that phrenology, as now taught in the best scientific quarters, is an immense help to all classes. There are many grounds on which phrenology is attacked, and the attacks through inaccuracy and want of knowledge in phrenological lore are daily being practically pulverised. Of late, notwithstanding the consternation caused by the “Victoria” disaster and the excitement over the Royal Wedding, several editors have thought a little merriment at the expense of phrenology would make a decided improvement in the sale of their papers, and have published articles which every “reasonable person” could see were written for that purpose. They are articles which are certainly beneath our notice as several phrenological friends have remarked, but as copies have been forwarded to us with a request to reply to them, we do so on that account. There may be some individuals who will believe the statement as law and gospel, that “Phrenology as now taught is a delusion,” because they saw it in print, and like the people who are said to be “bumped” on the sands for a shilling or sixpence a head, are said to be invariably flattered and misdirected, so some readers may be equally credulous over “Confessions of a Seaside Phrenologist,” and believe every word of it. As no names are given, and only initials are attached to one article, we cannot be expected to hold the same respect for the writers, as if we

were assured of their identity. On the face of the matter, it is not likely that a man who works by his wits, and earns his living by them, will open his confidence (?) to any man at the beginning of the season, much less a newspaper reporter. If he does earn his living by his wits, it is not like him to lose them by showing to the "inquisitive" how he dodges here and there, or plays his game like a fly on a bald head. Therefore we will treat the above-named article with the silence it deserves.

But the writer who signs himself "H., M.D.," endeavours to deal with the subject in a more scientific manner, though he does not forget he is writing for the "pit" audience, and uses his slang quite copiously. We will divide his objections into points. 1st, We are told that "everybody outside a lunatic asylum possesses all the mental attributes of his fellows more or less." We fear our antiquated M.D. does not, however, know very much about lunatic asylums, or he would realize, first, that there are as many lunatics outside our asylums as there are in them. And secondly, how many fewer mental attributes does he possess than his sane brother? It is more often a surplus of brain, though abnormally developed on one particular point, that troubles him. A case given by Mr. Williams, secretary of the Aberavon Phrenological Society, proves that phrenology can be, and is, of great service in a lunatic asylum. It also proves the division of the brain into faculties and the localization of these faculties, and how phrenology is not "a delusion" or "a sham."

A woman in the neighbourhood of Curnavon, S.W., during her accouchment became violently insane, and was taken to the local asylum, where her conduct became most savage. One day on entering her ward, her keeper found her crouched down, and on his entering, she immediately sprang upon him; a struggle ensued, during which she was accidentally struck on the head near the ear, from which there came a flow of "clotted matter" (*llaeth yn codi 'ir pen*), which resulted in her instantly regaining her equilibrium. On learning the condition she had been in, she broke down and wept. (The foregoing speaks for itself.)

2ndly, We are informed that if a person is unfortunate enough to break a blood vessel in the brain which may destroy a large portion of brain, that in such a person, his friends detect no difference, and he knows of no alteration himself, the only alteration perceived by the doctor being paralysis of corresponding parts of body. Now on this point our M.D. is also at variance with well-known facts. The American crow-bar case is indisputable, and is an absolute proof that loss of cerebral matter in any given part of the brain causes alteration in mental manifestation, and seriously affects the character and disposition of the person, see *Phrenological Magazine*, July, 1890; for a similar case, see "HEADS AND FACES"; and for another case, see "LECTURES ON MAN." A man met with a blow on the back of the head, in the part that is recognized immediately by phrenologists as that of parental affection. This gentleman was very fond of his family, but from the time of the injury he

received in this part of the brain, his character altered. After death his brain was examined, and the injury spread to surrounding organs, and affected not only his social faculties, but also some of the selfish sentiments, as his Approbativeness and Self-Esteem. Here was a cerebral defect, and a disorganized disposition.

(To be continued.)

J. A. FOWLER.

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QUEER FREAKS OF MEMORY.

DR. FORBES WINSLOW, in his *Obscure Diseases of the Brain*, recounts some most remarkable instances of the loss of memory—instances which one would be shy of swallowing, even with a large amount of salt, were it not for the fact that they come well authenticated from so eminent a specialist as Dr. Winslow. Many of the cases of *lapsus memorioe*, of which he speaks, were the consequence of some illness. One of his patients, subject to paralytic seizures, always knew when his attack was coming on by absolutely forgetting his own Christian name; and, if asked to sign a letter during this period, invariably used his surname only. On the contrary, another patient, troubled with epileptic fits, forgot his surname prior to the seizure; while a third, a French miner, whose case had baffled all the doctors of his own country, could not say *mon pere* or *ma mere*, but only *pe* and *me*. A lady, after illness, lost all recollections of her name, and never could be brought to pronounce it unless she saw it in writing. Similarly, a man forgot the names of his children, while another forget his own and his wife's name in addition. Dr. Heitz speaks of a patient of his, an officer of artillery, who could not say anything spontaneously, though he could read with great facility. There is also the case of a man who forgot how to read, but retained the power of writing. Boorhaave mentions the case of a Spanish dramatist, who, after an acute attack of fever, forgot all the languages he had learned, and would not be convinced that his mind was not in the least impaired, and he continued to write tragedies equal in power to his earlier efforts.

Loss of language is by no means rare. Wepfer had a

patient who lost all knowledge of a language with which he had been familiar, after brain disease, consequent upon a fall from his horse. The recovery of a forgotten language after illness is less uncommon, and Dr. Winslow has several cases. One is that of a Welshman, who during a forty years' residence in London had forgotten his native language entirely. He was admitted to St. Thomas's Hospital for injury to the head, and raved incessantly in Welsh, and when he was discharged spoke that language fluently, and had forgotten all his English. Another he records is the case of a German gentleman, who, after a fall from his horse, recovered the use of his native tongue, which he had not spoken before for twenty-five years. Closely allied to these in their characteristics are the instances, pretty numerous, of born idiots coming into full possession of all their faculties after a lucky fall on the head.

WE are on the "Borderland" of a great era for investigating mind under all its manifestations. The method adopted must, however, be strictly scientific. Psychic investigations with regard to "mind cure," are naturally interesting to all. Hardly a day passes without our having to direct the attention of many (who are not conscious themselves of being under abnormal condition of body or mind) to the right understanding of the undue influence of one part of their brain over the other. No one, perhaps, so well as a Phrenologist, understands how intimately sympathetic one part of the brain is with another, therefore the diseases of the brain—or perhaps to put it this way, the disorganized condition of the mind, acting through the medium of the brain—should be a study for every truly earnest student of mental science. We have found many methods of psycho-therapeutics, and we are glad they are being recognized and focussed in a scientific way, so that we may increase indubitable evidence on the matter which should not strike us as being so very miraculous when we think of the tremendous strides mental investigations have made of late years. Those who hang back from investigating these matters, will one day regret they were not in the vanguard instead of in the rear.

DR. GARNER has given us a curious and interesting fact concerning his observations in Africa of a monkey who was hypnotized by the glitter of mirrors. The mirrors soon attracted a host of chattering monkeys, and I watched them

for an hour, and then cautiously approached. They disappeared like magic when they saw me—all but one, a chimpanzee. When I got close to it I found that it stood as if transfixed with widely-opened eyes and dilated pupils, gazing at the mirror. There was a slight tremulous motion in the limbs and a spasmodic twitching of the ears. I could hardly believe it. The animal was hypnotized. It was making a guttural sound like “achru.” I put the monkey in a bamboo cage, and on examining him about an hour afterwards found him still under the hypnotic influence. I revived him with a good strong sniff of ammonia, and held a lighted taper before his eyes. He was quite tractable, and said “achru” and a few more tests satisfied me that this word embodied the idea of heat, light, warmth and brightness. Other words followed, and it was wonderful to take note of his awakening intelligence.

AT the meeting of the National Academy of Science in Washington, D.C., Prof. Alex. Graham Bell gave an interesting description of Helen Kellar, the Alabama marvel. This wonderful girl was, by an unfortunate illness in childhood, rendered deaf, dumb and blind. Nevertheless, although now only thirteen years of age, she has accomplished wonders in the way of overcoming her difficulties. Specimens of her handwriting and original stories and poems were presented to Mr. Bell, who said that the girl was recovering her power of speech, and was indeed a prodigy.

IN Newburyport, Mass., a successful experiment has been made of grafting clippings from the skin of frogs on to the skin of a woman, who had been extensively burned.

EXPOSURE of the bare head to the sun is thought to thicken the skull cap. At least, long ago Herodotus said that the Egyptians had thick skulls because they exposed their shorn heads to the heat of the sun, whereas the Persians had thin and soft skulls because they kept them covered with turbans from infancy.

THE most authentic witnesses of any man's character are those who know him in his own family, and see him without any restraint or rule but such as he voluntarily prescribes to himself.—*Dr. Johnson.*

Hygienic and Home Department.

STEPPING STONES TO HYGIENIC HOUSEKEEPING.

BY RHODA ANSTEY.

IT has always seemed to me that the hygienic mode of living advised by Vegetarians must appeal most strongly to women of education and refinement, for many reasons.

Besides the natural feelings of love and sympathy, and protection for all creatures who are weak, helpless and dependent, glowing in the breast of every good woman, feelings which make her recoil in horror at the idea of shedding blood or of causing pain unnecessarily, the means which it offers to the amelioration of her condition physically and socially, and in her home life, are very great.

Among the advantages it offers are the blessings of leisure, strength and opportunity for culture, which come from a simpler way of living ; for although at first the hygienic housekeeper must lay herself out to provide a variety of very tasty and flavoured dishes for those whose sense of taste has been dulled by the use of flesh and other stimulants, a pure diet soon makes its influence felt, the palate gets a wonderful power of appreciating natural flavours, and she finds that the tastes of her family grow less and less artificial, and they are able to enjoy dishes which require the simplest cookery, and in time, as they learn by experience the nourishing qualities of fruits, uncooked foods form a substantial part of the daily sustenance.

Vegetarianism, intelligently applied, is the way to health and personal beauty. Think of all that means in these days of indigestion, nervousness, headaches, rheumatism and physical weakness ; of pale faces, round shoulders, aching backs and harassed looks. It purifies the blood, frees the body from pain, tones up the system, and naturally leads to a greater interest in out of door pursuits. The skin grows clear, the eyes bright, and the body strong and capable of graceful movements. It enlarges the mind, is a means of strengthening the will ; it gives increasing power over the body, so that we become more and more able to do the things we wish.

Of course, all these grand results do not come at once, but a steady course in the right direction will work wonders.

The condition of a woman should be one of health and great enjoyment, including a life of varied and congenial occupation by which she is brought into contact with all beautiful things. Overwork, overpressure, in any direction, cause her to miss the

best things of life. She herself is a loser, and all who come under her influence are necessarily losers also. Women, as a rule, do not half enjoy life; they do not really live, they vegetate, and they do not seem to realise that they were made to enjoy as truly as to live. Then, again, it makes cleanliness and purity more possible in a house. The work which it entails is attractive, interesting, and clean; work, giving scope for skill, intelligence and artistic taste.

I can imagine the most refined woman looking perfectly in place, and of being every inch a lady, in a neat kitchen, dressed in a blue princess gown and white apron, cleverly making pretty cakes, tarts, and fancy rolls, and wholemeal "gems"; or intelligently preparing nice dishes of porridge, macaroni and pulse; or gathering peas and beans, and fruit from the garden, and arranging beautiful dishes of grapes, oranges, apples, figs, dates, and nuts on green leaves, or white-edged papers, so that the eye as well as the palate may be educated to enjoy the best things. But I cannot imagine her skinning and cleaning a rabbit, with blood stains on hands and apron, her face screwed up because of the bad smell; or plucking a fowl with its mutilated head hanging down, and dropping over her clothes; or roasting her face and spoiling her complexion over the fire, frying sheep's kidneys, or basting a joint from the carcase of a cow. I do not think she would seem *quite* in place washing up greasy dishes, plates, and baking tins, after a dinner of roast mutton or pork. And but that the thing is so customary that it is done without thought, I could not imagine her sitting down to a meal entailing such a sacrifice of one's natural feelings as to the fitness of things.

I knew a servant, not particularly nice in other ways, who was on one occasion unable to touch her dinner of stewed rabbit, because she had to prepare it. "No m'm, I couldn't stomach it!" said she. Where ignorance is bliss, 'tis folly to be wise, but, unfortunately, ignorance on these matters leads to very serious evils indeed, and they demand a careful looking into by women who wish to be well and happy themselves, and to promote the well-being of those around them. I have no respect for a woman who will allow a young girl or another woman to do for her a thing which she would be ashamed to do herself, or would not like her daughters to do. Of course there must be a division of labour in a house, and all are not equally suited to do the same kind of work, yet in a home, managed on hygienic principles, applied to house, furniture, food and clothing, there need be nothing to do which is itself disagreeable and degrading to any

woman. A servant girl having to do the kind of work I have described cannot be neat while doing it, she must be a slattern, and by both dress and work she loses in self esteem. What wonder is it that we have to complain of servants being coarse and dirty, of their want of nicety and thoroughness, when such work is expected of them? They must feel themselves inferior creatures, having to do things for which they are despised. What wonder is it that a nice intelligent girl seeks a means of livelihood which has not such an odium attached to it?

Dr. Schofield says, that if women were to set their faces against drink they could soon redeem England from this curse, and says he, "They can be little aware of the enormous power that is in their hands, or they would surely wield it to better advantage than they do." This surely applies with double force to the reformed diet, which, in addition to the hundred and one other blessings it brings, *would sweep drunkenness from our land.* Here they have the matter practically in their own hands. It is all very well for people to lecture, and talk, and reason about these things, but what is wanted to bring vegetarianism into general practice, and to bring about a healthier, and higher, and less barbarous state of society, is for women and girls to set to work in their own homes. There are no arguments on this subject which find such universal acceptance with people, as well-arranged, daintily served meals.

If women could only realise the power for good which is in their hands, they would, I feel sure, be eager to do their part, each in her little corner, to redeem the world from degradation and misery, and to change it into the Paradise it ought to be, and might become.

I am often pained to know that gentlemen, who would willingly adopt the better way in diet, are prevented by want of co-operation on the part of the ladies; it is a very sad thing when women stand in the way of men's progress, and directly oppose a thing that is good.

Dear lady friends will you not join in this good work, by introducing pure, healthful food, gradually and steadily, into your homes, and by abolishing all that is not conducive to health and to the well-being of society. It may seem a small matter at first sight, but if you look into the subject you will see what great issues hang upon it.

I have great faith in the efficacy of women's steady home work for the improvement of society. Not to underrate the value of their help and co-operation in larger matters of social interest, and public speaking for the advancement of needed

reforms. I am convinced that it is not by making a public stir, so much as by training herself to habits of industry, patience, good temper, by striving after the beauty and perfection of the home life ; by the daily ministry in kitchen and nursery that a woman's best work for humanity is done.

I propose to give you, month by month, a few hints on food and simple cookery, and domestic affairs, which I hope may prove of practical value.

I can promise you that all the recipes shall be tried ones, so that in carrying them out you may have no fear as to the result.

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BREAKFAST.—Let the family gathering for this meal be made a specially attractive one. A time of happy social reunion before launching out into the labours of the day. To gain a leisurable threequarters of an hour before the work of the day begins is worth no small self denial on the part of a good housewife. It has a most salutary effect on health and temper, and who can say how many a burden of business worry and household care may be lightened, how many a misunderstanding prevented, and how much irritable temper smoothed away by making the daily gathering at the breakfast table a time of thorough social enjoyment.

I have read of a husband and wife who made a practice of getting up an hour earlier in the morning in order that they might be assured of getting a happy time together, and a good romp or talk with the children in the best part of the day ; and I think the example is one well worthy of emulation.

The food for the breakfast table should be especially simple and nourishing. I know of nothing better than a dish of nicely made porridge and milk, to lay a good foundation for the day's work, to help in building up a strong and hardy constitution, especially for children and those who take plenty of exercise. Fruit should always form a substantial part of this meal ; apples, oranges, grapes in winter, and raspberries, strawberries, currants, cherries, &c., in summer, are particularly nice at breakfast time. Figs and dates go extremely well with porridge and milk, and are better than sugar. Some fruit or nuts or bread should always be eaten with it to ensure mastication. "What a nice clean little breakfast ours is," a friend of mine used to remark when he adopted the reformed diet first.

Once a habit of making the breakfast of porridge, fruit, nuts and milk is established, with the addition occasionally of eggs, cream and butter, it becomes so enjoyable that a change is

seldom desired. Tea, coffee, bacon and fish, potted meats, &c., are found to be superfluities, and soon drop off naturally in favour of the better food. In time they grow quite distasteful. A gentleman of my acquaintance began to have porridge for breakfast, not because he liked it, for he much preferred his accustomed bacon. After a time he was obliged to own that he had come to like the porridge better than the bacon. If he had taken plenty of fruit with it he would have found less difficulty in making the change. I know another family where fried bacon, liver, ham, &c., had been the usual breakfast dishes. Two of the family became hygienists, and porridge, dates, and apples, and brown bread appeared on the table daily. In spite of strong opposition to vegetarian theories, which was raised by the unadvised way which these young people had of forcing their new opinions on unwilling ears, porridge and fruit soon got the victory over pig and drove him from the field, and it is now the custom to have in a case of dates at a time, so that there may be a never failing supply. A good variety of tasty breakfast dishes can be prepared with eggs, potatoes, mushrooms, &c.—and a frying pan. For the present I must content myself with giving two recipes for porridge which are found to be very satisfactory.

OATMEAL PORRIDGE.—One quart water, eight large tablespoons of meal. Measure the oatmeal into a basin and mix it to a paste with part of the water, and set the rest on to boil. Then stir in the paste, and keep stirring for two or three minutes after it boils. Draw it back from the fire, and let it boil gently for an hour. Stir once or twice to prevent burning, but not more, as much stirring is apt to make it pasty. Send to the table in a junket or salad bowl, or vegetable dish, and serve on soup plates. If the oatmeal is coarse, it is best soaked in part of the water overnight.

WHEATMEAL AND SAGO PORRIDGE.—One pint water, five tablespoons wheatmeal, two tablespoons sago. Proceed as in the above recipe, but it need not boil more than half-an-hour. This is nice for a change, and, in summer, stewed apple goes well with it. Two or three tablespoonsful of cream added after it is taken from the fire is a great improvement, and makes it more digestible.

A double saucepan is a great convenience, especially if it is necessary to cook the porridge over night, but the under part must be large, and hold a good volume of water, and double time for cooking allowed.—*Hygienic Review*.

THE POWER OF KINDNESS.

"THERE is no power of love so hard to get and keep as a kind voice. A kind hand is deaf and dumb. It may be rough in flesh and blood, yet do the work of a soft touch. But there is no one thing that love so much needs as a sweet voice to tell what it means and feels ; and it is hard to get and keep it in the right tone. One must start in youth and be on the watch night and day, at work and play, to get and keep a voice that shall speak at all times the thoughts of a kind heart. It is often in youth that one gets a voice or a tone that is sharp, and it sticks to him through life, and stirs up ill will and grief, and falls like a drop of gall on the sweet joys of home. Watch it day by day as a pearl of great price, for it will be worth more to you in days to come than the best pearl hid in the sea. A kind voice is to the heart what light is to the eye. It is a light that sings as well as shines."
—ELIHU BURRITT.

THE POPPY LAND LIMITED EXPRESS.

The first train leaves at six p.m.
 For the land where the poppy blows ;
 The mother dear is the engineer,
 And the passenger laughs and crows.
 The palace car is the mother's arms ;
 The whistle, a low, sweet strain ;
 The passenger winks, and nods, and blinks,
 And goes to sleep in the train !
 At eight p.m. the next train starts
 For the poppy land afar.
 The summons falls clear on the ear :
 " All aboard for the sleeping car ? "
 But what is the fare to poppy land ?
 I hope it is not too dear.
 The fare is this, a hug and a kiss,
 And it's paid to the engineer !
 So I ask of him who children took
 On his knee in kindness great,
 " Take charge, I pray, of the trains each day
 That leave at six and eight."
 " Keep watch of the passengers," thus I pray,
 " For to me they are very dear,
 And special ward, O gracious Lord,
 O'er the gentle engineer."

—EDGAR WADE ABBOTT.

It is so easy to be imperfect that we should aim at perfection in everything.

Fowler Institute.

MEMBERS' NOTES.

"Cultivation to the mind is as necessary as food is to the body."—CICERO.

THE Members' Meeting for June was by the kind invitation of Mr. Fowler and family held at his private residence. A large number were present although the weather was somewhat inclement. After tea the more venturesome of the party succeeded in getting a very enjoyable country walk, and on their return a pleasant musical evening was passed, a most efficient programme having been previously arranged by Mr. L. Lepage, F.F.I. The following ladies and gentlemen took part: Messrs. Barnsdale, Taylor, Ramsey, Eagle, Baldwin and Lepage, the Misses Dexter, Maxwell, Scholefield, Kemp, and the two bonnie children of Mr. and Mrs. Dickinson. Thought Reading was a feature of the evening, and caused much interest and amusement.

* * *

THE Members' Column now being open to receive queries, we feel sure many of our members will avail themselves of this opportunity of sending and answering them, and we hope to receive many interesting items like the following:—From M. B. "Why do actors and actresses when trying to portray great emotion, particularly of grief and agony of mind, fling their arms about, raising them high in air, spreading them in all directions, clasp and unclasp hands, &c.? Is there any special connection between the motor centres controlling the arms and that part of the brain which belongs to the emotions?" A member sends a query as to whether others have found examples on the point raised by Mr. N. Morgan, in reference to the centre of energy, which the latter places in the posterior region directly behind and underneath the hinder portion of the organ of Combateness, and thinks that deficient development of this part, and a corresponding want of enduring power, generally correspond?

* * *

ANOTHER query sent us from Thelma, is—"Are all the five senses equally developed at birth, and if not, at what period do they first begin to show themselves, and with what effect on the brain and body?"

* * *

WILL members who answer the above queries kindly forward them as early as possible? We hope to receive many replies.

* * *

MR. LEPAGE has sent us the following communication: "While

examining the head of a young man, about 25 years of age, the other day, I noticed the suture (lambdoidal) that separated the parietal bones from the occipital bone was not particularly ossified, as it could be easily traced, it being very open; but his occipital or social faculties were by no means deficient. I told him, from the slope of his head, he must be one who found a little difficulty in blending his own individuality with the social sphere of others, and that it was peculiar to him to keep his friends, etc., or anything that related him to social life at a certain distance from his own individual ego, and that he must be in the habit of isolating himself from social surroundings, and as a consequence few understood him. I also said that possibly in his early life he was educated at some boarding establishment, or some place where the comforts of home life were conspicuous by their absence. After the examination, he looked surprised and said that what I had told him respecting the above was very true, and that it was a curious fact known only to himself. He said he had never left home, but it was a strange fact that he found great difficulty in entering into social relationship with anyone, even with the members of his own family. He also said that although he was very fond of his home, etc., he never seemed to enjoy the comforts of home life, as others seem to do, and that even at home as well as in society he always felt himself an odd one. He informed me that he himself had noticed this peculiarity in his nature but could not account for it. I relate the above as a fact, and for the benefit of others."

* *
* *

A SOMEWHAT curious fact has been forwarded by Mr. Coleman on the colour of words and sounds. The experience was given by Mr. Alfred Binet:—

"One day, by chance, in a conversation upon colours, one of the persons present, thinking to express a general sentiment, remarked in a matter-of-fact way that certain words had peculiar tints or shades. He was utterly unconscious that he had said anything unusual. I recall also a woman who, upon another occasion, while we were speaking of the blue colour of a certain flower, made this remark—

"It is as blue as the name of Julius." And then, seeing the astonishment of those around her, she added naively, 'You all know very well that the word Julius is blue.' Naturally, none of them had ever suspected such a thing. Pedrono, a physician, has published a very interesting case of colour-hearing—that of a young professor of rhetoric. Some young persons had assembled and were chatting gaily. They repeated at random several times the very insipid pleasantries, a comparison found in a romance, 'beautiful as a yellow dog.' Then this person, remarking on the voice of one who had just uttered the expression, said in a serious tone, 'His voice is not yellow, it is red.' This affirmation called forth astonishment and a shout of laughter. They all bantered the person who had thus made known his peculiar impressions, and, beginning to sing, each one

wished to know the colour of his voice. Those who learn for the first time of these peculiar perceptions in others experience a great surprise ; they can form no idea of what it is ; the likening of a sound to colour seems to them a process utterly devoid of any intelligible character. Meyerbeer has said somewhere that certain chords in music are purple. What meaning can be given to this expression ? Each of the words taken separately has a signification ; everyone knows what is meant by a chord in music, and by the colour purple ; but the linking of these terms by a verb, and making such a sentence as 'This chord *is* purple,' conveys no idea to the mind. As well say virtue is blue or vice is yellow.

"So, for the great majority of people, colour-hearing is an enigma. I shall attempt to show that it is a real phenomenon. Simulation has generally an individual character. It is the work of one person, and not of many ; it does not give rise to uniform effects, which repeat themselves from one generation to another and in different countries. It is especially important in the examination of this subject to take into consideration the number of persons who affirm that they have the *faculty of colour-hearing*. According to Bleuler and Lehmann this number would amount to twelve out of every hundred ; Claparède a distinguished psychologist of the University of Geneva, who was deeply engaged in an examination of this subject, has stated that out of four hundred and seven who responded to his questions, two hundred and five possessed colour-hearing. This very large proportion cannot be understood to be general, for the immense majority of individuals who know nothing at all of such phenomena do not respond to such questions, for several reasons, chiefly because of a certain disdain for studies which they cannot comprehend. It is nevertheless true that M. Claparède has collected without great effort two hundred and five observations, and that this number added to those obtained before gives a total of nearly five hundred cases. Surely this is a mass of testimony which may inspire some confidence. It is necessary to admit, then, as established, the fact that some persons do experience—on hearing certain sounds—impression of colour, whose nature varies with that of the sounds and of the individuality of the person. The writer, having speculated on the nature and cause of these impressions, concludes with these words :—'Summing up the results obtained from the researches made thus far in this peculiar question, we have the following statements, but they show that a good beginning, promising greater results soon, has been made ; one point is certain—that the impressions of colour which are suggested by certain acoustic sensations are mental images ; one point is probable—that persons who experience these phenomena belong to the visual type of persons ; one point is possible—that the grouping of the impressions may be the result of associated perceptions gained in early life.'"

* *

It is a point for observation whether the above-named person possesses a full development of the cerebral organ of Colour, or if

the above-named experiences come from other cerebral causes. What is the opinion of the thinking world ?

* *

THE usual monthly meeting of the members will be discontinued during August, but will be resumed in September. For date see further announcements.

E. CROW.

Notes and News of the Month.

WATCHING THE CLOCK.

A GENTLEMAN went to the great electrician, Edison, with his young son, who was about to begin work as office boy in a well-known business house. The father asked Edison for a motto which the boy might take to heart in his struggle for promotion and success. After a moment's pause, Edison said, laconically, "Never look at the clock !"

Edison, meant, we take it, that the man who is constantly afraid he is going to work overtime or over-hours doesn't stand a chance of competing with the man who clears up his desk, no matter how long it takes. The carpenter who drops his hammer, uplifted above his head, when the whistle blows is likely to remain a second class workman all his life. The carpenter who stays fifteen minutes to finish a "job" is working toward a shop of his own.

* *

THE late Archbishop of York would have succeeded at anything to which he might have turned his hand. He was counted an authority on music ; an ironmaster told him that he would have made a fortune in the iron trade ; and the students of St. Mary's Hospital avowed that a fine consulting practice awaited him if he would only pass the M.B. But the greatest compliment which Dr. Thomson received was from a bookmaker, who came over from Chester, as it is hinted, to stay in the same house with the very lay theologian, and who received a rough lecture at his hands. The man of the white hat listened to the whole with great meekness, but when the archbishop's back was turned he said, "It's a good thing that that fellow went into the Church ; if he'd gone on the turf he'd have cleaned us all out.

* *

MR. A. P. GOTHAM, of Newark, N.J., has invented a spring heel, which is to save the nervous system from the shocks which in walking come with every step. The nervous systems of some persons are so sensitive, especially at times when they have headache, that every step is painful. There are some cases in which these repeated shocks, or concussions, have an injurious effect even when they do not end fatally. The spring heel is made of steel and leather of different tensions, and

affords a moss-like cushion to the heel. It can be applied to any boot or shoe. This is an important item in hygienic progress.

* *

FROM an insurance point of view, a man or woman who has some regular employment is considered a far better risk than the idle or retired, physically, mentally, morally, and every other way. Examiners have observed that when men make their pile and retire from business, they are apt to become unwell, mentally uneasy, inclined to stimulants, to depression, and to suicide, which goes to show that "It is better to wear out than to rust out."

* *

THERE are said to be 50,000 muscles in an elephant's trunk. A Tennessee inhabitant thinks it must have been packed by a woman.

* *

CHICAGO has been busy holding meetings on educational and other matters. We note in the Temperance Congress that under Section A scientific, Dr. A. Forel, of Zurich, read a paper on "The effect of Alcoholic Intoxication upon the Human Brain and its Relation to the Theories of Heredity and Evolution"; and N. S. Davis, M.D., of Chicago, read one on "The latest verdict of Science concerning Alcohol." We expect to receive a more detailed account of the same. Among Educational matters one paper was read on the "Scientific Temperance Instruction in Schools and Colleges," by Hon. George W. Ross, Toronto; and "How to Train the boys," by the Rev. John C. Collins, of Newhaven. On the moral aspect of Temperance, papers were read from the Ven. Archdeacon Farrar on "The awakening of the Universal Conscience to the duty of Resisting the Curse of strong drink," which we may expect was an earnest and stirring appeal to *individual* conscience.

The women have also held their "week" at the World's Fair, when opportunities were given them to show their prowess as actresses, ministers, "free thinkeresses," women suffragists, literary and journalistic women, philanthropists and temperance apostles. Lady Aberdeen was the first to speak in the room that was crowded with two thousand persons, mostly women. Even in the prince of cities it seems they are free from the groan of passing trains outside, the thumping and steaming off of the engines, the loud and incessant tolling of the dismal railway bells, the noise of hammers and saws in the unfinished building. Mrs. Fisher-Unwin, daughter of Richard Cobden, Mrs. Fenwick Miller of School Board fame, Mrs. Margaret Parker of Dundee, Mrs. Chant, and others were also present.

* *

WITH the loss of the "Victoria" perishes one of England's highly-esteemed admirals. "On all the world's broad surface," as Mr. Stead says, "no living man wields more absolute authority than the admiral on the quarter-deck, nor have Izar and Kaiser, in all their hosts, more

obedient subjects than he. He is monarch, and diplomatist, and warrior, and judge, all in one. He is the warder of the watery marches, the naval overlord of the ocean. It is he who sustains the fabric of our Colonial possessions ; without him and his war-ship our world-circling fortresses would be as worthless as the pyramid. It is his patrols which make the traffic on the trade routes from continent to continent as safe from molestation as the tramways in Hackney and Islington. And this puissant sovereignty, built up by the valour, and the labour, and the lives of successive generations of British seamen, is maintained to this day by the same means, and exercised as of old in the ever-present menace of death."

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 Aberavon Phrenological Society held its first conversazione on July 6th, which was quite a success, though not unmixed with many feelings of regret at the loss of such a "full man" as our venerable President. There were forty members and friends present, who formed a select party, over which Lewis Lewis, Esq., presided. A handsome walking-stick was presented to the President (Rev. T. G. Dyke) by Mr. Councillor Thomas on behalf of the Society, as a token of esteem on his leaving Aberavon for Redruth, Cornwall.—*Midglamorgan Herald*.

THE weekly lecturettes have been attended by many country visitors who have taken this opportunity of renewing old acquaintances and making new ones. Two lectures have been given, Mr. Fowler's on "How Character is Formed," and "Phrenology applied to Law, Love, and Liberty," and one by Miss J. A. Fowler on "Agricultural Phrenology," when the laws which govern nature were applied to Phrenology. It is a large and very comprehensive subject ; first the blade, then the ear, then the harvest. The agriculturalist has to be an all-round man, and know something of soils, seeds, foods, stock, chemistry, surgery, machinery, and very much of nature and human nature. So a parent should know something of the laws of heredity, of growth, environment, of foods, health, education, &c., &c.

"Now that we have heard all about it, what are we going to do ?"
One ounce of action is worth a ton of preaching.

Correspondence.

Manchester, July 11th, 1893.

L. N. Fowler, Esq.

Dear Sir,—Enclosed are three articles on Phrenology and phrenologists, which have come under my notice and which I send for your perusal. Of late, the various papers throughout the country have persistently denounced and ridiculed the science of Phrenology in their columns, and it is seldom that a week passes without treating their readers to some silly and abusive article on the subject.

In my opinion, this kind of abuse ought not to go on unnoticed and unchecked, and it is getting time for the phrenologists to do something in the matter. It was only the other week that *Tit-Bits* had to pay damages amounting to £500 for a similar attack on the “strong men,” in which it was contended that their particular calling had suffered in consequence. If the law is “strong” enough in their case, it should be equally effective in preventing unscrupulous editors from thus feeding their half-famished journals and making capital at the expense of phrenologists, who are engaged in a useful and legitimate profession.

Yours faithfully,

T. G. ROSCOE.

To the Editor of the “Phrenological Magazine.”

Dear Sir,—During the last twelve months, and, indeed, in the majority of these singular cases, within the last three months, we have had the professions well represented in our vast Union Workhouse, viz., a captain of the army, a captain of the royal navy, a solicitor, a governess, a doctor and a clergyman, an organist, not one of whose physiognomy would indicate to any but an expert their proclivities or their weakness. Sad irony of fate! whilst the one Royal navy captain was last week being fêted as a member of the Royal Family on the occasion of his marriage, in the Royal palace, the other was cracking 10 cwt. of granite in the pauper’s casual ward, and whilst the clergyman is to-day picking oakum in the pauper’s task-shed, his contemporaries occupy the Bishop’s throne. Timely Phrenological delineation, might have given the glimpse to their inner self, and indicated the weak metal in the railroad of life to be strengthened, and which wheel had the lynch pin out. Let us hope that in the immediate future, Phrenology will be adopted by our School Boards and similar institutions as a necessary qualification for all teachers, so that our many Training Colleges will take up the

subject, and thus not only enable the teachers to know in the fullest sense, their scholars, but the scholars to know themselves.

DUNCAN MILLIGAN,

Chairman : Wandsworth and Clapham,
Putney, Battersea, Streatham and
Tooting Board of Guardians.

Vice-Chairman : North Surrey District
Schools. (800 children.)

Chairman : Warpole Way Group Board
Schools. (2000 children.)

London, July, 1893.

HOW TO WORK THE BRAIN.

To the Editor of the "Phrenological Magazine."

Sir,—Under the above heading in a recent number of the *Hospital* there appeared what the writer would have us believe to be the "kind of life which Physiology would suggest for the Brain Worker," from the following :—

"Early rising would be good for most of them. A cup of coffee and a piece of toast at half-past six might be followed by an hour's work from seven to eight. The whole hour between eight and nine should be devoted to a thorough good breakfast and a short walk. Work from nine to twelve. Half-an-hour should then be spent in gently sauntering in the fresh air, and a light lunch should follow—say a chop and bread, with a modicum of light pudding, accompanied by a small glass of lager beer. From one to two a pipe and a saunter, and at two a cup of black coffee. From two to four, work ; at four, a cup of afternoon tea, and a rest until five. From five to six or half-past, work ; and at half-past six the real labours of the day should be over and completed. At seven, a good, well-cooked, appetising, slowly-eaten dinner, followed by one cup of black coffee, but no tea. At a quarter to eleven a small cup of cocoa and one or two pieces of toast."

The writer evidently displays an ignorance of the brain substances, brain work, and the hygiene of the brain, hence the *régimé* he suggests for its working.

If he is desirous of helping to relieve his fellow-men from the painful results of nervous exhaustion, he should endeavour to teach them that in this money-making and exciting age it is essential that they should study the brain very minutely, and how to treat it hygienically, the systematic working of the stomach, and systematic exercise, &c. The brain being composed of water, fat, albumen, azmazone, and phosphorus, requires nutriment containing the largest

quantities of these elements to sustain it, and surely they are not to be found in toast, black coffee, lager beer, and tobacco. Man, to obey Nature's laws, must work agreeably with his powers and surroundings, should have a large supply of fresh air, plenty of exercise, plenty of sleep, and food most wholesome, with plenty of time for digestion.

Yours truly,

W. A. WILLIAMS.

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 photograph; 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 6s., for twelve 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.]

S. W. S.—The photograph of this gentleman represents a man who is favourably developed, especially in quality of organization first, and secondly, in shape and proportions. If he is defective it is in not having that kind of toughness and durability that goes right into his work, hit or miss. He has a fine quality of temperament, and is capable of a high degree of culture. His head and face are well proportioned. He is high in the moral brain; sufficiently expanded in the intellect and in the qualities that should give him unusual versatility of talent. He is not so well qualified for the rough, hard work of life, but has great susceptibility and impressibility. He would excel in scholarship and in music, and especially in writing. He has strong imagination; is very fond of the beautiful, and very much attracted to the perfect finish. He is regular in his features, uniform in the developments of his brain, and has more than average taste and imagination. He has none too much firmness and stability of mind. He is rather too easily diverted from one subject of thought to another. He has the qualities for brilliancy and display. He is best adapted to some sphere that requires culture in the sentimental, moral, and artistic direction.

J. H. P., "LEYLAND."—The photos of this gentleman indicate great strength of constitution; there is every sign of activity, toughness, and endurance; the whole character expresses determination, and a forcible character generally. He is well equipped as regards the affairs of this

life, and is well able to look after himself. He has plenty of energy, and is disposed to throw his whole mind into what he does. He works with a heavy hand. All his actions will be attended by this; there is no half measures with him. He is sharp and quick in his remarks, and to the point. He says straight out what he feels. He needs more control over himself. He has considerable mechanical skill, and would do very well if he gave his time to mechanical engineering. His memory of forms and faces is very good; also size and judgment in this respect.

J.A. (Inverness).—The photos of this gentleman indicate a very susceptible nature; he is very impressible, and is easily influenced by surrounding conditions. There is every indication of frankness and openmindedness generally, it would be better for him if he were less confiding and less disposed to publish his own affairs. He needs rather more life force than he appears to have to enable him to sustain the drain on his system. He is energetic, and forcible—when roused, he is not wanting in pluck or courage. He has strong social faculties, is very friendly, he makes strong attachments, and is ardent and affectionate. His perceptive faculties are strongly developed, which give him a general ability to collect facts, and constitute him an observer. His memory of events is good, his critical powers are strongly marked, and add greatly to his powers of investigation. His mind is a strong and comprehensive one. It will depend upon his environment as to the direction it will take. He is quick to adapt himself, and shews considerable method and system in his action.

“MULEY” (Birmingham).—The photo of this gentleman indicates a wide-awake mind, and an impulsive nature. He is active, energetic, and shows considerable spirit, and force of character. He overdoes rather than otherwise. He spends more energy than is necessary. He can accomplish more than many, for he has the abilities of a worker. He has a planning disposition, can organise, and save much time by method and system. He has a comprehensive mind; is quick to lay hold of a subject. There is every indication that the reasoning brain is predominant. He has considerable prudence and caution, and is not wanting in policy. Economy is strongly marked. The love of music, and ability to execute it appears to be well developed. The social faculties are well represented, giving him considerable warmth of feeling and affectionate nature. He is highly social, and would make a good friend.

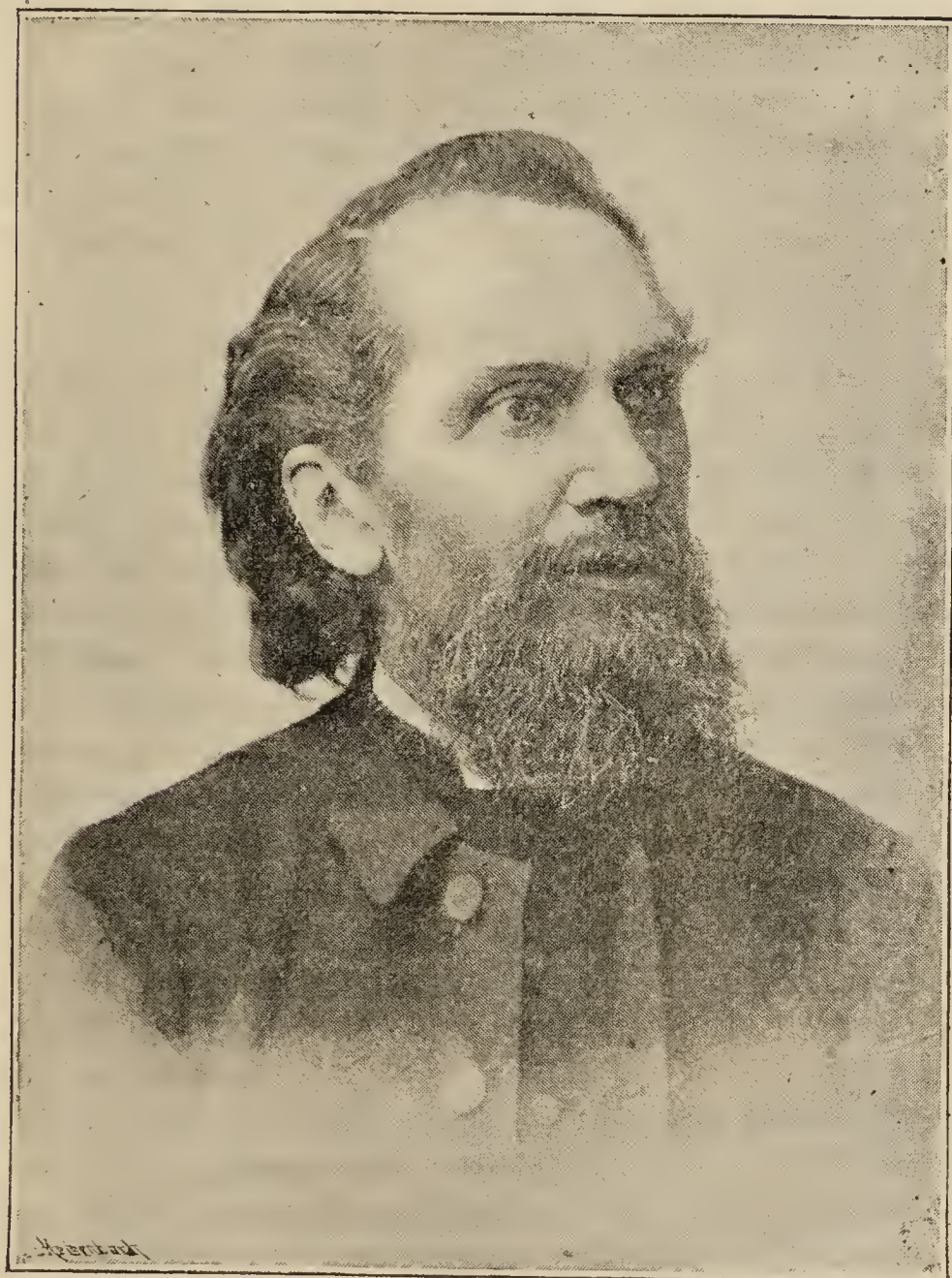
TITLES of honour add not to his worth,
Who is himself an honour to his title.

—*John Ford.*

Good men are the stars, the planets, of the age wherein they live and illustrate the times.—*Ben Jonson.*

THE
Phrenological Magazine.

SEPTEMBER, 1893.



REV. BENJAMIN WAUGH.

THIS gentleman is not possessed of a robust constitution. He works from a mental stimulus rather than from an animal one. His physique is not sufficiently supporting for his mind. It would be well if he turned his attention a little more to the building up of his health. His frontal angle shows a marked degree of intellectual power and scope of mind. His head is high from the opening of the ear to the coronal region, which gives him

high aspirations, philanthropic desires, and inclination to work for moral purposes. He has an organization which indicates spirit and hope. He is always looking on the bright side and anticipating favourable results. He is continually looking up not down, and contemplating pleasant things. He never sees the dark side of any subject nor does he look behind. He inspires hope in other minds and always has a word of encouragement. He is free and easy in conversation (more especially in talking to the young). Forward is his motto. He has a favourable development to acquire knowledge, and becomes easily acquainted with what is going on. He is a matter-of-fact man, knows how to turn everything to account. He is particularly good in analysing, comparing, reducing to practice, and making available what experience he has. He has no forebodings, no hard experiences to tell, and no dark corners in his character. He is full of life and love, and his ambition ought to be to scatter loving influences wherever he goes. It is seldom that a person has so much of his character out and above board. He has no fellowship with darkness. He is always looking angelward. He is very successful in encouraging others, and the most prominent feature of his character, and the chief topic of his conversation is Hope. He is a man of great power of observation ; he always has plenty to say and plenty of listeners. He seldom has to hesitate for words, or for subjects to talk upon. He is clear and distinct in his sentences, and has no guttural sounds. He does not make others think of the past but of the future. He is constitutionally a worshipper of all that is good and heavenly. His likeness stands out clear and distinct, and his character must be in harmony with it. He has a superior memory of what he sees, and all his experiences are brought to light. As a speaker he should be interesting and attractive, and draw people around him. He is more particularly adapted in favour of children, and is in his element when instructing and entertaining them. He is not adapted to anything that requires close examination and description. He has no special aptitude for buying and selling and making gain. He would make a mistake if he tried to make money ; he may make it for other people, but not for himself. His forte is kindness and looking forward. He has good imagination, and gives free utterance to his thoughts, and makes himself plain and easily understood. He does not live on the common plan of the business money-making man, nor does he have so much time to talk about business. To be well balanced he needs more of a worldly

man by his side, one who is living for this world. Such an organization generally finds enough to do and plenty to help him. He is always inspiring others, and not only by looking up himself but encouraging others to do the same. His mind is almost too tender : he suffers much when he sees others who are suffering. He has adaptability of mind, and can make himself at home with others in rather a special way.

L. N. FOWLER.

PHRENOLOGY APPLIED TO LAW, LOVE AND LIBERTY.

BY L. N. FOWLER.

IN this important subject we must take into consideration Law as Applied to Digestion, Hereditary Descent ; to Love ; to Morality ; to Liberty ; in short, to all that applies to the body and to the mind. The laws of nature lay us under heavy contributions, and the consequences of obeying or disobeying are more serious and important than to obey or disobey any laws established by society or government.

The laws of nature require, for our health, happiness and prosperity, that we be loving, industrious, temperate, intellectual and moral.

All existences have their foundation in certain principles, and these contain a law. The one does not exist without the other. To understand a law is to see and comprehend a principle in action.

There are principles and laws specially adapted to and applied to the body only, and those that are applied to the mind only. Laws and principles that are adapted to digestion are the most important that are applied to the body. The body is composed of certain properties of the food we eat, digest, and assimilate, being vitalized by the air we breathe. Man is wise when he understands the component parts of the body, and what he needs more of, or has too much of, and learns to eat and drink accordingly. It is by *what* we eat and *how*, that the body is kept up, and is a good or poor medium for the mind to grow and develop itself in ; for there is such a relationship, sympathy and affinity between the body and the mind, that the mind cannot work well in a poor condition of body. The better the quality, condition and perfect harmony of all the functions and organs of the body, the more easily and fully will the mind

manifest itself. The body is composed of many organs, functions, principles and laws ; but none are so important as those of digestion, for all the others depend in a great degree upon it for their healthy and vigorous condition. What shall we eat and drink becomes an important question.

THE LAW OF HEREDITARY DESCENT.

The second important law connected with the body is the Law of Hereditary Descent, the transmission of qualities from parents to children. In this law, both parents should be interested, for both have an influence on the offspring, and the one does what the other cannot do, but each may assist the other greatly. The web of life is made very imperfect when the warp of one sickly organization is woven into the warp of another sickly or diseased constitution through marriage. Many an imperfect specimen of humanity is the result of the marriage of two with the same disease, or even two with different diseases. Most children get their deaf, dumb, blind, idiotic, insane, consumptive and short-lived tendencies from their parents. They also get their sound, healthy organization, and favourable proportions, their tone of mind, disposition, clearness of intellect and mental vigour from their parents. In the animal, as well as in the human race, the improvement and perfectibility of the species depend more upon the female than the male. It is a matter of history with the Arabian horse, hence the genealogy of the female is kept and not of the sire, and it is in and through the former that certain qualities are sought and perpetuated. The influence of the mother is more remarkable on the essential and internal organs of the child. The influence of the father appears chiefly in the exterior and accessory parts. So also the affections, the religious emotions and the prudential qualities are transmitted more particularly through the mother, while passionate love, boldness, consciousness of personal superiority and originality of mind are transmitted through the father. The exception to this rule is where the mother partakes of the qualities of the father, and thus hands the masculine qualities down, or the father is like his mother, and hands the female qualities down. Dormant faculties in the parents are less developed, less active and susceptible in the child. Those children are the most perfect and harmoniously developed in body and mind, whose parents are well trained and in full exercise of their functions and organs. Extraordinary gift or genius is the climax of nature's genius, and is not transferred unless under the most favourable circumstances ; hence the children of

remarkable men generally descend in the scale. It is the family that is coming into greatness, and where genius is beginning to develop that qualities are transmissible. The new varieties and species talked about are many of them only a forced development of cultivated parts by making special selections with reference to the qualities most desired. It is the seed and not the soil ; the father and not the mother that give new stock, variety and species or races. The province of the mother is to improve on the quality and quantity of the more active powers of each. The no-horned, short-horned, crooked and straight-horned cattle and sheep ; the black, white, striped and spotted in hair, feather or skin, if kept to themselves reproduce their own. The children of the flat-nosed negro ; the curly hair of the African ; the straight and black hair of the Indians ; the short build of the Esquimaux ; the slender frame of the Australian ; the stout, bold Kaffee ; the simple, soft-looking Patagonian ; the peculiar sight of the Chinese ; the savage-looking Kurd of Persia ; all look like and take after their parentage from generation to generation. The same is also true of the long-tailed monkey, the short-tailed monkey, and the monkey with no tail at all, and all other peculiar species of monkeys, chimpanzees, baboons, ourang-outangs and gorillas included. Also large horses and small horses, of draft horses and race horses. Also singing, mocking, flying, and swimming birds are the same. The original Negro is a Negro still, and the original Chinaman is a Chinaman still, with all his peculiarities of eyes, &c. The original Jew is the same Jew to-day. So of the Arab, Indian, Mexican, and the islanders of the seas, and all the special races, but intermarriage with other nations makes a change. The dark races are stronger in bone and muscle and have larger necks and base to the brain than the white races, while the latter have more of the nervous system and have more brain in the frontal, coronal and occipital parts, and they are more active, expert, intellectual, high toned, social and domestic, but less tough and enduring. The law of transmission is more regular and perfect when applied to the body than to the mind. The passions and selfish natures of parents are more liable to be transmitted than the intellectual and moral powers. Changes of character in the parents do not show in the child. Nations that differ from each other have children peculiar to themselves. When nations intermarry, the children partake of the peculiarities of both, but the stronger nation gives the most character, and finally monopolize. But feed, clothe, educate and climatize all nations alike, and they would appear and actually be more alike than now.

Races are improved by amalgamation. If the white race will seek a greater variety of blood in the white race it will be improved thereby. If the dark race, the red race and the copper race would do the same among their own races they would all improve and rise to a much higher state of perfection. The mixing of the white man's blood with the coloured races does not as yet prove a great success. The first offspring of the mixture of the white and black races are frequently brilliant and susceptible but rather tender. The second remove is more tender, less stable, and fewer in number in a family, and generally end with the third generation.

Races that are the nearest alike, and have the greatest affinity with each other, may amalgamate with great chances of improvement. But let a limited number of families intermarry for a few generations and they will fail, unless they live much in the open air and do physical labour. The greater the mixture of blood the better where there is sympathy and affinity. Foreign blood mixed with love, gives life, heat, action and health. New and increasing modes of travelling, and free exchange between nations and races will be a source of great improvement to mankind. That great and good time will come when the blood, and especially the sympathies of all nations will be well mixed, then we shall care for each other. Laws apply to everything. Wind and sound go in waves as well as water, and vary in regularity according to the velocity or strength of the wind, or the pitch or force of the sound. These waves applied to machinery, produce many different kinds of beautiful and graceful patterns. All nature is alive with birth, growth or decay. Everything in nature is kept in motion. There is order in all her movements; her laws of reproduction are unalterable. Everything after its kind, whether in the plant, fish, bird, animal or man; the horse, lion, monkey and man each produce their own. The first important law or principle of the mind is the law of love and affinity. To love wisely, and guide it properly, is one of the most important acts of man. Where there is an affinity and an attraction between two or more persons, objects or qualities, there the love principle exists, and if they are drawn together and held together by that principle, it is the law of love in operation, as in the law of attraction, adhesion, assimilation and motion, in matter or mental affinity and attraction between the sexes. The law of love is not necessarily dependent on two persons or qualities being exactly alike, but in their adaptation of the one to the other, the one supplying a need of the other, thus perfecting the

qualities of both. The masculine and feminine natures are not exactly alike, nor perfect when separate, therefore the more need of the blended influence for each. The more masculine the man is the more feminine the woman should be. Where the principle of love has been properly established between husband and wife, a power has been set up on the earth that will last like the laws of gravitation or adhesion, for ever.

THE MORAL LAW.

The second law or principle of the mind is the Moral Law, or the relations of man to a higher life, duties and obligations. Man's life and conduct materially affect the man and his character. He is under obligation to live in harmony with the moral principle of his nature as much, if not more, than any other. Every result connected with the obedience of the laws of body and mind is favourable to man's health and happiness. Disobey the laws of dietetics, and disease, debility and pain are the results. Disobey the laws of hereditary descent, and imbecility, deformity, imperfection, weakness and many physical defects and derangements of vital power follow. Disregard the law of love, and peace, harmony, unity, and healthy influences are interfered with, resulting in antagonism, discord and hatred. To disobey moral law, the road to perfection is blocked, and man is less an angel and more satanic. He is going down to ruin and demoralization rather than up to honour, perfection and glory. Existence brings with it responsibility and accountability, if not immortality. Man has a moral nature which gives him a consciousness of duty, justice, right, humanity, superiority, spiritual existence and immortality. Man's moral nature is adapted to a code of laws or principles that are necessary to be observed in order to regulate conduct, govern passions, direct love, guide reason, enlarge and elevate the mind, and stimulate man to live within just, humane and true bounds, so that not only self, but all others, may be benefited by his existence. Man has a monitor, a prompter, within himself. These moral, stimulating, monitorial, regulating, elevating powers of the mind have their location in the superior coronal part of the brain, and are the capsheaf of all the rest of the mind, and character cannot be perfected without their supreme influence and guidance. Take away the influence of the moral faculties entirely, and a man is a reasoning animal, and extremely liable to pervert his nature and become lustful, without natural affection, morose, cruel, sordid, deceitful, tyrannical, proud, vain, stubborn, and rather than not have his own way would sacrifice all around him. But

with the full, complete influence of the moral faculties, which, when legitimately exercised have a modifying, regulating, guiding, monopolizing influence, the man becomes harmonious, humane, modest, truthful, honest, pure, elevated and a spiritually inclined being, living for another life as well as this. Man is happy when he acts in harmony with his moral sense, and unhappy when he violates it.

LIBERTY.

The watchword of the race is Liberty. All are struggling for more freedom. Give a little, and more is wanted in every direction. The highest price is given for the latest telegraphic news, the fastest horse, and the quickest boat and engine. A child wants more liberty than it has ; the father takes all he can get, and all are breaking away from as many restraints as possible. The struggle in politics is for more liberty. In religion it is the same. There are strikes in every direction for less work and more pay. Laws are continually being violated because men cannot bear restraint. Every possible chance is taken to secure more liberty, and all available ground is occupied in the direction of more liberty of body and mind. Perfect freedom does not belong to mortals. Give men all the freedom it is possible for them to have, both of body and of mind, and then the mind is bound by the body and by ignorance and the smallness of its conceptions. And the body is confined by its laws of gravitation and weakness. Most men abuse what liberty they have, and yet want more. The greatest despot and tyrant is not satisfied, for he would wish the human race had but one neck and he could sever the head from the body with a blow. His misery consists in not being able to do more than he can do. The human mind is never satisfied. What it sees makes it want to see more. What men know makes them want to know more. A short journey makes them want to take a long one. To influence one man makes them want to influence more. To get into office once makes them want it all the time. Liberty of person depends upon how little we are dependent on others for existence, support and comfort. Liberty of opinion in politics, religion and other matters, depends upon the perfection and development of our own minds, and our ability to satisfactorily solve all enquiries for ourselves and do our own thinking. Political freedom will be secured in proportion as legislation secures the greatest good to the greatest number. Religious freedom and tolerance will be secured in proportion as each individual understands correctly the

attributes and requirements of his Creator, and adapts himself to them and encourages others to do the same. It is impossible for anyone to be entirely free from all restraint, obligation or dependence, for he is an organic being, subject to natural laws—laws of physiological, of hereditary descent ; and mental, moral and spiritual laws. The freest man, enjoying the most liberty, is the most obedient to natural and moral laws. The body holds the mind a prisoner so long as its vital forces are in action and will not let it go or do as it wants to. It is obliged to sympathize with the body and take care of it. The natural tendency is for the mind to increase in power and influence, and the body to decrease, until the power is reversed. Man has no right to do wrong—to pervert his organization or misuse any of his powers of body and mind. He has no right to shorten his life, or voluntarily place himself where he will be miserable. Has no right to neglect an education, or to fail to improve and govern himself. He has no right to stand in the way of others who wish to improve. He has no right to interfere with the happiness, enjoyments and quiet of inoffensive persons. He has a right to as much liberty as he can get and enjoy without abusing it ; to as much education and improvement as he can secure honestly ; to all the property he can honestly earn ; to exert as much influence for good over others as he can ; to do all the good he can ; to save and prolong life ; to set good examples ; to be true, pure and honest. He has a right to the legitimate use of all powers of mind : to love and marry, to be religious, to acquire knowledge, to learn a trade or art, to enjoy the rights and privileges of the government he helps to support. Man is free in proportion as he is true to the laws of his nature. He is a slave necessarily to the consequences of violated law. The greater the sinner, the greater slave. The greatest freedom comes from the greatest obedience. The greatest happiness comes from the effort to do good. The greatest hate gives the greatest love.

Our obligations go higher than to ourselves and to society, for we are created and are therefore subject to that creating power, and dependent upon it for our existence, and for the very breath we draw. Then let us ascertain what liberties really belong to us, and use them as not abusing them, and make the most of them for our temporal and eternal good.

THE manner of giving shows the character of the giver more than the gift itself.—*Lavater*.

FOUR GREAT LEADERS OF THOUGHT,
PHRENOLOGICALLY CONSIDERED.

BY JESSIE A. FOWLER.

JOHN RUSKIN.

THE nearer we get to all truly great men the more they become a part of our lives. This is, however, true in proportion as we touch their inner selves, the core, the mainspring, the pivot on which they work. In proportion as we study their aims, their successes and failures, do we accomplish our object in examining their lives. We need to live with all whom we wish to know, a personal examination gives us what biographics generally leave out, and these are the very points we look for in vain. It depends very much how one looks. At present we will look at these friends—the great leaders of thought—phrenologically.

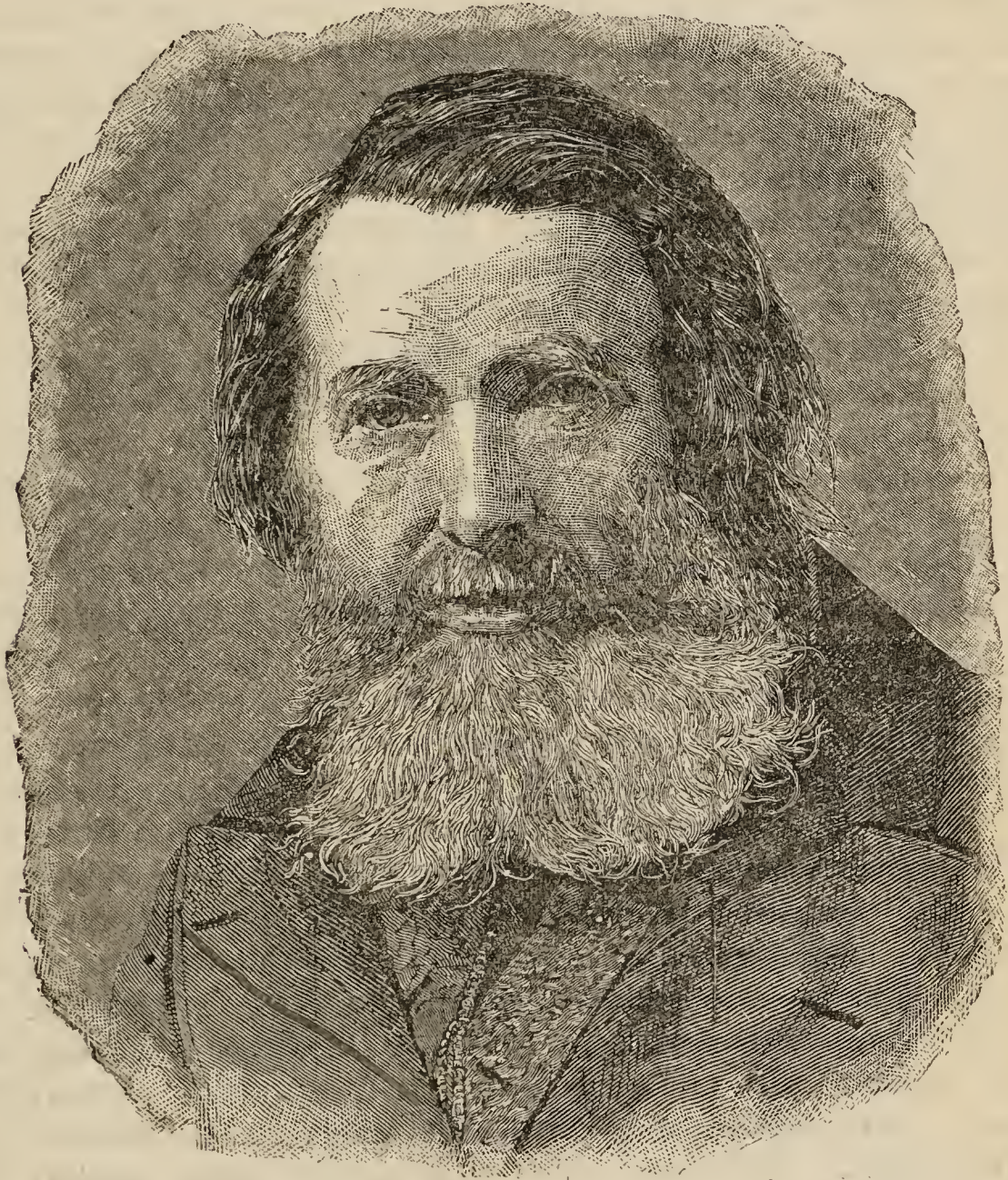
A few great men have led and governed the world. In arts and arms, in laws and letters, in religion and science, in mechanics and commerce, a few names only stand prominently in the memory as leading men.

We might have selected for our study, four leading men in science, in poetry, or in art, but we have chosen four inspired teachers or original and vigorous thinkers to speak to us through their lives and writings on phrenological grounds, and this is what Ruskin, Browning, Emerson, and Carlyle have done. We may disappoint some if we are expected simply to give the portions of their works that have become household words, as that is not our object, but rather to point out in what way they are true born phrenological teachers. In our present sketch we propose to examine John Ruskin's writings and phrenological developments.

His brain is of full size and of peculiar shape, being high, long and narrow. He has a distinct predominance of the mental temperament, with a full degree of the motive, and a fair amount of the vital. His animal powers by no means predominate. His forehead decidedly represents large perceptive faculties, while his comparatively narrow yet high head indicates he is living for some purpose besides making and hoarding property, or living for his own happiness or pleasure. Even more restraining powers would be an advantage to him.

The ruling faculties of his mind are in his coronal brain; and the largest of these is Benevolence, as seen by the extreme height of his head above the forehead. This is more

influential because of the weakness of the selfish brain. Were it not for a fair share of Self-Esteem he would be tempted to make unnecessary personal sacrifices from a pure desire to benefit others. His sympathies are liable to lead him to forget himself while he is ministering to the wants of others. This faculty, joined to his large Veneration, leads him to value humanity for humanity's sake, and to strive to raise the lowest objects of humanity as high as possible. His



JOHN RUSKIN.

sympathies are constitutionally with the inferior and lonely in proportion as these two faculties have the ascendancy. His high forehead and large Benevolence and Veneration indicate a philanthropic state of mind, and the disposition to do the greatest good to the greatest number, and at the least possible expense. He appears to have so much sympathy for the mass of mankind that this quality joined to his

intellect must make him value his friends whether they are rich or poor, in proportion as he respects them for their intellectual and moral qualities.

The range of his thoughts is higher and less selfish than that of most men ; hence he will have the sympathy and co-labour of but few. Before we leave our remarks on the moral group there is another faculty that appears very large, which is Hope ; it makes him work with regard to a distinct future. To those who have a "weaker eye of faith" his schemes seem somewhat visionary. Yet at the bottom his ideas will be found to be based on facts and not on mere theory. His Utopia, if he planned one, would be built upon an actual, not an imaginary human nature. His imagination does not run wild, but is distinctly under the control of his common-sense faculties. His Conscientiousness is a distinct and ruling quality. It makes him somewhat censorious at times ; for anything of the nature of a deviation from the path of duty or right must annoy him the more because his Continuity makes him dwell on a subject for a long time. This protractedness of mental power is quite a characteristic of his mind. He cannot easily give up a process of thought, he must continue it until completed and expressed. His Approbativeness is not specially large, hence he thinks more of saying what he believes to be right than that which will be popular or simply pleasing.

The central brain from the root of the nose upwards over the top of the head to the back, is large. Eventuality makes him conscious of what is going on around him and disposes him to take an interest in the life and doings of the day. He can not only gather a vast amount of information, but can retain it and use it to a good advantage. It should render him very fond of history and all kinds of movements and experiments. His very large Comparison gives him keen powers of analysis and criticism, and joined to his large Language and vivid imagination endows him with superior descriptive powers and ability to present his ideas in a distinct and striking light. His clear, sharp and active brain renders him capable of being exceedingly direct, pointed, and appropriate in what he says. Intuition, between Comparison and Benevolence, gathers strength from either side, and aids him to see truths from Nature, and the fitness and harmony of things, and disposes him to decide on all truths, or supposed truths, as they do or do not harmonise with what he knows to be true in Nature ; for, with such developments as he has, Nature must be his guide. He has much more ability to criticise, analyse, combine, compare, arrange, classify, estimate,

reduce to practice, and perfect an operation, than he has to create, originate or discover. He can reply in the debate better than he can start or open one. His large Language, as indicated by his full projecting eye, enables him to express himself correctly and copiously, and gives him the ability to be a good conversationalist. His Perceptive faculties are all large, which gives him a great range of observation, and enables him to acquire a vast amount of information. They, together with other faculties, give him an equal amount of talent for Science, Literature and Art. Form is very large, it is seldom that even good mechanics or artists measure so much from eye to eye. This very large Form gives him memory of outline, countenance, expression, likeness, resemblances, and with such a highly cultivated mind, anything in art out of shape, or where a proper expression is not given, must be a source of extreme annoyance to him. He is equally prominent in the organ of Size, giving fulness to the corner of the eye next the nose. This faculty enables him to judge correctly of the proportion of one thing to another. It enables him to measure by the eye, to take a perspective view of a landscape or picture. With his large Individuality, and very large Form and Size he is able to focus objects at a great distance, and take in a large range of vision. Height and Colour also are large, and must have a distinct influence in connection with his other perceptive faculties. Order is most distinctly marked, while Calculation is full. They would dispose him to arrange, systematise, and work according to some rule or plan, and to reduce everything to system. They are so large as to dispose him to be fastidiously particular, and to criticise mere details. Their combined action inclines him to make up estimates, and look at everything in the light of profit and loss, waste and supply. He can quickly see where things are done to a disadvantage, and what saving could be made if such and such plans were adopted.

Few men have been so distinctly before the public for so long a time as Ruskin, and few have won for themselves so unique a position and influence as he has. He is known for having peculiar mental characteristics, and views of men, and advocating measures which are quite individual. The foregoing remarks explain, from a phrenological standpoint, the bent of his mind.

Society could do with more of such men, even though it had them at the expense of a few of the worldly and selfish type.

EARLY LIFE.

Of Ruskin's early life, and his family, he writes in one of his "Fors," "Who am I, that I should challenge you? The Squires of England, do you ask? My mother was a sailor's daughter, and please you, one of my aunts was a baker's wife, the other a tanner's; I don't know much more about my family, except that there used to be a greengrocer of the name in a small shop near the Crystal Palace. Something of my early and vulgar life, if it interests you, I will tell you in next "Fors," in this one it is indeed my business, poor gipsy herald that I am, to bring you such a challenge, though you should hunt and hang me for it." His father, who was a man of indomitable spirit, came over the border in search of fortune. He came to London, and was a clerk in a merchant's office for nine years without a holiday, then began business on his own account, and paid his father's debts, for which he was called a fool by his best friends, but his son John wrote on the marble slab over his grave, "An entirely honest merchant." As days went on he was able to take a house in Hunter Street, Brunswick Square, No. 54. "The windows of it," remarked John Ruskin, "fortunately for me, commanded a view of a marvellous iron post, out of which the water-carts were filled through beautiful little trap-doors by pipes like boa-constrictors, and I was never weary of contemplating that mystery and the delicious dripping consequent; and as years went on my father could command a post-chaise and pair for two months in the summer, by help of which, with my mother and me, he went the round of his country customers (who liked to see the principal of the house his own traveller); so that at a jog-trot pace, through the panoramic opening of the four windows of a post-chaise, made more panoramic still to me because my seat was a little bracket in front, I saw all the high-roads and most of the cross ones of England and Wales, and a great part of lowland Scotland, as far as Perth, where every other year we spent the whole summer."

This I say, to show how the boy learned to love art, which (as he so finely said), "is a translation of nature." He said of himself, "It so happened also—which was the real cause of the bias of my after-life—that my father had a rare love of pictures. I have never met with another instance of so innate a faculty for the discernment of true art up to the point possible without actual practice. Accordingly, whenever there was a gallery to be seen, we stopped at the nearest town for the night; and in reverential manner I thus saw

nearly all the noblemen's houses in England, not indeed myself at that age caring for pictures, but much for castles and ruins, feeling more and more as I grew older the healthy delight of uncovetous admiration, and perceiving, as soon as I could perceive any political truth at all, that it was probably much happier to live in a small house and have Warwick Castle to be astonished at, than to live in Warwick Castle and have nothing to be astonished at, but that at any rate it would not make Brunswick Square in the least more pleasantly habitable to pull Warwick Castle down." And he goes so far as to say that, "Even to this day though I have invitations enough to visit America, I could not even for a couple of months live in a country so miserable as to possess no castles." Ruskin's early reading, and his only reading when a child, on week-days was Walter Scott's novels and the "Iliad" (Pope's translation); on Sundays their effect was tempered by "Robinson Crusoe" and the "Pilgrims Progress;"—"my mother," he said, "having it deeply in her heart to make an Evangelical clergyman of me. Fortunately I had an aunt more Evangelical than my mother, and my aunt gave me cold mutton for my Sunday's dinner, which, as I much preferred it hot, greatly diminished the influence of the 'Pilgrim's Progress,' and the end of the matter was that I got all the noble imaginative teachings of Defoe and Bunyan, and yet am not an Evangelical clergyman." In my opinion he is one of the best of the cloth without wearing it.

There is something very quaint in the way he describes his further training.

"I had, however, still better teaching than theirs, and that compulsorily, and every day of the week. Walter Scott and Pope's "Homer" were reading of my own election, but my mother forced me, by steady daily toil, to learn long chapters of the Bible by heart, as well as to read it every syllable through aloud, hard names and all, from Genesis to the Apocalypse about once a year; and to that discipline, patient, accurate, and resolute, I owe not only a knowledge of the book, which I find occasionally serviceable, but much of my general power of taking pains, and the best part of my taste in literature."

In a series of articles entitled "Fiction: Foul and Fair," which have since been published in three volumes entitled "On the road," Ruskin carefully and lovingly analyses some of Scott's novels, and does the fullest justice to the manly dignity, the robust morality, the exquisite purity, the delicate refinement, and almost Shakespearian humour which flood and float every work of the great wizard of the North.

Instead of giving an outline of his life which you have all read for yourselves, I want to pass on to some salient characteristics of Ruskin's teachings. His writings have been most varied, including "Notes on the Construction of Sheep-folds," which a simple-minded farmer bought for practical instruction on the subject, and was very disappointed and bewildered by its contents.

To understand Ruskin, it is, I think, necessary to understand Wordsworth. The same loving study and reverent worship of Nature animated both writers. The difference between them is one of temper. One was calm, philosophical, withdrawn from the cantankerous controversies of politics and the little details of daily life. John Ruskin with a chivalrous disregard of the wear and tear consequent upon mingling in the dusty daily fray, breaks out here with a letter, and there with a lecture, dealing directly with the topic of the hour. He is not exactly a safe teacher to ordinary minds, to men and women who cannot weigh measure, and discriminate between his opinion, but to those who can, his teachings are of unspeakable value, for he is a noble and chivalrous denouncer of the infinite vulgarity and stupid greed of the age.

AS A TEACHER.

As a teacher, Ruskin was most engaging. What is called "personal magnetism" the attraction of a powerful mind and intensely sympathetic manner, he exercised to the highest degree over all with whom he came into personal contact. His enthusiasm for the subject in hand, his obvious devotion to his work, his unselfish readiness to take any trouble over it, his extreme consideration for the feelings of any man, woman or child, high or low, clever or stupid, in his company, his vivacity and humour and imagination, all spent, as the pupil proudly felt, "on little me," made him simply adored. One little drawback was perhaps noticeable, namely, that he did not realise how much help he actually gave his pupils so that, he thought that because they could make great progress with his help, they might now and then be trusted to walk alone.

JOHN RUSKIN AS A PROSE ARTIST.

John Ruskin has done as much for art as Millais, Rosetti, Holman Hunt, and Burne Jones, all of whom have put their original and daring ideas in glowing colours before a jaded public, while he in words not less glowing and opalescent fought the battle as he only can fight. These men have proved that according to man's insight into nature, and his

power to make us feel by his picture what he felt when he looked at and loved the scene portrayed, is the value of his genius. So it is with the study of human nature; in proportion as we can get inside a character, and make others see what we see and feel is there portrayed, do we succeed in convincing others that mind and therefore character is revealed through the brain and skull and face. We have heard a good deal about pre-Raphaelitism. Ruskin says, "It has but one principle, that of absolute uncompromising truth in all that it does, obtained by working everything down to the most minute detail, from nature, and from nature only. Every pre-Raphaelite figure, however studied in expression, is a true portrait of some living person." This was the keynote of Dr. Gall's observations, and it should be ours. I do not think any one can doubt that the influence of this teaching has been good. As in art, so in all work, it must first please, I think, and refine and elevate the mind and heart too. A man may think he has a mission to teach; but he must prove, if he wishes to be regarded by the busy world, that he can teach in a pleasing and graceful way. Mere scolding at large will not do. This leads me to the exquisite beauty, finish and grace of John Ruskin's literary style. One would, I think, rather read the melodious scoldings of John Ruskin than the praise of most other writers. His very thoughts are better than their puny literary virtues. Can we not catch an inspiration from this great man here. "Melodious scoldings"—a wise art in criticism. When we have to deal with the most sensitive part of a man's nature—his character—our criticisms should be "melodious scoldings" over the faults one finds.

Ruskin says again of Fine Art, that it is that in which the hand, the head and the heart go together. This is true equally of the human art of mind-reading. Greatness in all work consists first, in earnest and intense seizing of natural facts, then in ordering these facts by strength of human intellect, so as to make them, for all who look upon them to the utmost, serviceable, memorable and beautiful. And thus great Art in any work is nothing less than the type of strong and noble life; for as the ignoble person in dealing with all that occurs in the world about him, sees nothing clearly, looks nothing firmly in the face and then allows himself to be swept away by the torrent and inexorable force of the things that he would not foresee and could not understand; so the noble person, looking the facts of the world full in the face, and fathoming them with deep faculty, then deals with them in unalarmed intelligence and unhurried

strength, and becomes, with his human intellect and will, no unconscious nor insignificant agent in communicating their good and restraining their evil.

Homer sang what he saw ; Phidias carved what he saw ; Raphael painted the men and women in their own caps and mantles ; and everyone who has arisen to eminence in modern times has done so by working in their way and doing the things they saw. As in Art, so in Phrenology, we must portray what we find but with "melodious scoldings."

(To be continued.)

WHAT CAN WOMAN DO ?

BY JAMES COATES.

It is not proposed to point out in this article all that woman can do, it would require a more subtle mind, and a much more skilful pen than mine. It is only a woman who can properly understand a woman. Next to a woman, one versed in the art of reading characters and who has given some time to comprehend and analyse woman's complex dispositions may attempt the task. The correct answer to this question, What can woman do ? can only be given by having a proper appreciation of woman's organization, and her true character as the outcome of that organization. There are some thinkers capable of rising above the prejudices and conversations of the hour, who are willing to admit that woman is man's equal and complement, each having their respective spheres and duties, and their own special endowment for the discharge of these, and each is superior to the other in their own particular sphere. This is an honest, and on the whole, correct admission. When men undertake the task of performing feminine duties, which change, accident, or choice throw in their way, they generally make a sorry plight of it. In the nursery, sick room, convalescent ward, as a hostess, and in the thousand and one gentle arts to make life sweet, good, and wholesome, woman reigns supreme. Woman has shown herself capable of not only filling the *rôle* of wife, mother, and educator to the race, which are the distinctive characteristics of her sex, but she has shown herself capable of filling any position, which has, as a rule, been esteemed the special presence of man to occupy.

Among the things woman can do, she can perform, with

greater aptitude and success, masculine duties, which Providence or necessity has thrown in her way, than man can hers. How is this ? Woman is superior to man. Woman ought to take courage and rise out of the dull routine of dependence to the full and rightful use of the heaven-given parentage. The scientist, who believes in natural selection, and the non-scientist who is content to take Genesis for it, both arrive at the same conclusion, viz. : woman is the latest and highest product of evolution, and that which received the last stamp of the Creator's skill. But neither are likely to follow this up to the logical conclusion, *i.e.*, that in consequence, woman is superior to man. That which is last is highest. Woman is superior to man in her physical structure. She is endowed with two functions more than man,—those of gestation and lactation. Her mental and psychic nature, being counterpart of the physical, these will be superior too. This will not be readily admitted. But a little reflection will prove how helpless man is without the sustaining, intuitive and spiritual influence of woman in adult life, first as he was dependent upon her in infancy for life, nutriment and care. It is given woman to mother the race, and among the things she can do is to people the earth and heaven, with the children of men, made pure and strong by her love, sympathy, patience, and alike inherent virtues, woman shines alike to advantage, and like the modest Forget-me-not she but beautifies some quiet corner of God's heritage—unknown and unthought of outside the circle she clothes, makes warm and happy, or when she is suddenly called upon to more public duties, and perchance those hitherto discharged by men. For among the things woman can do, she can not only perform the duties allotted to the sex, but she can perform any other as yet discharged by men.

If man is qualified to fill a throne or govern a nation, woman has shown herself, in intellect, tact, wisdom and moral influence, his equal, if not his superior. It is certainly exceptional when woman comes to the front, showing her superiority, in being able to mount to eminence and command, by surmounting obstacles, which are not by reason of sex, habit and usage, thrown in the way of man. From Deborah to Victoria woman has shown her power to command and guide a nation's welfare.

Woman appears to have "an infinite capacity to fulfil the unexpected." She is often called upon suddenly to take up unusual positions—masculine duties, for which she has no real or preliminary training, at least such as man demands and have to qualify him for success. The most successful

stock-raiser in Scotland is a woman ; her prize stallions and cattle are known everywhere. Left a widow suddenly she has continued her husband's business with success. The most skilful farmer in County Down was a woman, who without any previous training took the management in hand, when she lost her husband. One of the largest journalistic and publishing enterprises in America is conducted by a woman, whose good husband died and left a large business, almost hopelessly bankrupt, as a legacy to his young wife and family. Without previous business or journalistic training this lady took the reins of the business in hand, stopped the business leaks, gradually built up the business, and paid off the £45,000 of arrears which had brought the husband to a premature grave. Some twenty years ago a young wife, only four months a mother, the widow of a ship's captain, who died of yellow fever a week out from Pernambuco, navigated her husband's vessel in safety to New York. Neither the first nor second mate could navigate the vessel ; yet this young woman, delicate in health, broken with grief, rose to the occasion, completely controlled a rough and mixed crew, and navigated the ship with valuable cargo to port. She received quite an ovation when the facts came out, salvage rewards and all that, and then dropped quietly out of public notice into the ranks of domesticated women.

Captain Betsy Meller commanded and sailed for nearly thirty years the brigantine, "Clytie of Ardrossan," generally with coal from Saltcoats to Dublin. When no longer able to take her post through old age, her sister Hannah became captain, and sailed the vessel fourteen years. It is true these women were somewhat masculine in type, but they were guided by womanly motives. Betsy could not think of allowing her husband's vessel to pass into the hands of strangers. Hannah did not wish to see the vessel her sister loved for her husband's sake to pass away either, and so sailed it herself until it was condemned by the Board of Trade. We read of Grace Darling. I believe the majority of women are Grace Darlings at heart, but the emergency, the unexpected has not come their way. Whether woman is admitted to be man's superior or not, it must be granted her love is more intense, more devoted, more lasting than his. Such love can only be the outcome of a purer, more refined, and superior nature. It will be generally found that it has been this love which has been the motive or mainspring of most things a woman can do. We are often told that woman is physically inferior to man. Well, we do not suppose she was fitted with that kind of strength to fill jails

or build them, but it is wonderful to see a strong man tottering about and losing his temper too, under the weight of a twelve pound baby, and yet a woman is expected to take the little one about day after day when it is twice as heavy, to keep her temper, take a pleasure in her duties, and come up smiling every time, to chase the gloom from her husband's face, and to watch that nothing bothers him, and when she has done all her own, to advise and help him in the discharge of his duties. How often has the strong man had to acknowledge the intuition and advice that has saved him from designing men, despair, bankruptcy, and perhaps moral disaster. These are some of the things that woman can do.

It is said if there is a little contemptible mean thing to be done, get a woman to do it. If there is an uncharitable way of looking at things, or if you want to hear unkind things about women, start a woman to talk and she will supply you. But all this is of no purpose, the same thing might be said about men, and indeed the greater the man, the greater his faults. Tycho Brahe, the great astronomer, grew pale and trembled like an aspen leaf when he saw a hare, dead or alive. The great Marshal Saxe, used to scream with terror at the sight of a cat, our own General Roberts turns faint on the presence of pussy. The great Dr. Johnson, would never enter a room except left foot foremost. As I am writing there is a lively thunderstorm overhead, that reminds me that the great Julius Cæsar used to be so frightened at the sound of thunder that he would creep into the earth, or hide himself anywhere to get away from the sound. Peter the Great trembled at the idea of crossing a bridge, and so on, hundreds of instances of similar weakness could be pointed out, in large brained stalwart men. No one should laugh at a woman shrinking from a mouse, as often as not the same woman will face any danger to life, aye actual death and judgment, without a single regret or fear, when impelled to action by love.

Is woman inferior to man? Intellectually, not a bit of it. Every year bears abundant evidence of woman's success in literature, science, and art. Give woman the opportunity and she will hold her own intellectually with man. First in mathematics, Mrs. Somerville, higher than a First Wrangler, Miss Fawcett, who gained the Sergeant Prize of £500 for the best translation of a Horatian Ode—a woman. Foremost writers and journalists—women. The greatest authority in Great Britain on the entomological pests of farmers and horticulturists—a woman, Miss Omerod, to whom the British Government on more than one occasion has had to apply for health. A woman advised the Federal Government at

Washington, D.C., planned the most of the successful strategic movements, by which the rebellion was crushed out. It was a woman who advised and finally led Abraham Lincoln to issue the proclamation of emancipation. It was a woman who revolutionised hospital practice and reduced nursing to a science. What men were afraid or unable to do, the genius of Florence Nightingale led the way. Can we forget Elizabeth Fry, who was instrumental in converting our jails from insanitary dungeons and hells upon earth, to cleanly and healthful resorts for criminal reformation. Mrs. Butler in her heroic crusade against vice, or Catherine Booth, who had "the heart" to show how to reclaim the forsaken and outcast, especially of her own sex.

Illustrations of what woman can do we have, and might continue to give, in abundance. What is the secret of her power and of her superiority? The secret lies in the constitution of her sex, and in her special brain organization. Her intellectual lobes are equal to those of man. Her selfish and animal propensities are less and her social lobes are greater than his. Her brain is smaller than his, but greater in proportion to her body. Her head has a distinctive shape of its own. It is narrower from side to side, of equal length in front, and of greater height above the ears, and much longer back than man's. Woman has also a higher, finer, much more sensitive and delicate organization, and the whole points out the secret of woman's power is her capacity to love, her superiority in her self-denial. It was love which achieved success at examinations, navigated the ship, gave strength to Grace Darling's arm, stirred the soul of Florence Nightingale, and gave to the world the mighty strength of such women as Elizabeth Fry and Catherine Booth. Propelled by such strength of feeling, affection, sympathy, heart, the weak intellect of woman often achieves what the massive intellect of man fails to do. What can woman do? Love. It is manifested at the cradle. Dorcas-like it works wonders. It feeds the hungry, clothes the naked, and saves from sin; with this power, in any position in life, woman can do all that man can do,—aye, and more, and remain herself, a woman.

WORK is the best educator of practical character. It evokes and disciplines obedience, self-control, attention, application, and perseverance.

THERE never did, and never will, exist anything permanently noble and excellent in character which was stranger to the exercise of resolute self-denial.

THE WILL IN RELATION TO SELF-CULTURE.

J. MILNER FOTHERGILL, M.D.

“ I HAVE begun several times many things, and I have often succeeded at last, aye, and though I sit down now, the time will come when you will hear me ” ; so said Benjamin Disraeli to the House of Commons, when the members would not hear him speak. Derision was all he got for his maiden speech, but that did not daunt him ; and the time came, sure enough, when the House not only listened to him, but even acknowledged his mastery over it. Disraeli had learned, what many another man learns, that because he failed at first it did not follow that ultimate success was unattainable. Perseverance, industry, correction of faults of style, and the baffled speaker came to be able to hold the House spellbound with his barbed shafts of rhetoric. He soon attacked fiercely Sir Robert Peel, who was an excellent speaker ; and the pungency of his remarks taught the House to dread him, at whom they once had scoffed ! It must have needed great resolution to face the House of Commons again after that first terrible rebuff ; but after that attempt had once more been made, the rest was comparatively easy.

But in order to command success Disraeli had to toil. He saw where his faults lay, and remedied them. A man who fails, and will not see his errors, can never improve. If he remains satisfied that the fault lies entirely in others, no self-improvement will or can follow. He is stricken with “ the devil’s palsy of self-approbation,” and will never achieve anything worth the doing. A man’s education at school does not fit him for the fight of life, as is too generally assumed ; it is no more than a preliminary training to teach him how to work, how to battle with difficulties. The real knowledge required for the business of life comes after the school-days are over. “ I had such a bad education, you see ; if I had had a better education it would have been different,” says many a man or woman. Be sure that person will die in insignificance ! There is no power of “ self-help ” there.

They read the newspaper without ever opening an atlas ; they talk about what they do not properly understand, and then are surprised that their opinions do not carry weight with them. They never tried to give their opinions any weight ! No wonder they do not succeed when they never even make the essay. And yet they assert their equality with other people who have striven, and earned by the sweat of their brow, a claim to hold a valid opinion on many subjects. I once heard

an observant lady-nurse say of a medical man with whom she had to work upon one occasion, "He went in for the easiest examination he could find, and after he passed it, took good care he never learned anything more." Yet it seemed he lived on very comfortable terms with himself; and always gave his opinion on professional matters as one who had a right to speak—untroubled by diffidence.

No man has ever attained real eminence who did not toil; and for sustained toil a resolute will is essential. The person who is readily wearied can only be preserved from mediocrity by the possession of remarkable powers; and these last but few possess. "How much I could do if I tried!" is the pose of many persons; especially young persons, who think it is grand to be possessed of capacities, which are of little worth if not cultivated. What would be thought of a man who had a garden overgrown with weeds and pointed to the luxuriance of their growth as an evidence of the excellent quality of the soil, adding, "See what it would grow if I cultivated it!" All would think him a fool; and yet many young persons pride themselves upon their mind gardens being in a neglected state.

The young gentleman who claims a position on the strength of unrealized aspirations is an intellectual impostor. The claim founded on what is going to be is often as offensive as that sort of piety which, on the strength of the position its owner is going to occupy in another world, gives itself airs in this.

"Genius is patience. What I am I have made myself," said Sir Humphrey Davy.

"It is not everyone who can command success,
But we'll do more, Sempronius; we'll deserve it,"

Addison makes one of his characters say. "The best part of every man's education is that which he gives to himself," said Sir Walter Scott, who was regarded as a "stupid" at school. It is downright hard self-imposed work which makes the complete man. A boy can learn tasks, but to do that is not enough; when a man believes that knowledge is power, then he feels he can never have enough of it. That is the difference betwixt a mere clever boy and an industrious man. Gibbon knew what hard work meant; and his opinion is that "every person has two educations: one which he receives from others, and one, more important, which he receives from himself." And every man, and woman too, who has done anything in the world, knows that it is the after-school education of the individual

which affects the end mainly. It is not the education which they have had from others, though of course that has its value ; but the education which they have given themselves that has brought about the result, when result is attained.

A man cannot give himself powers, that is true. But he can use what powers he does possess. "I am as clever as I can make myself," he may be able to say, and to say honestly. He cannot increase the talent given him : but is he always sure about the amount of talent possessed ? He can only tell this by doing his best. Sometimes he begins to believe in time that he has really more talent than he once gave himself credit for, or than others credited him with. Youthful cleverness often ends in a mature mediocrity. Others, again, are "late pears," as Oliver Wendell Holmes happily expresses it. "And that leads me to say," he continued, "that men often remind me of pears in their way of coming to maturity. Some are ripe at twenty, like human jargonelles, and must be made the most of, for their day is soon over. Some come into their perfect condition late, like the autumn kinds, and they last better than the summer fruit ; and some that, like the winter-nelis, have been hard and uninviting until all the rest have had their season, get their glow and perfume long after the winter frost and snow have done their worst with the orchards. Beware of rash criticisms ; the rough stringent fruit you condemn may be an autumn or a winter pear, and that which you picked up beneath the same bough in August may have been only its worm-eaten windfalls."

Steady, persistent application is the best means, often the only means, of finding out if there be any prospect of the toiler being "a late pear." What said John Hunter ? "Is there one whom difficulties dishearten, who bends to the storm ? He will do little. Is there one who *will* conquer ? That kind of a man never fails." The story of Richard Arkwright, the cotton spinner, is a most instructive one. He never went to school, and was apprenticed to a barber and wig-maker. Wig-making went out of fashion, and shaving alone was a poor affair. But Arkwright, while he shaved, toiled away at the idea of a spinning machine until he was in great poverty. Nevertheless he held on to his idea, and turned his mind to clock-making. At last he got the invention patented, and after unending toil he perfected it ; only to find the mob rise against him as the inventor of a labour-saving machine. Then the manufacturer turned against him, and would not buy his machines ; after that using his invention, but refusing to pay the patent-right. Nevertheless Arkwright persevered, and beat every combination against

him. At fifty years of age he studied the English grammar in order to speak more correctly ; became high sheriff for Derbyshire, and was knighted before he died. Nothing could stop him ; but the difficulties he had to surmount would have been too great, too numerous, for a man of less resolute will.

Men who have made their mark in the world are the men who never spared themselves ; who have not only formed grand schemes, but who have laboured at details. An error in a detail may at some time of emergency be fatal to a grand scheme. Watch a young Prussian subaltern drilling a few men. He gives his whole mind to it. He is fully imbued with the consciousness that upon him and his handful of men at some critical moment great issues may depend. He knows the difference betwixt doing his work in a perfunctory manner, and giving his mind to it—going into it heart and soul. “We cannot leap from our shadow” ; and if he and his men habitually did their work in a careless, half-hearted way, the day might come when in an important emergency they might be on out-post duty, and their habitual remissness might then be fatal to them ; and, what is more, to their comrades whose safety lies in their diligence. The habit of doing everything thoroughly is one well worth acquiring. “If a thing is worth doing at all, it is worth doing well !”

As a man succeeds in life he finds out his powers, if properly cultivated, which expand to meet the growing demands upon him. He finds himself readier of resource to meet a difficulty, readier to decide in an emergency ; in fact the fitter for his training to play a more conspicuous part in life's drama. His natural character becomes strengthened as it matures ; and he is conscious of this waxing power. Having learned how to command himself, he is fit to command others ; and not only that, but to set an example, which we know is “greater than precept.” When he can point to himself as an example of well-won success, his precept will have tenfold weight. The advice of an unsuccessful man is rarely of much worth ; for how can he communicate a secret to others which he has never found out for himself ? Self-culture is its own reward, not only as the realization of success in life, but also as to the inward self-communion.

In reading about well-known men one interesting matter is their “self-help,” their own education, and the evolution of their volitional dynamics, or will-power. It is curious to review the female influences to which they have been

subjected, or to which they have chosen to submit themselves. The mother's influence and character seem to have been strong in Cromwell, Napoleon, and George Washington; while the wife's influence with Cromwell and Washington does not seem to have been marked, though in Napoleon it was pre-eminent. Cromwell told his wife after Dunbar, "Thou art dearer to me than any creature; let that suffice." And from the context, it would seem, Mrs. Cromwell repined somewhat at his cool attitude toward her; though his solicitude for the "two little wenches," his young daughters, testifies to the fact that his home-ties lay near his heart. In both the cases of Washington and Cromwell the mother saw the Divine guidance in her son's success.

However far the woman a man proposes or aspires to marry will be likely to influence him for good, or evil, is not usually a factor in the volitional dynamics of love and courtship. It is a matter about which no rules, however broad, can be laid down. It is, of course, perfectly obvious that a wife should be a person of such principle that her influence with her husband will be for good rather than for evil. But, unless it be in that exceptional case of the courtship of "the old bachelor's wife," the suitor is more engaged in seeing how he can win the lady, than in speculating what her influence upon him will be after he is her husband; while, on the other hand, it is to be feared women, especially young ones, are inclined to test their influence rather in seeing how quickly they can put their swain out, than in seeing how they can make the most of him. How few men in courtship have taken the line of Felix Holt, who when gazing on Esther Lyon said, "I wonder whether the subtle measuring of forces will ever come to measuring the forces there would be in one beautiful woman whose mind was as noble as her face was beautiful, who made a man's passion for her rush in one current with all the great aims of his life!" To which keen-witted lovable Esther made answer, "It is difficult for a woman ever to try to be anything good when she is not believed in, when it is always supposed that she must be contemptible." But then I know men, and women too, who speak disrespectfully of Felix, and call him a prig. Whether these persons will look, or ever did look, on courtship from Felix's point of view may be questioned. Yet it would possibly be well for the world at large, as well as those immediately concerned, if this matter were oftener inwardly digested. The outline of the profile, the angles of the mouth, the lustre of the eye, nay even the turn of the ankle, to say nothing of her fortune,

will weigh with most men more than the subtlest of mental dynamics.

Then there lies beyond all the question of the relations of the will, that the possibility of some reserve of will, *i.e.*, that at times of great emergency, a man can call out reserve will power, as a general calls out his reserves in battle. "It is related of Muley Moluc, the Moorish leader, that, when lying ill, almost worn out by an incurable disease, a battle took place between his troops and the Portuguese, when starting from his litter at the great crisis of the fight, he rallied his army, led them to victory, and then instantly sank exhausted and expired." His remaining strength was called out and expended in one final effort. A story still more to the point was recently told by an eminent physician. One day he was asked by a man, whose exploits in his own line are known all over the world, "Doctor, what is will?" The physician declined to commit himself to any definition. The inquirer went on, "One day I signed an agreement to wheel a barrow along a rope on a given day. A day or two before I was seized with lumbago. I called in my medical man, and told him I must be cured by a certain day; not only because I should lose what I hoped to earn, but also forfeit a large sum. I got no better, and the evening before the day of the exploit, he argued against my thinking of carrying out my agreement. Next morning I was no better, the doctor forbade my getting up. I told him, "What do I want with your advice? If you cannot cure me, of what good is your advice?" When I got to the place there was the doctor, protesting I was unfit for the exploit. I went on, though I felt like a frog with my back. I got ready with my pole and my barrow, took hold of the handles, and wheeled it along the rope as well as ever I did. When I got to the end I wheeled it back again, and when this was done, I was a frog again. What made me that I could wheel the barrow?" "It was my reserve will!" This is the story, bald and uninteresting compared to what it was when told in the Frenchman's imperfect English, exquisitely imitated; but the moral remains, "It was my reserve will."

How many of us possess some reserve-will for emergencies which only reveals itself when the emergency has been encountered successfully, and then the individual exclaims, "I don't know however I did it. But I did!"—*Will power.*

OUR nobleness of soul consists in steady love of what is good, steady scorn of that which is evil.

“PHRENOLOGY AS NOW TAUGHT A DELUSION.”

GREY MATTER THE THINKING PORTION.

H., M.D., makes a very important admission in favour of Phrenology, and until it can be disproved Phrenology will hold its own. The admission is:

“The outside or grey matter is the thinking portion, and also presides over the movements of the body.”

Could he have proved that the grey matter is not the thinking portion of the brain, and that it is the white or interior matter that does our thinking for us, he would have been able to build up a substantial evidence against Phrenology, for then he could have clearly proved that the thinking portion did not immediately influence the skull. But he has been straining with impossibilities all through his article, and here, one of his strongest arguments raised against Phrenology actually stands in favour of it. It is one of the crux upon which Phrenology is based; disbelieve that and there is little left to support the theory that the thinking portion or exterior of the brain gives to the exterior of the skull its general shape. Phrenologists and physiologists are well aware that the brain presides over the movements of the body, though H., M.D., seems to think he is doing the public a great service by informing his readers of the fact. Because we cannot see and handle the “pleatings” of the brain, we are told that Phrenology is a lie, and therefore unreliable. For a doctor to follow that theory right through the nervous system and tell his patient to take out his lungs for examination, as he cannot judge from the exterior what the interior is like, would soon cause him to close his medical career. Phrenologists cannot ask their clients to allow them to just trephine their skull before delineating on their developments. Every day, however, physicians are diagnosing the diseases of the brain and body from external indications, yet H., M.D., would hardly care to be called into question on his diagnosis, because he was unable to dissect a living person.

DEPTH OF GREY MATTER.

H., M.D., has come over to the phrenological side again when he says,

“Of course the more pleating there is, the more grey matter there must be.”

He thought it well not to contradict this anatomical fact or he would have led the whole of the insect world combatting his false conclusions. He knows, or I suppose he knows, that a person with a comparatively small head, but possessing a good supply of grey matter, is better able to make use of his brain than a person with a large head and a moderate quantity of grey matter. Now, by dissecting brains after death, we can prove through the animal world that the more convoluted the brain substance, the greater the

intelligence, therefore we are not surprised that some of the little creatures of the earth outstrip some of the larger animals who possess smooth-surfaced brains. H., M.D., now asks how are you to tell the amount of grey matter in the brain? As he is a physician he ought to know. But then, even physicians cannot know everything, so perhaps his ignorance is pardonable. To answer this question, brings us to the third admission, of one who has done his best to hound from our midst and bury the subject that is so distasteful to him. Instead of doing so we find that he has given Phrenology another lift by the following remarks on

QUALITY.

"Now take two heads of exactly the same size and shape, or as nearly as possibly so, not only does it depend on the amount of grey matter, but on its quality."

As a medical man H., M.D., knows very well that in giving medicines to his patients he takes into account the quality of each individual. To the finely organized he would not give the same quantity or strength as to the coarsely organized. Yet he asks,

"How on earth can you judge of the quality of a man's brain from his bumps or appearance?"

I will also ask him how he judges of the quality of anything in Nature? Fruits have their quality; flowers have their quality; animals have their degrees of quality, and the human animal—man—undisputably has indications of the quality of his internal material, through his external appearance; otherwise, why has one man fine and another coarse hair? Why has one man fine and another coarse skin, and texture of organization? Why has one man fine and another coarse and irregular features? It is going against the law of Nature to expect her to present a fine quality on the exterior, while possessing a coarse quality interiorly, and *vice versâ*.

(To be continued.)

J. A. F.

ST. LEONARD'S CHURCH, HYTHE.

THIS curious old church possesses rather a wonderful history. In all probability it now stands where an ancient abbey once decorated the hill-side of the pretty, sequestered sea-side town—originally one of the Cinque Ports. The architecture is of early English, which is particularly noticeable in its clustered shafts, and the richly-moulded recesses of the arch. The crypt is finely proportioned; the arches, which are pointed, rest upon the massive pillars with capitals of Bethersden marble. It was when the present vicar was restoring the chancel that the workmen found a hidden doorway in good preservation. Under the high altar is

where the human remains are deposited, and on either side as you enter you see some six hundred skulls arranged on ledges; while, arranged in a pile some twenty-five feet in length, eight feet high, six and a half feet thick, are the bones of many hundreds of people. It is estimated that there are altogether nearly 7,000 people represented. By what means they were brought to this place the people are not quite sure. It is thought that many of them were Frenchmen killed in an engagement at Hythe, A.D. 1295, and that continual additions were made to the collection, until they increased to so vast a number. Another account supposes they are the remains of the Britons slain in a battle fought between this place and Folkestone, with the retreating Saxons, in the year 456, and to have attained their whiteness by lying for some length of time exposed on the sea-shore. Several of the skulls have deep cuts in them, as if made by some heavy weapon, most likely of the Saxons. The bones seem mostly of the extremities that are arranged with the skulls. There were a small number of children's, but only a few, the remainder belonging to male adults. There seemed to be no feminine skulls, at least as far as I examined them. The teeth were noticeable for their soundness and regularity, which was one indication of their age. The wormian bones of some were very distinct, so was the spheno-parietal suture; in No. 3, the wormian bones, in the sagittal and coronal sutures, were very distinct. In No. 12 the frontal bone was divided by the sagittal. In No. 14 there is a strong development of Firmness and Secretiveness. In No. 15 there is a very deep or indented sagittal suture between the organs of Conscientiousness and Approbateness. No. 17 was probably an officer; he was very large in Self-Esteem (7 in. from opening of ear). The ancient Celtic Britons gave the appearance of rounded skulls. The Saxons, the elongated or bordering on the dolichocephalic skulls; while the Romans were notably square shaped, or bordering on the brachycephalic skulls. Robert Knox, M.D., F.E.S.M., Mr. Walker, the distinguished anatomist, and Dr. B. W. Richardson, M.D., F.R.S., have examined the skulls from time to time. Mr. Knox considers they are in too good a condition to be merely church-yard bones collected at different times, as there would have been numbers in a state of decay, and further that there would have been more women's and children's skulls among them. It is also thought that the few skulls of the Laps belonged to men who came over with the Saxons; while the Roman skulls must have belonged to those of some Romans who lingered in the

neighbourhood of Castrum at Lymport. We attach a table of measurements which, if they afford our readers one half the pleasure they gave to take, will amply repay the time spent over them, and the great kindness of the Vicar, Rev. T. G. Hall, M.A., for allowing our party the privilege of examining them.

SKULL.		Circumference.	From Ear to Ear.	From Ear to Ben- evolence. PostFrontal Bone. Coronal Suture.	From Ear to Indi- viduality. Anterior Frontal Bone.	From Ear to Self- Esteem or Crown.	From Indi- viduality to Oc- cipital Spine.	From Ear to Occi- put.
Saxon (elongated head) ..	1	20	$13\frac{1}{4}$	$6\frac{1}{2}$	6		11	$5\frac{1}{2}$
„	2	$21\frac{1}{4}$	$14\frac{1}{2}$	7	6	7	13	$4\frac{3}{4}$
„ (child's)	3	$19\frac{1}{2}$	$12\frac{1}{2}$	6	$5\frac{1}{4}$	6	$12\frac{3}{4}$	$5\frac{1}{2}$
Ancient Briton (round head) ...	4	$19\frac{1}{4}$	13	6	$5\frac{1}{8}$		12	$4\frac{1}{2}$
„ „ ...	5	$19\frac{1}{2}$	13	$6\frac{1}{4}$	$5\frac{1}{2}$		$12\frac{1}{2}$	$4\frac{1}{2}$
„ „ ...	6	$19\frac{5}{8}$	$12\frac{1}{4}$	6	$5\frac{1}{4}$	6	12	$4\frac{1}{2}$
„ „ ...	7	$19\frac{1}{2}$	$12\frac{1}{4}$	$5\frac{3}{4}$	$5\frac{3}{8}$	$6\frac{3}{8}$	$11\frac{3}{4}$	$4\frac{1}{2}$
Lap or Danish ...	8	$20\frac{1}{2}$	$12\frac{1}{4}$	$6\frac{1}{8}$	$5\frac{1}{4}$	6	$11\frac{3}{4}$	5
„ „ ...	9	$21\frac{1}{4}$	14	$6\frac{1}{2}$	$5\frac{1}{2}$	7	13	$4\frac{3}{4}$
„ „ ...	10	$21\frac{1}{2}$	$13\frac{3}{4}$	$6\frac{1}{2}$		7	$12\frac{1}{2}$	$5\frac{1}{4}$
Roman (square head) ...	11	$21\frac{1}{2}$	14	$6\frac{1}{2}$		$6\frac{3}{4}$	$12\frac{1}{4}$	$5\frac{1}{4}$
„	12	$20\frac{3}{4}$	$13\frac{3}{4}$	$6\frac{1}{2}$	$5\frac{1}{2}$	7	$12\frac{1}{2}$	$4\frac{1}{2}$
Celtic	13	$21\frac{3}{8}$	14	7	6	$6\frac{1}{2}$	$12\frac{3}{4}$	$4\frac{1}{4}$
„	14	$20\frac{3}{4}$	$14\frac{1}{8}$	7	6	7	$13\frac{1}{4}$	$4\frac{1}{2}$
„	15	$20\frac{1}{2}$	$14\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{2}$	$6\frac{1}{2}$	$12\frac{1}{2}$	$4\frac{1}{2}$
„	16	$20\frac{3}{8}$	$13\frac{1}{4}$	$6\frac{1}{4}$	$5\frac{1}{2}$	7	$12\frac{1}{4}$	$4\frac{1}{2}$
„	17	$20\frac{1}{2}$	$13\frac{3}{4}$	$6\frac{1}{4}$	5	7	13	5
„ (child's) ...	18	20	13	6	5	$6\frac{3}{4}$	no Oc.bone	no Oc.bone
„	19	$20\frac{1}{2}$	13	6	$5\frac{1}{2}$	$6\frac{7}{8}$	$11\frac{3}{4}$	5

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., SEPTEMBER, 1893.

THE ABORIGINES OF JAPAN. THE Ainus, or aborigines, inhabiting northern districts of Japan, are a curious race. Their customs as regards burial are very singular. The Ainus have no cemeteries. Each person chooses a spot for the body of his relative, and they generally bury far away in the mountains. Formerly it was the chief's duty to seek out a burying-place and to attend to the funeral. The people keep their graves as secret as possible, being, like the members of many other barbarous

ances, much afraid of the ghosts of the dead. They visit the graves only upon exceedingly rare occasions, or under very great pressure. Thus Ainu places of burial are very soon forgotten, and the graves quickly become quite indistinguishable from the forest around them. Whenever the Ainu finds it necessary to speak of death and burial, as of course it sometimes must be, they talk with a hushed voice, and use a figurative and roundabout phraseology. Thus death is called "sleeping," "overcome with deep sleep," "resting," "leaving the world behind," "going," "gone away," "is not." Even a person's name is to be forgotten when death overtakes him.

THINKING OF
MANY THINGS
AT ONCE. WHAT I would like would be a device to help me to forget things. If a man could absolutely forget all about his business when he locks the office door at night, his hair would not grow grey nearly so soon. The secret of the continued activity of such men as Chauncey, Depew and Mr. Gladstone, who always seem able to talk about everything and anything at a minute's notice, and who have forgotten what it is to be tired, is their ability to forget everything except the one subject on hand. The little school child rhyme about "one thing at a time and that done well," applies to mental as well as physical labour.

No reasonable man ever attempts to do two physical acts at one time, but nearly everybody tries to think of several things at once. If some philosopher would arise and tell us how to school the brain the same as we regulate the muscles of our hands and legs, he would prove a benefactor to his race and be the means of causing a large number of vacancies in insane asylums and homes for people who are called weak-minded, but who half the time are simply worked to death by trying to do several things at once.

HEREDITY. MISS OGILVIE, the lady Doctor of Science, comes of a family that has made a remarkable figure in the educational world of Scotland. At the present moment there are four, if not five Ogilives, all of them brothers, who occupy prominent positions as educationalists. They are the products of the wonderfully democratic university system of which Scotland is the proud possessor, for they started life in a Banffshire crofter's humble home, and gained the envied bursaries which entitled them to an academic training.

Miss Ogilvie's father is the rector of Gordon's College, Aberdeen—one of the largest and most successful secondary schools in Scotland. Another brother is one of Her Majesty's inspectors of schools for Scotland. A third, Dr. Joseph Ogilvie, has just been appointed the first Education Lecturer in his *alma mater*, Aberdeen University, after a very successful career as Rector of the Church of Scotland Training College for Teachers in Aberdeen. A fourth brother is head master of George Watson's College, Edinburgh, while Miss Ogilvie's own brother is principal of the Heriot-Watt College in the Scotch capital.

All the brothers are out and out Scots, speaking with the broad accent of their native Doric. Their success, perhaps, lies in their skill as administrators of large educational establishments, rather than in pure scholarship. All, or nearly all, of them are licentiates of the Church of Scotland, though they have never adorned the pulpits of the "Kirk."

Fowler Institute.

MEMBERS' NOTES.

*"Let us be content in work,
To do the thing we can, and not presume
To fret because it's little."*

SATURDAY, July the 22nd, was a day that will be remembered by many of the members of the Fowler Institute for a long time to come. The Annual Excursion was arranged for Hythe this year, and a more perfect day could scarcely have been selected even had we been able to choose for ourselves. Leaving Cannon Street Station at 8 a.m., we were soon passing through the picturesque scenery for which Kent is so well known, and by 10.30 we were looking on the beauties of the sea under the brilliant rays of the sun. Within a quarter of an hour's walk from Hythe Railway Station is an old Church, and attached to it a Crypt containing the bones of about 7,000 people, which were supposed to have been gathered from an ancient battle field. This being the principal reason for our visiting Hythe, it was previously arranged we should stay if we liked for a couple of hours, and by the kind permission of the Vicar, the Rev. T. G. Hall, we were allowed to handle the relics and make observations thereon. Here we spent a most useful and enjoyable time, short descriptions being given by two or three of the party of the various skulls. Some curious prominences—Veneration, Cautiousness and Combativeness—being particularly noticed. Some skulls bear the marks of instruments of battle. After leaving the Crypt we visited the church, and then strolled along the beautiful

Parade to Folkestone, a distance of some five miles, having the sea on the right, and the fields, hills and cliffs on the left. Passing through Sandgate our attention was drawn to the site of the recent landslip, some of the houses being entirely shattered. Arriving at Folkestone we were conducted by our guides to the Temperance Hotel, where we partook of an excellent dinner, the tables being prettily decorated with plants and flowers. After a short rest the party again set out for the harbour, sea front, and other places of attraction and interest, and re-assembled at the hotel at 6 o'clock for tea, which meal was highly appreciated, the sea air having sharpened our appetites. At seven, several of our party availed themselves of the car and omnibus running to Hythe, while the others again enjoyed a walk by the sea in the cool breezes of a lovely summer evening. Few of us, will, I think, regret the effort we made to be present, for seldom does an excursion of this kind pass off with so much pleasure, and without mishap. Leaving Hythe by the 7.25 train we had a pleasant journey to town, and thus ended a very happy experience. Our thanks are due to Messrs. M. H. Piercy and G. Lewis Lepage for the excellent arrangements made for the day's pleasure.

* * *

MR. SMITH sends the following incident as an example of the power a man can exercise over his fellows when possessing the faculties mentioned, and illustrating the faculties in action :—"A doctor of my acquaintance is conspicuous for his large organs of Adhesiveness, Approbativeness, Mirthfulness, Benevolence, and Agreeableness, and I have noticed that the power he exerts over people seems almost mesmeric. No matter who makes his acquaintance they quickly like him, and he makes friends wherever he goes, being one of the most entertaining people I have ever had the pleasure of knowing. On one occasion, while crossing to Queensland, the steamer had on board a great number of Irish emigrants, who for some reason or other became discontented and threatened mutiny. The captain, unable to pacify them, expected every moment to be overpowered by their superior numbers and possibly killed. At this crisis the doctor went among them, and by his kind, genial manner succeeded in restoring order where authority and threats had failed."

We should be glad to hear further from Mr. Smith regarding the influence one possessing special faculties is able to exert; such experiences ought to influence us to study Phrenology and spur us on to further self-culture.

* * *

THE wonderful experiment by Prof. Baron Krafft Ebing, sent to us by Mr. Coleman, is one that will arrest the interest of those studying hypnotism; and if the art can thus be successfully practised, it may become of great use where the memory in its normal state fails, although to some minds the past is a time they prefer to keep buried. Great interest has been aroused at Vienna by some remarkable experiments in hypnotism and suggestion, which Professor Baron Krafft Ebing has carried out before a meeting of psychological experts. The

object was to show that it is possible, by hypnotic suggestion, to transfer persons into a former period of their lives, their mental conditions at the same time undergoing a corresponding change, and that while in this state nothing is lost to their memories which cannot by suitable influence be recalled. The subject of the experiment was a woman of 33 years of age. Baron Krafft Ebing hypnotised her and transferred her successively back to the ages of 7, 15 and 19, restoring her after each experiment to her normal condition. In every case she behaved, spoke, and wrote in a way corresponding to the age which she imagined herself to be. It may be added that the experiments were received by the other doctors with much scepticism.

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MR. EUGENE GARRIE has kindly sent the three following interesting items :—A remarkable case of gunshot wound of the brain has just been under the care of a surgeon. The patient fired two bullets from a revolver into his head above the temple on the left side. He did not become unconscious until the next day, and when the serious symptoms commenced convulsive movements began on the right side, which ended in that side becoming completely paralysed. On the third day after receiving the injury it was decided to attempt some operative interference with a view to affording relief, and the skull over the seat of the injury was trephined. The bullets were found lying upon the surface of the brain over that portion which is technically known as the third frontal convolution, on the left side. They were at once removed, as well as several large blood-clots, together with that part of the brain substance which was seen to have been severely injured. The wound was plugged with antiseptic dressings, and the patient taken back to bed. Three days after the operation good progress to recovery was being made ; the paralytic symptoms had quite disappeared, as well as all those which had before been noticed. Ultimately the man left the hospital quite well.

It seems a pity our present day doctors are not more willing to study the science of mind than they are, and to practise cranial surgery in many cases of lunacy caused by pressure on the brain.

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DR. W. A. HAMMOND, retired Surgeon-General of the United States Army, relates an extraordinary case in evidence of the fallacy of the popular notion that it is impossible to survive very serious injury to the brain. A strong, healthy man, 25 years of age, was engaged in ramming down a charge of powder in a rock to be blasted, when an explosion took place, and the tamping iron was driven through his head from the base of his skull to the vertex. In a few minutes he recovered his consciousness, was put into a cart, and carried three-quarters of a mile to his residence, where he got out and walked into the house. Two hours afterwards he was seen by a physician ; he was then quite conscious and collected in his mind, but exhausted by an extensive hemorrhage from the hole in the top of his head. But the wound finally closed up, and his recovery was complete. He lived, (adds Dr. Hammond) twelve and a half years after the accident, and

his cranium, with the bar that went through it, are now in the Warren Anatomical Museum at Boston.

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A SUCCESSFUL case of operation on the spine for fracture has just been recorded by a French surgeon. A man received an injury to the back caused by a weight of 200 pounds falling on him. When seen by the surgeon there was a well-marked depression corresponding to the position of the twelfth dorsal vertebra, and in addition complete paralysis of the legs, as well as loss of sensation on both up to the knee. The operation of trephining the vertebral column was performed on the fourth day after the accident. Without much difficulty the lesion was reached, and this proved to be a fracture of the spine. The spinal cord was compressed by fragments of bone. The loose pieces of the latter were removed and the wound dressed, with antiseptic precautions. In three weeks' time the parts had all firmly united, and the right leg had recovered its power. Ultimately the patient completely regained the use of his legs, and the power of sensation was gradually returning in each.

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THE next Members' Meeting will be held on Monday, September 18th, when the Autumn Session will be commenced with a paper by Miss Dexter, F.F.I., on "Harmony." The meeting will begin at 7.30 as usual, and it is hoped members will make a special effort to be present on that evening.

E. CROW.

Hygienic and Home Department.

EDUCATION OF CHILDREN.

BY BELLE BUSH.

It is a sad thing, a very sad thing, to hear a little child say, "My mother never kisses me, I don't believe she loves me, and I don't much care what I do, or what becomes of me." Yet I have heard many a child say this. Now if childhood was properly appreciated we would not see such blighted buds on the tree of life. Children are like rosebuds, they cannot thrive well without proper nourishment. They need the genial sunlight of encouragement, the refreshing dews of sympathy, and the warm breath of love to make them unfold into the perfect beauty of the flower. Folded within each baby breast are aspirations, emotions, thoughts, feelings, and passions which, like the closed petals of a rose, should be allowed to unfold naturally. As the infant form grows into prattling childhood, the eager questionings of its young soul should be responded to patiently and truthfully ; not teased

and worried, or deceived by false answers till it becomes afraid to ask questions and loses all faith in the replies given. There are some people who think it a smart thing to trick and deceive children, but let me tell them it is a very stupid act and one which no thoughtful person will ever attempt. Remember this, you who are parents and teachers, and bear in mind also that the conduct of children under your care, is to a great extent what you make it by the force of your example ; and in the faults you discover in them, you may see your own errors come home to rebuke you. Be gentle with them when they do wrong, and before chiding them, examine yourself and see if there has not been something in your own conduct which led to the wrong in theirs. Have you discovered that your little daughter has told you a falsehood, or your son been guilty of using profane language ? Don't rebuke them in anger, don't tell them you do not love them any more, or that God is angry with them ; don't shut them up in a dark closet, or send them away from you to remain till they can promise to be good, for oh ! if there is ever a time when children need the blessing of the purest love to guide them, it is when they have done a great wrong and feel the reproaches of a guilty conscience, for then it is that a word will harden or subdue them. Oh ! then speak kindly to the little ones, let your love and sympathy draw them closer to your heart and away from the dark influences which lead them astray. But never under any circumstances refuse to smile on a child or deny it a kiss because it has done wrong, for there is vindictiveness manifested in that mode of treating it that will teach the child to be vindictive also. Above all, I beseech you, never allow your children to witness any scenes of discord at home. Parents who wrangle with each other in the presence of their little ones, will teach them to quarrel with one another. And what a sad picture to set before childish eyes a home full of discord ! What wonder that those who are brought up in such scenes should carry discord with them out into the world ! Give children beautiful, sunny homes and they will have happy hearts in which peace and love dwell, shutting out the evil and calling to them the good influences which dwell all about us, and which will surely come to us if conditions are favorable.

THE OLD HEN WENT TOO.

THE excuses which are given by children in order to escape from some distasteful duty are often exceedingly ingenious and even witty. Johnny was afraid of the dark. His mother was trying to induce him to go to bed without her accom-

panying him. Johnny was averse to this. The boy was the owner of a little bantam hen and 13 chickens, so his mother used these as a sort of argument to convince him of his folly in being afraid of the dark.

“Why, Johnny, just think of your chickens, how bravely they go off to bed every night without a thought of the dark, and you, a great big boy, are afraid to go upstairs alone.”

Johnny was silent for a moment and then said :

“But, mamma, don’t you see the reason that the chickens are willing to go to bed in the dark is because the old hen goes with ’em, and so I think you ought to go with me.”

A PALPABLE HIT.

FATHER—Why can’t you be as good a boy as little Arthur Arthurson ?

Small Son—I don’t know, but I’ve heard folks say that Arthur Arthurson comes of very good old stock.

Notes and News of the Month.

TRADES AND PROFESSIONS.

THE National Workman’s Exhibition, which has been held at the Agricultural Hall, was well worth a visit from people even less interested in national industries than phrenologists, but for them it had a peculiar charm and benefit. Although a phrenologist is supposed to know all the intricacies of trade, still practical demonstration is worth more than all the knowledge obtained from books on the subject. For instance, Phrenology must be put to so fine a point that it can not only tell a man he is adapted to brass work, but what is more important, it must tell him what kind of brass work. Phrenologists must not be content to recognise only brass finishers, or brass designers, but brass dippers, brass burnishers, brass moulders, brass polishers, brass chasers, brass spinners and brass engravers.

Now, what applies to brass work, applies equally well to other, and nearly every other, kind of trade and profession. Take, for instance, music. Every person cannot sing or play equally well, even with the same amount of the organ of Tune, and phrenologists know that quality of organisation, Ideality, Time, Weight, Comparison and Benevolence, are greatly needed to give *finesse* to a musical artist. But besides these combinations, we have others bearing on the mechanical side of music—a side of great importance,—an instrument maker, pianoforte maker, violin maker, cornet and flute makers, drum and banjo makers among others. Constructiveness joined to Weight, and a peculiarly sensitive power or development of Tune, are all necessary to produce the desired quality of musical instruments.

It is not enough to tell a man to put his boy to an ingenious or mechanical trade, but it must be indicated for what kind of, or department in, the mechanical work the lad is best fitted. When a phrenologist recollects there are wood carvers, pattern makers, joiners, cabinet makers, carriage builders, piano makers, wheelwrights, machinists, jewellers, and workers in wood and metals, the work of diagnosing an occupation becomes a very fine point in his education, and one which he should be equally able to give judgment upon.

The Exhibition was planned with skill, and afforded an easy examination of all the machinery. The dynamos were particularly interesting, also Edison's and Swan's minute lighting apparatus.

MEMBERS of the Institute will find a list of engagements for the month at the end of the Magazine.

THE Editor thanks J.M.G., Winchester, for his encouraging letter and appreciation of the Magazine.

STUDENTS intending joining the Advanced Phrenological Class at the Fowler Institute will kindly note that the class commences September 25th, at 7 p.m.

THERE is an abundance of interesting work to be done for Phrenology by all who are interested in the subject during the coming season, by lectures, classes, discussions, social and practical evenings.

DRAWING-ROOM meetings will be held in different localities of London. Ladies wishing to introduce the subjects of Health and Phrenology to their friends, can obtain all particulars from the Secretary, Imperial Buildings, Ludgate Circus, E.C.

WE have received several letters from some who are interested in Phrenology, expressing their regret at the custom prevalent at this time of year, of persons with inferior capabilities as Phrenologists frequenting the sands and other places, calling themselves "Doctors" or "Professors," and giving lectures, &c., in such a manner as to expose their ignorance to the initiated, at least, if not to all, as is proved by the falling off in numbers of the intellectual part of the audience at each succeeding lecture when given in a hall. The Science of Phrenology is not advanced, but rather brought into dispute by these proceedings.

We thoroughly appreciate the sentiment which our correspondents have expressed, and trust the time will soon come when the wheat will be separated from the chaff.

SEASIDE AND MOUNTAINOUS RESORTS.—Speaking generally and without regard to exceptional cases, sea air is moist whilst mountain air is dry ; sea air is heavy whilst mountain air is light ; sea air is equable whilst mountain air is subject to sudden oscillations of temperature. Humidity is one of the most constant and characteristic features of

sea air ; at sea the difference between the wet and dry bulb is usually from 2° to 4°. On the other hand mountain air at the elevation at which it has been most carefully studied from 4,000 feet to 6,000 feet is very dry, and in the absence of fog, may be as dry as the air of the desert. Both the seaside and mountainous districts are noted for their purity of ozone. People should study which is calculated to suit them the best. A phrenologist can help them in this decision.

A FEW DEFINITIONS.—The poet Tennyson could take a worthless sheet of paper, and by writing a poem on it, make it worth thirteen thousand pounds. That's genius. Rothschild can write a few words on a sheet of paper and make it worth a million pounds. That's capital. Great Britain can take 123 grains of gold and stamp the Queen's head upon it, and make it worth a sovereign. That's money. The mechanic can take the material worth a pound and make it into a watch worth twenty pounds. That's skill. The merchant can take an article worth ninepence and sell it for five shillings. That's business. The navvy works 10 hours a day and shovels three or four tons of earth for four shillings. That's labour.

PHRENOLOGY IN PARLIAMENT. — An interesting discussion took place last month in the House of Commons on the Education vote of £3,894,718 to complete the sum for public education in England and Wales. Mr. Acland, Minister of Education, said he believed there was no sum of money on the Estimates which every member of the House had more pleasure in seeing voted. There had been a steady improvement going on in the quality of education in this country. It was less mechanical, and more intelligible. If there was one thing which had tended more than another to bring about this result, it was the code of his right hon. friend (Sir W. Hart-Dyke) introduced in 1890, and which presented enormous advantages as compared with the code which preceded it. The great object before them was not merely knowledge, but character—(hear, hear)—but what they had to consider was how far they were really *drawing out* and *training* the *best faculties* of the children. (This is a move in the right direction, and from the right person.—ED. P.M.)

MISS CHARLOTTE M. YONGE, the *doyenne* of our lady novelists, has just attained her 70th birthday. In view of this interesting event an interview with this gifted writer, in the *Lady*, had a peculiar timeliness. Miss Yonge, though part editor of the *Newbery House Magazine*, has not visited London lately, but lives at Otterburne, and she gives the reporter her reason. "I am afraid of London," she says ; "it is too big, too noisy, and too grand. Besides, it is disillusionary, and the conjurations of the most fertile brain would be dispelled by London surroundings. We pity those devotees to bricks and mortar who work out their days in the great city. The vast city, with its millions of struggling people, all competitors in the race for wealth, is

the work of man, but the country, with its simplicity of nature, its mantle of perpetual foliage and unvitiated atmosphere, that is the work of God, and I am a child of God." Here is a short account of her daily life:—"She rises at eight every morning with a punctuality that would do credit to any chronometer in the world. After a light and hasty breakfast, she works until half-past one, when she takes luncheon. After luncheon she walks in the garden for half an hour, returning to her writing desk at two, where she remains until six. Dinner over, she listens to music or reads for an hour, and then resumes work until ten o'clock. Shortly after that hour she retires for the night, to recommence the daily routine next morning at eight. She is of very temperate habits, and lives most plainly, the flavour of wine being unknown to her."

Correspondence.

THE OPEN COURT.

To the Editor of "THE PHRENOLOGICAL MAGAZINE."

DEAR SIR,—You ask for replies to four questions propounded by you.

I think you will get matter in answer to your questions, from pens much abler than mine. Still I feel in duty bound to say something on question number three.

"What benefits have I derived from the examination of my children's heads?" Well Mr. Editor, to enumerate them particularly would take up more space than you can spare in your valuable magazine.

I must therefore generalise in order that good may result from my testimony.

First then, I am one of the happiest fathers in England. I have five children, the oldest between twenty-three and twenty-four, the youngest between fourteen and fifteen, and I can say that, so far as their life and conduct is concerned, I have never had an hour's real trouble since the first was born. Corporal punishment has never been known. Yet there is nothing feminine in the boys, nor is there anything masculine in the girls.

Second, the most absolute confidence exists between parents and children. The children know their parents as their best friends and trust them as such, never going outside their own home for advice.

Third. This has not been accomplished by bringing all to one dead level, but by getting to understand each other, and blending the different characteristics of each, like the notes in the musical scale, until there is developed one harmonious whole.

I am, dear sir,

Yours respectfully,

THOS. CLARK.

To the Editor.

DEAR SIR,—In a written phrenological character of myself by you (Nov., 1890), it reads as follows :—“ You could do as an artist, architect, or manufacturer of lighter kinds of machinery, or even as a chemist, where you can apply the qualities and uses of things.” Also as follows :—“ You gather knowledge very easily, are much interested in physical phenomena, you gather the news easily, are fond of experiments.”

It may be of interest to you to learn that during the present month I have gained a certificate of honour in Theoretical Chemistry and Physics. Apologizing for thus troubling you,

I remain, yours faithfully,

London, July.

G. S. J.

DEAR EDITOR,—Your article on “ Motives ” was quite a stimulation to me in giving a lecture recently.

Morecambe.

Yours truly,

J. W. TAYLOR.

Book Notice.

Self-esteem, an essay by John George Speed. Second edition. London : L. N. Fowler & Co., 7, Imperial Arcade, E.C. In this essay the writer urges a plea for the legitimate exercise of the faculty of Self-Esteem. Self-depreciation is not humility, neither is the consciousness of ability always conceit. A certain amount of confidence is favourable if not absolutely necessary to success in any undertaking. Man needs to have a full recognition of his own mental capabilities ; and to give him that practical effect which makes him serviceable to his fellowmen, he must show that he has confidence in those capabilities. The essay is well worth reading, its key-note being, “ Know thyself ”—that knowledge leading man to estimate himself at his true worth, and enabling him to take the place in the world he is fitted to fill.

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 photograph ; 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 6s., for twelve 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.]

IRENE (London).—This young lady has a strong hold on life. She

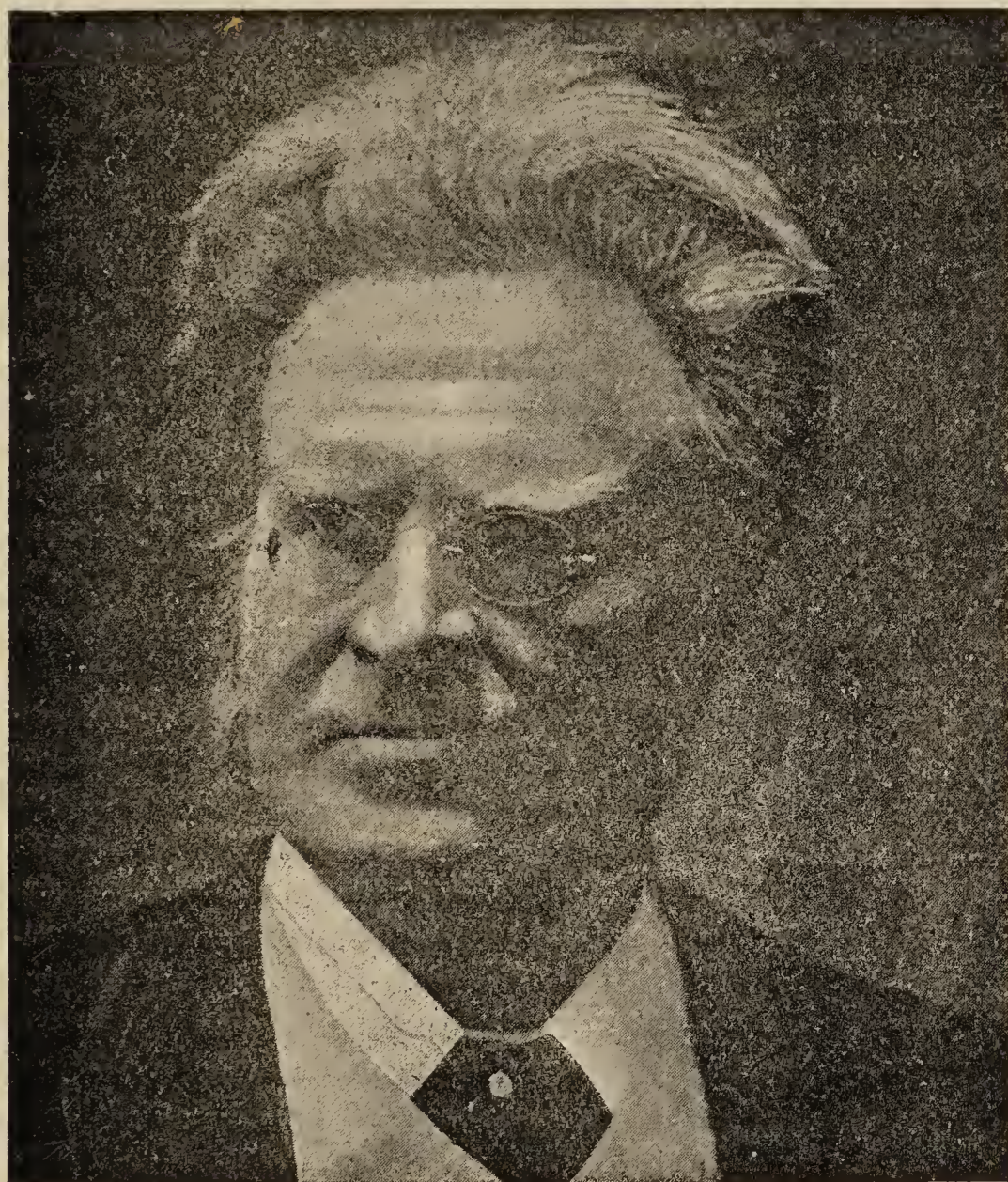
has a very distinct character, and is self-possessed in times of danger. She is orderly, practical, and far-seeing. Not over scrupulous, rather selfish, and would resort to selfish ends. She is rather jealous, very sensitive, and feels slights easily. She would know how to get out of a difficulty if things were going against her. She has a great desire to be loved ; can do with any amount of affection ; her love is not fickle, but she needs so much that it is varied and changeable. She feels slights when there are none intended. She is not sufficiently thoughtful, but quick to see and observe. Cautiousness is not large ; she has very little fear, and will do daring things which she may repent of afterwards. She says an impulsive thing and then regrets it. She will need to use all her moral courage to keep her from going against her better sense when inclined to please her friends. She is young in some things and old in others. When she talks she uses strong language, if excited. She has large weight, and could excel in out-door games. Flattery will influence her rather easily. When older will do courageous things ; she will be passionate, and must be under good control. She has foreign blood in her veins.

BELFAST.—You have favourable powers of body and mind. You are genial, social, and entertaining ; will make many friends and no enemies. You have a good degree of taste and imagination, and possess much suavity of manner. You are musical, and have artistic tendencies. Quite intuitive in the discernment of character and motives, and know how to present your ideas in a pleasing way. You had better be a musician, an educationalist, or a public man of some kind.

MARY E.—You are not to regulate yourself by the idea of good and bad bumps. You are good when you make yourself good and use your powers accordingly. You are bad and have bad bumps when you fail to use your powers to a good advantage. Your developments are not altogether even or uniform, but you have a superior faculty for acquiring knowledge and using it to a good advantage. You have great powers of observation, and can easily retain knowledge thus obtained. Can excel in almost any study that you choose to take up, and have the ability to teach. You should be a teacher or lecturer. You would waste yourself by staying at home and doing nothing in particular. You must always have an object in view, and live and labour to accomplish that object. You have superior conversational talent and excellent powers to entertain company. You would show considerable ability as a musician, and probably as a singer also. If the way opens for you, it would be well to devote yourself to music, either as a teacher or a performer. You should have no hesitancy in deciding what to do with such available gifts as you have ; if you fail, it will be from a want of patience and perseverance and not from a want of talent. Your powers are more intuitive than argumentative. You have more of the spiritual than philosophical brain. The right thing comes to your mind if you give yourself time to take it in. You need to encourage thought and originality. It is a good sign that “you have an uncommon mind.”

THE
Phrenological Magazine.

OCTOBER, 1893.



BJÖRNSTJERNE BJÖRNSEN, ESQ. (NORWEGIAN).

THIS gentleman appears to possess an unusually vigorous organization, capable of a remarkable amount of physical and mental action. There is general harmony between his body and his brain. His head shows uncommon abilities, and great comprehensiveness of mind. He is particularly observing, has superior judgment of practical things, and is remarkably quick to take in knowledge concerning the condition of things around him ; turns off work

with dispatch, and knows how to apply his knowledge with great directness and positiveness. He is a live man all over. He is never so content as when he is at work, and is especially in his element when he is pressed with more work than he can do without extra effort. He possesses an unusually well-balanced temperament; which enables him to use his mentality with more readiness—self-possession of ease than most men. He throws his whole soul into whatever he does, and impresses men generally with his individuality. There is no pretence about him, he walks straight into a subject, for he cannot beat around it; this trait is seen by the slight depression above Causality. He is first true to himself, and, as a natural sequence, he is true to all his neighbours. He is large-hearted, which is noticeable through the great height of his head in the region of Benevolence. His mind is not poisoned with prejudices. His delight is, probably, in doing good to those who do not come within the pale of organized charity. He can be rigid and strict in matters of duty and obligation, but generously forgiving when there is any sign of contrition. His moral brain is distinctly represented. He must have sound principle to guide him, however much he may differ from his friends. He has the capacities that fit him for a literary sphere, of an original, strong, and vigorous type. His penetration into character is deep and searching as well as sympathetic and kind. He combines nobleness and gentleness to a marvellous degree. He talks because he has something to say. He has more ideas than language, hence he does not easily exhaust himself. If he talked all the day he would not exhaust his subjects. He has a very analytical mind, is most apt in his comparison. He has also a full degree of imagination which enlarges his scope of mind. He must have a great amount of varied knowledge. His ideas are like steel chips. He is not a mere theorist, but a utilitarian thinker. He naturally takes rather broad views of men and things, of politics and religion, and all the relationships of life. He is quick to suggest new methods of work when they appear practical to his mind. He is full of dry humour and exerts a pleasing influence over others. He is very tenacious of his position when he has once taken it, and can be relied upon to carry out the plans he has commenced. He is not unconscious of the troubles and wants of others, in fact he makes them a part of himself. His character is all the stronger because his head is high. He is differential to others when he sees their superiority and mental worth, but he is not a man-worshipper. He is fond of illustrating his remarks,

and clenches his arguments with his own observations, and hits the nail square on the head, and does not fail to make a point clear before he leaves it. He would prefer to deal seriously with a subject, rather than to be light-minded and be obliged to simply entertain people. He delights in giving others the benefit of his experience and knowledge, yet he does not force himself upon anyone. The base of his brain is well represented, which gives him general force of character, animation, executiveness. His mentality is particularly adapted to write, speak, debate, to exert a definite influence in scientific, political, and social directions; for he has great versatility of talent, and unusual powers for mental contrivance, dexterity, and ingenuity. He may be too plain and direct to suit some minds, but his large Intuition makes him a master in understanding mind and the characteristics of people he meets. His powerful organization makes him a live man, one not afraid of action, or of holding distinctly individual opinions on matters and things. His ideas spring from a healthy source, and he exercises a healthy magnetism over others.

L. N. FOWLER.

THE BRAIN OF WOMEN.

A TALK WITH SIR J. CRICHTON BROWNE AND
DR. BÜCHNER.

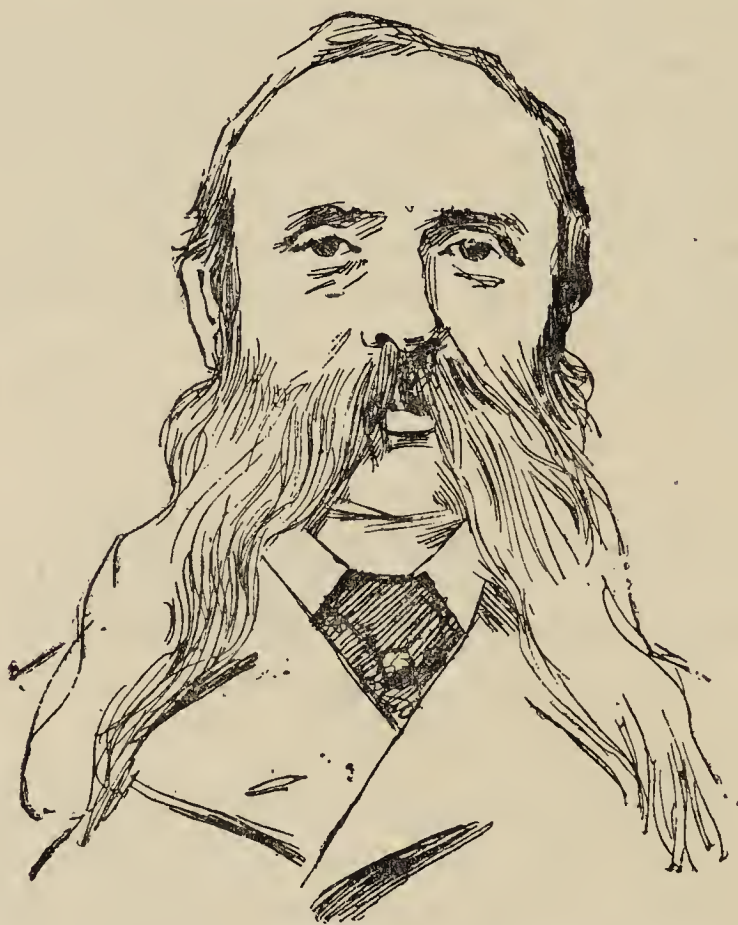
THESE physiologists have again become perplexed about the brains of women. The mystery that is almost too deep for dissection by a man's intellect is the difficult one of deciding whether woman has a soul or not. The decision arrived at by the Bishops of Maçen can hardly be called a favourable one for woman. Had she been content to use a limited portion of her brain, and live within a narrow sphere, then she would not have become a riddle to the other half of the community. When she aims at Senior Wranglerships then she startles her Venerable Fathers and Scientific Professors into the delusion that she has gone mad, and that the "coffee cupful" of cerebral matter that she lacks, accounts for it, and what she does possess is unfortunately in the wrong place in her skull. The second mystery is in regard to woman's brain. Dr. Büchner, however, is somewhat consoling when speaking of the feminine brain, for he holds out a hope that in time, and with due training, she may sow

intellectual seed in the frontal lobe, and some day become a thinking animal. However, she must not be too elated, as this is a thing of the dim future.

Sir J. Crichton Browne, LL.D., M.D., F.R.S., evidently takes the matter much to heart, and considers Professor Büchner's argument upon "The Brain of Women" as very fallacious in biological argument, that although woman does not display so strong a reasoning and critical faculty as man, she excels him in quick perceptions and intentions.

THE FALLACY OF THE EDUCATION ARGUMENT.

Putting heredity upon one side, Sir Crichton Browne



THE ABOVE CLEAR CUT EXPLAINS ITSELF.

does not think that the difference in education between the boy and the girl accounts for the difference in their brains. He says, "What can education have to do with the weight and formation of the brain? The difference exists at birth. We are not now dealing with habits of memory, or intellectual tastes. Education may affect these, but the question is one of the structure of the brain itself, and this structural difference between the brains of the boy and the girl is observable in the new-born babe. Education has nothing to do with it. Now, in Scotland, boys and girls are educated together in the parish school on exactly the same methods, and to a large extent in this country too, if you take the

great bulk of people. It is only when you come to the more affluent classes and to an age when brain growth is far advanced, that there has been much distinction made between the education of the sons and daughters in a family, so that the education argument does not stand the test of scrutiny."

"You will admit, though, that in Scotland, parents will strain their utmost to give a bright boy an educational chance. He is sent on from the parish school to the Academy, thence to the University, and makes his way into one of the learned professions, while his less fortunate sisters are sent to domestic service. I have personal knowledge of a case where the sisters of a college professor were working as general servants." "Then I think," replied Sir Crichton Browne, "that there was something lacking in those girls, or they would have been fashionable milliners at least."

THE GREATER WEIGHT OF THE MALE BRAIN.

Sir Crichton Browne goes on to explain what are the structural differences between the male and female brain, by saying—"First, there is that of mass and weight, qualities with which one naturally associates power and strength. Now it is a matter of common observation that women have smaller heads than men, and it is a matter of scientific observation that in all peoples and races, without exception, the absolute weight of the entire brain is, on the average, greater in men than in women, though, of course, individual women do sometimes possess larger and heavier brains than individual men. Now, Professor Büchner maintains that we must consider the size of the brain in relation to the size of the body, and that, as a matter of fact, when the relative, and not the positive, weight of the female brain is considered, we find that it is not less, but even slightly greater, than that of man.

EXPERIMENTS WITH 1,600 BRAINS.

"This position is quite untenable. On an average, woman's brain is 5 oz. less than that of man. I am prepared to admit that there is some correlation between brain-weight and stature, but when I have considered the average difference in brain-weight—viz., 5 oz.—and the average difference in stature—viz., 5 in.—I still find there is an excess of brain-weight of 1 oz. in favour of the male. I have arrived at this conclusion by personal observation, having weighed the brains of some 1,600 men and women—insane persons, I admit, but for my argument not so favourable as if they had been the brains of sane people, because the kind of disease

which attacks the brains of men dying in asylums has a tendency to lessen weight far more than do the diseases to which insane women succumb. Male lunatics die in large numbers from organic diseases involving wasting and loss of substance, while amongst female lunatics the chief causes of mortality are bodily diseases which do not interfere with cerebral nutrition. Therefore, although my observations upon the brain-weight of insane persons, taking the difference of height into consideration, shows one ounce in favour of the male, I am disposed to consider that if a table could be drawn showing the relative brain-weights of healthy people, it would show a difference of two or three ounces in favour of the male. All available evidence points to the conclusion that the male brain exceeds the female brain in weight in this country to an even greater degree than has hitherto been believed, and I contend that the smaller size of the female brain is a sexual distinction, and is not to be accounted for on the ground of environment, education, or habits of life."

QUANTITY AND QUALITY.

"Quantity does not necessarily mean quality"—"but quantity is the primary consideration. A large, massive brain indicates great mental power. Compare the heads of the idiots at the Earlswood Asylum with the heads, say, of the Fellows of the Royal Society, and you will find my theory demonstrated. Le Bon has made an examination of the heads of three classes—the peasants, shopkeepers, and men of science—with the result that the size of the heads corresponds to the known intellectual capacity of the three different classes."

WHAT AN OUNCE OF BRAIN MAY MEAN.

"One ounce of so precious an organic product as brain tissue," said Sir Crichton Browne, "may mean a great deal. That one ounce evenly distributed over the surface of the brain would certainly involve a very marked difference in mental capacity, but when you have an extra ounce *localised* it may be still more important.

THE DIFFERENT SHAPE OF THE MALE AND FEMALE BRAINS.

"This brings me to the *Second* sexual distinction in brains. We have already considered weight; now we come to balance of parts. Professor Büchner says that the frontal lobes are larger in the male; Broca declared that the

occipital lobes are more voluminous in the female ; and my own observations, as far as they go, confirm Broca's conclusion, and show that while the frontal lobes are equally developed in both sexes, the parietal lobes, the centre of the brain, are larger in the male than in the female, and the occipital lobes are larger in the female than in the male, and these latter being sensory in their functions impart to her a quicker perception. So we find that not only is the female brain less in weight but it is different in shape.

LESS GREY MATTER IN THE FEMALE BRAIN.

“The *Third* brain difference between the sexes is one of convolucional arrangement. The grey matter of the brain is convoluted, and the extent of surface depends upon these convolutions. We see it through the animal kingdom. The rabbit and the marmoset monkey have smooth brains. Many convolutions mean much grey matter, and the female brain, being more symmetrical, like her body, and not so much convoluted as that of the male, has consequently less grey matter. Some observations of my own indicate that the specific gravity of the grey matter is lower in the female than in the male brain.

THE RICHER BLOOD IN THE MALE BRAIN.

“There is yet a *Fourth* difference to consider, a most important one, that of the blood supply. In company with Dr. Sydney Martin I have made investigations as to the size of the great arteries that supply the brain. These show : that the diameters of the internal carotid and vertebral arteries, taken together, are slightly greater in the male than in the female ; but when the difference in size of the male and female brain is taken into account it will be found that the female brain receives a larger supply of blood in proportion to its mass than does the male brain. But again we have to consider that the blood going to the female brain is poorer in quality than that going to the male brain, and contains only 4,500,000 corpuscles to the cubic millimètre, instead of 5,000,000, as in the case of the male ; also, there is a marked difference in the calibre of the large arteries supplying the male and female brains respectively. The general conclusions of Dr. Sydney Martin and myself amount to this : that the anterior region of the brain is comparatively more copiously irrigated with blood in men, and the posterior region in women. And as the blood supply to an organ indicates the measure of its activity, we find that men have a greater supply of blood to the frontal lobes of the brain, where the higher psychical

functions are localised ; and in women the larger supply is to the occipital, which is mainly concerned in sensory functions, pointing clearly to the intellectual and emotional differences of the sexes. All through life the male brain differs from the female in capacities, aptitudes, and powers."

EDUCATION "THE GUIDANCE OF GROWTH."

And Sir C. Browne does not consider that the advanced education of women will, in a measure, counteract this difference. He says, "There is an exaggerated notion abroad of what education can accomplish in developing the brain. Carlyle says, 'Nature gives much to the healthy child ; how much ? Good education wisely unfolds this, but it often unfolds much better of its own accord.' Education does not impart faculties—these are born in the child. It is simply the guidance of growth."

THE UGLIEST WOMEN IN THE WORLD.

As women are naturally supposed to be proud of their beauty, the last argument this celebrated scientist brings forward, may prove the most trenchant among the fair sex, if it is true that through the higher education woman will lose her beauty and grace, and health. He says, "I fear that what woman gains intellectually by the higher education now in vogue, she will lose in beauty and grace, and often in health, too. It looks to me like straining her faculties against Nature. Woman's personal charms are her greatest power ; we must not have these destroyed, and she greatly excels man in perception, intuition, and the moral faculty. Amongst the Garo nation, a people dwelling on a range of hills between the Brahmapootra and the Soorma valleys, the women are supreme. They woo the men, they control the affairs of the home and the nation, property descends through them, and in everything they are dominant, but—note the sequel—they are the very ugliest women on the face of the earth."

According to this, our educated women of the day have lost their womanliness and have taken on ugliness. Fortunately facts do not support this theory which we do not consider a sufficiently scientific one to take much notice of.

T.S.A.

SOME things are of that nature as to make
One's fancy chuckle while his heart doth ache.

—*Bunyan.*

AGRICULTURAL PHRENOLOGY.

“ If vain our toil,
We ought to blame the culture not the soil.”

THIS subject is an appropriate one to discuss at this time of the year, as it carries us through one group of faculties into the cornfields, into the country lanes, and up winding slopes. In the farm-yards where the poultry, cows, pigs, horses, pigeons are visible, and where they are ploughing up the fresh straw as they go from trough to trough, to one side are the stacks of hay and last year's corn. Besides these are ploughmen, the beast-men, the shepherd, the general farm hands, the sons, and the master or farmer himself. This is a picture indeed, worthy of much thoughtful study, though doubtless some may wonder what Phrenology has to do with it. Let us first see what Agriculture means. We all have a general idea that it pertains to the cultivation of the soil, and literally we find it comes from *Ager*—a field, and *cultura*—cultivation, or the art or science of cultivating the ground, especially in fields or in large quantities, including the preparation of soil, the planting of seeds, the raising and harvesting of crops and the rearing and management of live stock; tillage, husbandry and general farming, or in other words, the act or practice of cultivating; the application of labour, or means in rendering productive, in reducing, in refining and ameliorating; in cherishing, promoting or advancing; as the culture of the soil, and of the mind. *Culture* also means a physical improvement, enlightenment, and discipline, acquired by mental training. Now an agriculturalist, as we have found, has to attend to his *soil, grain, corn, hay, turnips*, while a phrenologist is not behind, but runs apace with him, in tending the development of mental soil, such as propensities, sentiments, selfish, moral and social; intellectual and perfecting faculties, aspirations, ambitions and ideals.

The agriculturalist realizes what Job said to him, “Speak to the earth, and it shall teach thee.” He speaks to the earth and the earth answers him, and many are the important lessons it teaches him. Shakespeare was right when he wrote:—

“ And this our life, exempt from public haunt,
Finds tongues in stones, books in running brooks,
Sermons in stones, and good in everything.”

The phrenologist realizes that in every walk in life, in every sphere of work, his education is enhanced by the study of the principles of Phrenology, and the practical working of them.

It is no new thing to say that “All men have in

them the feelings of mercy and courage, of shame and hatred, of fear and ambition." It is therefore for each one by *culture* to let these feelings grow, or to let them wither. They are part of the organization of men, as much as the limbs or senses, and may be trained as well. The mountain Nicon-chan naturally brings forth beautiful trees. Even when the trunk is cut off or down, young shoots will constantly rise up. If cattle are allowed to feed there, the mountain looks bare; shall we say, then, that barrenness is natural to the mountain?

So the lower passions are let loose to eat down the nobler growth of reverence and love in the heart of man, shall we, therefore, say there are no such feelings in the heart at all? Under the quiet, peaceful airs of morning and evening, the shoots tend to grow again. Humanity is the heart of man; justice is the path of man. To know heaven, is to develop the principle of our higher nature.

By tending to the organs, we mean cultivating them; and by culture, we mean the application of means to improve, refine and enlighten, by a discipline of mental training.

It is a something beyond learning or technical skill; it implies the possession of an ideal, a theory of life, based upon a clear knowledge alike of its possibilities and of its limitations; and the habit of critically estimating the value of things by this theoretic standard.

Starting in life with the right key is what man needs; the latest scientific knowledge. Of one thing we are certain—by nature is implied a definite order with which nothing interferes; therefore the chief business of mankind is to learn that order, and govern themselves accordingly. You can have no better ideal than the study of the beautiful and wonderful adaptations of nature, as strikingly witnessed in human beings, in animals and plants, and in every phase of creation. Such a culture will give scope, object and beauty to life, and raise the soul above the petty things that the daily routine of life is apt to bind us to. The effort would not only ennoble us, but elevate us above the monotony that curses so many painstaking and exemplary lives.

Intellectual culture consists not chiefly, as too many are apt to think, in accumulating information, though this is important, but in building upon a force of thought which may be turned at will on any subject on which we are called to pass judgment. The intellectual soil is fat enough if men would but till it. Who knows what minerals the rocks contain? Give any man but a few miles of a wilderness, and how soon he will make it plentiful! There may be thorns

and thistles ; but use your intelligence, and with labour you will get wheat instead ; till the ground like a man, plough and harrow away, and you will soon remove the hindrances in your way.

The agriculturalist has all kinds of implements and machines to work with, and he must know how to use them. There is the mower, the reaper, the binder, the steam plough, the harrow, and the drag. When combined he has a wonderful machine, in the mower, the reaper and the binder. The drag is put on the land after the plough, then comes the chisel harrow, with its more refining process of powdering the soil, and after that the wooden harrow, and lastly the chain harrow that picks up the weeds. With the steam plough he finds a great reduction, or economy of labour, for he can plough ten or twelve furrows at a time instead of one. In sowing wheat broadcast, four yards at a time both ways is the usual practice, then the harrow comes and covers the seed with soil, and lastly the roller is employed to press down the corn, to fasten the roots and press down the stones.

Phrenologists find they have all kinds of machines and implements to work with in working up their characters. Good habits are powerful engines for effective work. They are more important and more influential than is often supposed. A habit it is said becomes a second nature, therefore it becomes necessary to guard them.

Then they have the working machinery of our homes, our streets, our penitentiaries, our gaols, our training ships, our reformatories, our board schools, and our boarding seminaries, our colleges, our clubs, societies, and associations. From which we derive our greatest average of tutorship it is difficult to decide. When one reads Benjamin Waugh's report of work for the enfranchisement of childhood, one is inclined to think that the street will carry off the palm, especially among "our little citizens." The phrenologist does not find that cruelty or peculiarity of training is confined to the streets alone. His work is needed in the home throughout our land. What do we hear ?—Why just this, that 11,000 complaints were investigated last year by the Society for the Prevention of Cruelty to Children, and 10,000 proved true. This being so, Phrenology has her seed to sow and water, to reduce the number of persons (20,000) who have been convicted of making little creatures wretched. Phrenology to be of use must be essentially practical, therefore its agricultural work must in the future aim at altering "the fundamental ideals of parents" in the managing and rearing of their children.

The agriculturalist depends much on the kind of *seed* he sows.

He may do everything that is necessary to prepare the soil; he may put on lime to enrich it; he may irrigate it; he may sift it, and separate the stones, but he must have good seed to put into his prepared ground.

The seed needs to be well selected, dried, and preserved in a room free from dampness, to allow the seed shells to be fully matured.

So a man who has the cultivation of mental plants and seedlings has to depend largely on the seeds or material he has to deal with.

Hereditary stock is of vital importance to the farmer as well as to every parent. The farmer must know all about domestic animals, such as the sheep, cow, horse, and their use in clearing fields, and show judgment in buying his stock. There is a particular kind that he wants, he must therefore know every kind, to select from various markets. He must also know how to judge of quality, as it is an important factor. He must not only be a good buyer but also a good seller of his stock. Some men confine their whole attention to this one department, namely, of selling stock, but an agriculturalist should know how to buy, then sell; and also to calculate the probable weight of beasts, &c. He must calculate as they stand, without scales, the comparative value and quality of his stock. So a phrenologist must be able to judge of contour, of proportion, of external and internal power, capacity and faculty.

An agriculturalist must know what kind of food is necessary for his animals, and hence be able to blend them at different seasons of the year so as not to waste any. The fowls, ducks, turkeys, the horses, cows, sheep, the pigs, dogs, all require special kinds of food to properly strengthen and fatten them, and the diet question is thoroughly studied, both for the sake of producing satisfactory stock, and also from an economical point of view. With the rearing of children the parent has doubly to study the importance of diet to complete the chemical parts of each organism.

An agriculturalist must have a large development of some faculties if he attends to certain departments of his work, but to attend to them all he must have an all-round level head, one that can comprehend and understand things that come under his eye equally well. He needs, therefore, large Human Nature, Causality, and Agreeableness. He requires a sharp, practical mind, one well able to engage his men with judgment. Unfortunately now-a-days in some parts of the country he can only choose a foreman, for farm labourers he has often to take what he can get.

An agriculturalist must possess immense tact in the management and working of his men. He cannot afford to waste their time so he must plan out their work and be prepared for all weathers, fine, dull, wet, frosty, cold, and hot.

A phrenologist has to judge of the requirements of masters in each kind of trade and profession, and know the adaptability of household and business servants, if he is to assist employers in this difficult task of finding suitable men and women for their work, and find situations for men out of employ. And it behoves the business man to be a phrenologist, so that he can with tact utilize all the precious qualities as well as the time of his ten, twenty, one hundred or two hundred men.

The agriculturalist has to be an analyst and chemist, for he must understand all the chemical compounds necessary for his soil. He must therefore have large Comparison, Constructiveness, Order, the Perceptive faculties and a full degree of Causality, in order to combine as well as separate his chemical compounds, and use them appropriately. A parent or householder needs to know considerable of chemistry, though unfortunately the knowledge is often limited in this direction, hence the great mistakes that are made in judging the chemistry of food, and everything connected with the analysis of home comforts.

It is well for the agriculturalist to be a veterinary surgeon, for it will not always be convenient for him to send for even the nearest one, and most accidents need to be attended to at once. He should be a good bone setter, and he will find ambulance lectures on animals, as useful as those for men.

A phrenologist recognises and points out that certain shaped heads will make better surgeons than others, and these are the ones who should, if possible, devote their whole time and labour to surgery. The special qualifications should be cultivated by the agriculturalist for the completing of his work. These are large Human Nature, Form, Locality, Order, Hope, Destructiveness, Combateness, a moderate degree of Cautiousness, and good Perceptive faculties.

The agriculturalist has to know something of dairy work. If he does not, he has to hire the work to be done for him. The cream must be separated and churned, the butter made up and sold; the cheese made up also. There is a great art in making both. The products of the mind are varied. There is intellectual cream, as well as skim milk. Some of the material of the brain produces music, some artistic work, and some mechanical work.

An agriculturalist must have as much ingenuity as a tailor, in order to cut out his material and plan out every inch of ground he has to dispose of.

So a mother, if she is wise, will become a phrenologist, that she may dissect her own mind and cultivate those qualities that will make her a good home dressmaker, for she has to cut out, plan, and retrim, with as much care as an agriculturalist has to lay out his acres of land. A farmer and agriculturalist now-a-days must be a mechanic. He must not only be able to drive his steam-plough, but understand its mechanism. He must therefore have large Constructiveness and a practical intellect, and cultivate or call out the amount that he has.

Land is divided into various courses. In the Lothians, there are six courses, shifts, namely :—1st wheat, 2nd beans or potatoes, 3rd wheat, 4th turnips, 5th barley (or wheat), 6th grass or seeds. So nature has to be humoured, it cannot go on its course without a change any more than human beings can. A constant strain of wheat crop for a number of years without a break would not only exhaust the land itself, but the crop would be impoverished or poor, hence the need of change. The brain requires change of work in order to equalize the faculties of the mind. If the Social faculties are used to the exclusion of the Intellectual ones, or if the Reasoning faculties are developed without due respect to the existence of the Moral and Spiritual faculties, then we are not carrying out the divine plan of development.

The agriculturalist depends much on the weather.

Picture the trees full of blossoms, and the heart of the agriculturalist is filled with joy at the prospect of having plenty of fruit, when suddenly a frost appears, and nips the beautiful pink and white furniture of the orchard, and the prospects go down to zero ; or sometimes an east wind prevails and blows the blossom to the ground. This year the dry spring has caused many an agriculturalist to sigh with sorrow, for the ground has become so parched that no nourishment has touched the roots from the surface. Some seasons bring a continuance of rain, and thus frost, drought and rain all have their drawbacks. The agriculturalist needs water. Think for a moment of a garden that hath no water. You cannot picture such a thing, for there is none. All nature is co-operative. A garden or a field may be laid out, but without rain it is dead ; it cannot hold itself together. It is not a question of a garden retaining its outline, its lineal beauty, for it cannot do it without the clouds. It is marvellous how very few are the resources which the world has within itself. It has no wood but for the clouds, no light but from above ; there would be no earth without the heaven.

Is the garden dependent upon water ? So are we ; so is life.

The first thing that a new born babe has given to it is water.

The harvest fields are in the clouds. It is practically correct to say, we have no enduring resources within ourselves, we must look to the light, heat and water from above.

Earth can go for a little while without water because it is cistern enough to hold a little. But the gardener becomes discontented and moody; he is not repaid for his labour, he is but raking up dust.

Phrenology says we cannot *live* within ourselves. We may live a monastic life for a little while, but without that helpful intercourse with one another, we soon begin to live backwards. A man said the other day, "I had not thought that the garden depended upon water or rain for its very sustenance," "No, he had not thought." Without water there can be no cohesion, no ministry. Earth and heaven belong to one another; "rain" has been called liquid flowers.

Man thinks he can go on by himself (without God), but he is a very little cistern. His own resources are very little more than *nil*. Phrenology points out that resource, says where it is, and just about how strong it is and where its resources are liable to break, and how much water in the cistern is continually wanted. It says it is like a carriage on a railway line running along without an engine. It looks a marvel, but presently the car moves slower and slower and is still, it is lifeless. It cannot push itself forward. There are times in some men's lives when there is a draught of energy, they are pushed on for a time by their father's entreaties, their mother's prayers, but if left alone they slow down and stop. They need the refreshing rain of encouragement. We may shape our gardens as we please, and put peas here and beans there and celery and lettuce further on, but the countless drops must fall from above, then all things within our patch of ground will answer with glistening smiles. So with the environment of our characters. Inspiration does not shape our Individualism, our Individuality is our own, and when God's inspiration falls upon a man according to what his Individuality is so are the issues. There are more things in this world than mere confirmation and contradiction. There are more things in our characters worthy of study than we have even yet thought of. One thing helps the completeness of the other in agricultural work, and it is the same with the character. No one can grasp the meaning of the fraction without knowing the meaning of an integer. Character is a marvellous exhibition of individualism and collectivism. No

one speaker is *the speaker* ; no one preacher *the preacher* ; hence denominationalism, orthodoxy, heterodoxy, &c., when instead of worshiping under 1,000 roofs, as we do now, one roof (the roof of heaven) might cover us all.

One kind of corn is not all corn ; neither is one man *humanity*. We find gooseberries grow better in England than in America, while Indian corn grows better in America than in England. One man finds human nature partly in himself, partly in another. One man's wisdom may be all lost on another man. The wise man may not know everything that the supposed or surnamed foolish man does. We do not know all of either, and until we understand the whole man we had better not make too much of our knowledge of human nature. Some are egotistical enough to think they know all about themselves. A garden without water is like that man who is intellectually great, but who has not the grace to see his shortcomings. He is immensely intellectual, freezingly so, yet he never had a kind word for the helpless. The wealthy man who has no benevolence, never gives to others, yet expects you to go down on both knees to him. It is not a question whether a man has £10,000 or £2,000,000, but has he any ideas, has he any ideality, any poetry ? and are his thoughts watered with the *loveliness, beauty, and loftiness* of the universe ? These constitute a man of character. If we are unchristian, there is no Nazareth in our souls. Even a perfect little garden needs water ; so if we will we can be little gardens, if not massive fields, and our hearts can grow in the graces of the Spirit, but we cannot grow without the continual spray from the Fountain, the cool refreshing water.

FOUR GREAT LEADERS OF THOUGHT, PHRENOLOGICALLY CONSIDERED.

BY JESSIE A. FOWLER.

JOHN RUSKIN.

(Continued from page 370.)

RUSKIN ON CLOUDS.

There is another source of sympathy between Ruskin and myself, and I will mention it here because it had been a source of continual encouragement to me, and which, as phrenologists, we all need, but we cannot always get from our circle of friends when most we hunger for it.

Perhaps, therefore, some of you will follow me while Ruskin explains the unspeakable value of the world of exquisite and ever-varying beauty to the eye of every human being willing to raise his or her eyes from the dead pavement to the glorious panorama of the brave o'er hanging firmament. He says, "It is a strange thing how little in general people know about the sky. It is the part of creation in which nature has done more for the sake of pleasing man, more for the sole and evident purpose of talking to him and teaching him, than in any other of her works, and it is just the part in which we least attend to her. The noblest scenes of the earth can be seen and known but by few; it is not intended that man should live always in the midst of them; he injures them by his presence; he ceases to feel them if he be always with them; but the sky is for all—bright as it is, it is not

‘ Too bright or good
For human nature's daily food? ’

It is fitted to all its functions for the perpetual comfort and exalting of the heart, for soothing it and purifying it from the dross and dust. Sometimes gentle, sometimes capricious, sometimes awful, never the same for two moments together; almost human in its passions, almost spiritual in its tenderness, almost divine in its infinity; its appeal to whatever is immortal in us is as distinct as its ministry of chastisement or of blessing, to what is mortal is essential. And yet we never attend to it; we never make it a subject of thought but as it has to do with our animal sensation." How true that is to our lives, the lives of the generality of men. That which appeals to our basilar brain or practical senses is paid more attention to than that which can feed the superior or coronal faculties, the spiritual imaginations, inquiry, or speculation.

If in our moments of utter idleness or insipidity, we turn to the sky as a last resource; which of the phenomena do we speak of? One says it has been wet, and another it has been windy, and another it has been warm. Who among the whole chattering crowd can tell me the forms and the precipices of the chain of thoughts that girded the horizon at noon yesterday? Who saw the narrow sunbeam that came out of the South and smote the summits of the tall white mountains until they melted away and mouldered into a dust of blue rain? Who saw the dance of the dead clouds when the sunset left them last night, and the West wind blew them before it like withered leaves? All has passed unregretted as unseen, or if the apathy be ever shaken off even for an instant, and men be stirred to gather inspiration therefrom, it

is only by what is gross or what is extraordinary ; and yet it is not in the broad and fierce manifestations of the elemental energies, not in the clash of the hail, nor the drift of the whirlwind, that the highest characters of the sublime are developed. "God," he continues, "is not in the earthquake, nor in the fire, but in the still small voice." Here, again, he touches our characteristics, when he says, "They are but the blunt and the low faculties of our nature which can only be addressed through lampblack and lightning." But to the higher faculties of the mind, he says, "It is in quiet and subdued passages of unobtrusive majesty, the deep and the calm, and the perpetual, that which must be sought ere it is seen, and loved ere it is understood ; things which the angels work out for us daily, and yet very eternally ; which are never wanting and never repeated ; which are to be found always, yet each found but once. It is through these that the lesson of devotion (to our work) is chiefly taught, and the blessing of beauty given." This I call a grand peroration on the unperceivable things of beauty and comfort that are given to us if we will but take them, and I profoundly thank John Ruskin for so clearly expressing my own sentiments on the unappreciated corners of nature, and his appeal to our higher faculties.

Another phrenological appeal comes to us in the following paragraph—

"Man's use and function are to be the witness of the glory of God and to advance that glory by his reasonable obedience and resultant happiness. Better not to live, than that we should disappoint the purpose of existence."

This is plainly phrenological teaching. Have we not often heard from lips that are older and wiser than mine, that for each man there is a purpose in life, and it is the duty of each man, woman and child to find that out. A man cannot stir the lives of other men if he has not found out the plan and purpose of his own. Better aye, better not to live, than that we should disappoint the purpose of existence.

We have now a little lecturette on "Quality." He says, "the true sign of good breeding is sympathy"—which is another word for expressing quality—"a vulgar man is kind in a hard way on principle, whereas a highly bred man"—or a man with quality of organization—"even when cruel, will be cruel in a softer way, understanding and feeling what he inflicts, and pitying his victim." By the very acuteness of his sympathy, he knows how much he can give to anybody, and he gives that frankly.

THE THREE CLASSES OF INDIVIDUALS.

Ruskin very cleverly points out three distinct classes of individuals whom the phrenologist daily encounters among mankind in general. First, the lowest, sordid and selfish class which neither sees nor feels ; secondly, the noble and sympathetic class, which sees and feels without concluding or acting ; thirdly, the highest which loses sight in resolution, and feeling in work.

For the second class we have not far to seek, and some melodious scolding might do them good and make them conscious that they do not act on "suggestion," but prefer rather to see and feel, and leave the acting for some future time.

The third class is certainly our ideal. For one who is blinded to the works of God by profound abstraction or lofty purpose, tens of thousands have their eyes sealed by vulgar selfishness and their intelligence crushed by impious worldliness.

A MAN OF GENIUS.

In describing a man of genius how exquisitely beautiful is his recognition that a truly great man does not know that he is great, and such a man has moderate self-esteem. He says, "A man of genius remains in great part a child, seeing with the large eyes of children in perpetual wonder, not conscious of much knowledge—conscious rather, of infinite ignorance, and yet infinite power ; a fountain of eternal admiration, delight, and creative force within him meeting the ocean of visible and governable things around him."

What a thrill of truth pervades the mind when he speaks to us in the following words. I think we as students of human nature should appreciate them. "All things are literally better, lovelier, and more beloved for the imperfections which have been divinely appointed, that the law of human life may be Effort, and the law of human judgment—Mercy."

THE LAW OF EFFORT.

Here we have the A.B.C. of Phrenology. Of what use is it ? if it does not explain to us the "Law of Effort" in regard to our characters, our imperfections are the whetstones of our future improvements ; and "the law of human judgment—mercy," is the law we should enforce every day, in regard to these imperfections which we meet in others as well as observe in ourselves.

Ruskin notes the difference in mental capacity when he

says : "Greatness is not a teachable nor gainable thing, but the expression of the mind of a God-made great man. Teach, or preach, or labour as you will, everlasting difference is set between one man's capacity and another's; and the God-given supremacy is the priceless thing, always just as rare in the world at one time as another." He might have been lecturing on Phrenology, for mental science is the only science that recognises the "everlasting difference" between one man's capacity and another's. What he says further on greatness is truly applicable of Dr. Gall : "I believe that the first test of a truly great man is his humility. I do not mean by humility, doubt of, or hesitation in speaking his opinions, but a right understanding of the relation between what he can do or say, and the rest of the world's sayings and doings. All great men not only know their own business, but usually know that they know it, and are not only right in their main opinions, but usually know that they are right in them; only they do not think much of themselves on that account, and do not expect their fellow-men therefore to fall down and worship them. They have a curious under-sense of powerlessness, feeling that the greatness is not in them but through them. And they see something Divine and God-made in every other man they meet, and are endlessly, foolishly, incredibly merciful." This is our conception of true greatness.

For something particularly original read his defence from ignorant and prejudiced attacks on his noble actions and beliefs in "Fors IV."

KNOW THYSELF.

The following sublime passage, which includes the phrenologist's motto, "Know thyself," sums up all the beauty, intellectual and moral, contained in Mr. Ruskin's works. I quote only a part of it. How do you discover the equality of justice? Not by inequality of mind, not by a mind incapable of weighing, judging, or distributing. If the lengths seem unequal in the broken mirror, for you they are unequal; but if they seem equal, then the mirror is true. So far as you recognise equality, and your conscience tells you what is just, so far as you do not discern the nature of justice or equality, the words, "God is just" brings no revelation to you. But "His thoughts are not as our thoughts." No, the sea is not a standing pool by the wayside, yet when the breeze crisps the pool you may see the image of the breakers and a likeness of the foam. If the sea is for ever invisible to you, something you may learn from the pool.

Does this not explain how we may learn from the least mental material we have ?

He says, " But this poor miserable me ! Is this, then, all the book I have got to read God in ? Yes ! truly so. No other book or fragment of a book than that will you ever find. . . . In that is the image of God painted ; in that is the law of God written ; in that is the promise of God revealed. Know thyself, for through thyself only canst thou know God."

HUMANITY—DIVINITY.

We learn of Divinity through our Humanity. You cannot have a Humanity without a Divinity. You cannot know or understand what divinity is except through humanity. Nothing lasts but duty. We have no morality without divinity, and no revelation of divinity except through humanity. We are first human then divine, but as character is in everything, and divinity is limitless, so we must all have a portion of that which is divine in our nature.

In conclusion Ruskin says, " Therefore is it that all the power of Nature depends in subjection to the human soul. Man is the sun of the world, more than the real sun. The fire of his wonderful heart is the only light and heat worth gauge and measure. Where he is, is the tropics, where he is not, is the ice world."

" Once read thine own breast aright,
And thou hast done with fears ;
Man gets no other light,
Search he a thousand years."

" Sink in thyself, there ask what ails thee, at that shrine."

THE GREAT EXHIBITION.

MRS. WIETING, one of the American Members and Correspondents of the F.I., whose keen observation and extended travel especially qualify her to judge intelligently of the merits of the great Columbian Exhibition, has sent us a graphic description of the sights and scenes in the great White City. " The Illinois Central Railway Company runs long trains of open cars every two and a half minutes carrying people to and from the World's Fair. The road skirts the shores of Lake Michigan, and Chicago seems to have solved the question of transportation most effectually between lake and land."

She continues, " On viewing the grounds for the first time one is impressed with the magnitude of the undertaking, the space occupied being nearly a thousand acres, and the number of buildings about four hundred. The bronze dome of the Administration building

forms a prominent landmark, and this building seems a sort of nucleus to the others. The various structures are all showy, beautiful in outline and architecture and of dazzling whiteness. Colonnades, Corinthian, Ionic and Doric, adorned with statuary are veritable dreams of beauty in effect, though on close inspection they are found to be roughly finished in plaster and stucco, on account of the time allowed for the completion of the work.

"*The La Rabidas Convent* contains the relics of the life of Columbus, and a valuable collection of original manuscript, among which is the document written by Ferdinand and Isabella, granting Columbus permission to start on his voyage. In this building, among other interesting relics, is a facsimile of the first globe. It is of pasteboard, covered with parchment, and bears the date 1492. The only lines on it are those of the Equator, the two Tropics, and the Polar circles.

"*The Transportation Building* is one of the most elegant and costly of the structures. The beauty of its entrance has won for it the title of 'Golden Portal.' Within the building may be seen examples of the different modes of transportation through centuries past up to the present time. There is also a facsimile of the first train ever run out of Chicago, and a model of the first street-car used in New York City, built by John Stevenson, 1831.

"*The Mining Building*, as giving an idea of the hidden wealth of the world, is of exceeding interest. In the Montana mining section is the famous silver statue of Ada Rehan.

"*The Manufacturers and Liberal Arts Building* is considered the largest building in the world. Beneath its roof is the treasure-house of the world. From the Arctic Circle to the Torrid Zone, all nations of the earth come to lay their tribute here. It would be the work of many days to go over the building and give but a cursory glance at the exhibits, among which is to be found a superb vase of silver and gold.

"*The Government Building* occupies a prominent position on the lake front. The representation of the Greely expedition is of exceeding interest. The original flag displayed near the North Pole is also shown. The geological survey is very extensive, showing the mineral and coal formation of all parts of the country.

"*The State Buildings* all make a creditable representation. The Iowa building is unique. The ceiling and walls are covered with an ingenious decoration of grains and grasses. Huge columns covered with ears of corn support the roof, which is adorned with landscape effects formed of grasses and grain. It is said that 10,000 sheaves of grain, and 15,000 bushels of corn were used in this decoration. The floors of the New York building are in mosaics. The history of the State may be traced in the rotunda, from the time of De Witt Clinton, the first Governor. The California building has a statue of James W. Marshall, the discoverer of gold, January 19th, 1848.

"*The Art Gallery*, in its chaste beauty of purely Grecian architecture, is in itself a work of art. It is the only one of the buildings which will have a permanent place in the park.

"*The Woman's Building* is very extensive, and straight out from it extends the magnificent avenue, the Midway Plaisance. It is one mile in length, and is the famous foreign quarter of the Fair. Thousands of people are passing to and fro, and almost every language known to the civilized world is heard.

"The Volcano of Kilanea is one of the most wonderful of the exhibits. This representation is the result of over two years' work, and was constructed by Hawaiian capitalists at an enormous expense. On entering the building so complete is the illusion that one seems transplanted to the island itself.

"The Street in Cairo in the Egyptian quarter is one of the most interesting in the Plaisance ; while the Turkish village shows a street in Constantinople.

"No one leaves the Exhibition without a sail on the waters of the lovely lagoon, in the graceful little electric launch. It makes a circuit of over three miles, the entire distance presenting a panorama which commands universal admiration."

Truly we may say after reading this description that we have seen the wonderful City, and the equally wonderful Exhibition.

THE ARTIST'S SECRET.

OLIVE SCHREINER thus describes the Artist's Secret :—

"There was an artist once, and he painted a picture. Other artists had colours richer and rarer, and painted more notable pictures. He painted his with one colour, there was a wonderful red glow on it ; and the people went up and down, saying, 'We like the picture, we like the glow.'

"The other artists came and said, 'Where does he get his colour from ?' They asked him ; and he smiled and said, 'I cannot tell you ;' and worked on with his head bent low. And one went to the far East and bought costly pigments, and made a rare colour and painted, but after a time the picture faded. Another read in the old books, and made a colour rich and rare ; but when he had put it on the picture it was dead.

"But the artist painted on. Always the work got redder and redder, and the artist grew whiter and whiter. At last one day they found him dead before his picture, and they took him up to bury him. The other men looked about in all the pots and crucibles, but they found nothing they had not.

"And when they undressed him to put his graveclothes on him, they found above his left breast the mark of a wound—it was an old, old wound, that must have been there all his life, for the edges were old and hardened ; but Death, who seals all things, had drawn the edges together, and closed it up.

"And they buried him. And still the people went about saying, 'Where did he find his colour from ?'

“And it came to pass that after a while the artist was forgotten—but the work lived.”

Nothing that is well done was ever accomplished by anyone except by the sacrifice—no, not sacrifice, but by the freewill offering of a part of that *ego*. Freely ye have received, freely shall thou give. He who grudges the paint he paints with, will never, never produce for eternity. Choose your colours, choose your model, begin your work, erect your structure, paint your picture. Whether it will last rests with the individual worker.

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., OCTOBER, 1893.

ACTIVITY. THERE are few, if any persons in the world who do not like to look at a truly beautiful form or face. Sad to say, but few know how to preserve the beauty they possess. Instead of powder and paint, which seem to be the only panacea according to some people's way of reasoning to increase beauty, I should like to suggest a very effectual way of preserving it. Whoever looks at the human family calmly must soon conclude that work is one of the laws of its being—that six-sevenths of its days or hours are work days or work hours. Activity is such an attractive quality, away from man, that it should, when found in man, not be wholly destitute of charm. In the brute world the stupidity of inaction is no ground of admiration. The animal that sleeps the most is the least respected. The bird on rapid wing; the gazelle swift of foot; the intense life of the mother robin, which is said to visit her young eight hundred times a day; are the creatures which win applause from the students of nature. That man's working hours are six-sevenths labour, need not strike us as a painful fact, for Activity, when not excessive, is one of the means of giving the truest forms of beauty the face can have.

DRINK FACES IN WRITING to the *Standard*, recently,
THE PICTURE “A Medical Man” says:—“I have just
GALLERIES. finished my round of the pictures of the
year, and have come home with much food
for reflection. In the first place, I am shocked to see—from

the portraits of celebrities—how many of our most eminent characters have—well, to put it delicately, taken to drink. It is positively awful to a patriot to note the ravages which intemperance has worked in our leading men. They are nearly all of them depicted with complexions which can only be the result of yielding to the raging tempter. I have been told that what I see on the canvas is only the ‘hues of health,’ but, as a medical man, I know what appearance health puts on, and it is nothing like what is painted. Drink, and drink only, could produce those awful faces. Now, I can quite understand this state of complexion in a common celebrity, such as a mayor or an alderman, or a J.P., whose eminence is perforce attained as much at the tables as anywhere else. But in the case of great politicians, statesmen, and military, naval, and dramatic nobles, it is as unexpected as it is saddening.” The above is a fact that has often weighed heavily upon us as we meet, morning after morning, faces that have become drink-stained. That their own eyes are blind to the fact is evident. Is there no one who has never taken up the work before, willing now to tell these blinded individuals, with the utmost tact, what is revealed in their faces?

LONGEVITY OF MINERS. COAL mining, at least in the north of England, is a much less unhealthful occupation than might be supposed. Coal miners, according to Prof. Philipson, President of the British Medical Association, have an average of three years longer life than the aggregate of Englishmen, eight years longer than the Cornish miner, nine years longer than the South Wales miner, and only one year less than that of the men of the healthiest districts of the kingdom. The heated and dust-laden atmosphere, with the cramped working position, cause considerable suffering from mucous catarrh of the respiratory and gastro-intestinal tracts. There are, however, a few diseases peculiar to miners. Emphysema of the lungs does occur occasionally, but anthracosis is very rare, and pitmen’s asthma is less frequent than formerly. Miners are also very exempt from kidney inflammation, and surprisingly so from rheumatism.

THE smallest act of charity shall stand us in great stead.—*Atterbury*.
 CHARACTER groweth day by day, and all things aid it in unfolding.

Fowler Institute.

MEMBERS' NOTES.

" 'Tis the mind that makes the body rich."—SHAKESPEARE.

ON Monday evening, Sept. 18th, the Autumn Session of the Fowler Institute opened with an excellent paper by Miss Dexter, F.F.I., on "Harmony," phrenologically treated. The subject was most carefully worked out. There was an interesting discussion at the conclusion, when Messrs. Baldwin, Tovey, Ramsey, Whittaker, Piercy, and Miss Fowler took part.

The lecturer pointed out that everywhere and in everything we are surrounded and governed by laws and adaptations which harmonize and blend in such perfection that the majority of mankind accept them as a matter of course. We were shown that nature is supremely harmonious in every department. That there is no harmony without some difference, but that the great differences in nature often harmonize by their very contrasts. We were then asked to look through the animal kingdom and to notice how each species is adapted to his physique, life, habits, wants, country and food. In the growth of plants and flowers everywhere the law of harmony is observable, and most of all in God's greatest work—man, in his adaptability to the external world, and in the adaptability of his different mental faculties; as might be supposed some very good thoughts were brought out in relation to the harmony that was intended to exist between body and mind. The relationship between the animal, moral and intellectual powers of the mind was beautifully touched upon. A general hope was expressed that the paper should be printed; and as there may be an opportunity given to our absent members and others to read it sometime for themselves, further comments are unnecessary here.

* *

MR. B. COLEMAN observes: At the post-mortem held yesterday over the body of 11-year-old Willie Frim, of St. Louis, the verdict that death was due to a fracture of the skull was returned. Dr. Franck was considerably surprised when upon opening the cranium he noticed that the lad's brain was unusually large. On examining it a little closer he judged from its appearance that it was the largest brain he ever saw. Acting upon this idea he procured scales, and upon weighing it, found that it tipped the beam at 52 ounces, being the same weight exactly as was that of Daniel Webster, one of the largest on record. This surely beats the record in brain weights.

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IN reply to the query regarding Colour-hearing, as phrenologists we should expect to find in the phenomena of Colour-hearing a large development of Colour, Tune, Human Nature, Ideality, and

Spirituality, as these faculties would act like chemicals on the camera. M. B.—Most certainly it is pretty well believed that certain centres of the brain are distinctly connected with the muscles of the body. Hence, for the different emotions of actors and actresses, there are corresponding telegraphic communications to and from the muscles used in extending the arms, &c.

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MR. RAMSEY has forwarded the following interesting items :—

M. Brown Sequard has recently addressed a communication to the French Academy in which he describes an important discovery of M. d'Arsonval. It has generally been assumed that the electric excitability of the muscles ceases shortly after death. This statement is true as far as their ability to contract is concerned ; but all such observations have entirely failed to take accounts of muscular movements of feeble intensity. In order to study these muscular vibrations M. d'Arsonval has for several years employed a magnetically adjustable microphone, which he calls a "Myophone." This instrument produces a sound long prior to a nervous excitation sufficiently powerful to create a visible muscular contraction. By means of this apparatus M. d'Arsonval has been enabled to prove that a nerve remains alive for hours after death. This is easily demonstrated by attaching, say, the Achilles tendon of a guinea-pig or a rabbit to the "Myophone," and then exciting the sciatic nerve by means of a current intermitting 50 to 100 times a second. Such tests show that the nerve can and does act upon the muscle without necessitating its visible contraction, and that a distinct muscular vibration takes place. It also proves that a nerve dies slower than has been currently believed.

REGISTERING NERVOUSNESS.

"A large proportion of the ailments by which this generation is afflicted arise from nervous disturbance of one kind or another. Many complaints are of such a subtle nature, that the physician is often puzzled in making the diagnosis, and the 'tronometer' or new register for the indication of the various degrees of trembling exhibited in different diseases, promises to be of great service to science. This instrument, we understand, consists of a metal plate pierced with a number of holes of different sizes in a graduated scale, and a needle which the patient endeavours to put into the holes. When he has succeeded in placing the needle in a hole, an electric contact is made and a bell rings. Although this method of testing unsteadiness of hand appears simple, it is found reliable. The immoderate use of coffee and stimulants produces tremblings which can be accurately denoted by the appliance. One of the directions in which this invention may prove useful is in ascertaining the degree of steadiness possessed by marksmen and others, in whom stability of nerves is an absolute necessity."

E. CROW.

OCTOBER ENGAGEMENTS.

Monday, 2nd—The Advanced Class in Phrenology ; followed by Fellows' Meeting.

Wednesday, 4th—Lecturette, "Objectors to Phrenology, and some of their Objections," L. N. Fowler, 7.30.

Monday, 9th—Members' Meeting, 7.30 p.m. Paper on "Representative Men," by Miss Crow, F.F.I.

„ 16th—Advanced Class in Phrenology.

Fellows' Meeting, open also to Associates, 7 o'clock.

Wednesday, 18th—Lecturette. Wm. Brown, Esq., Vice-Pres., F.F.I.

„ 25th—Lecturette, "Handel and his Phrenology," with musical illustrations. By Jessie A. Fowler, and Members of the Institute, 7.30.

Receptions after each lecturette at 8.30 to 9.30. Coffee at 9 o'clock.

Hygienic and Home Department.

HEALTH AND DISEASE.

BY P. C. REMONDINO, M.D. (of California).

PHILOSOPHERS and sociologists have remarked that within the world's historic period, that man's power of reasoning has remained stationary. Nowhere is this shown better than in medicine. We learn, we burden ourselves down with this or that knowledge, simply, as observed by Professor Goodell, that we too often find that we have to *unlearn* a great deal. The different branches of medicine, and the many subdivisions into which these are again divided, are after all but as so many coloured stone fragments from which the finished artist constructs the great mosaic, Medicine. The negative coloured stones and those of neutral tints are as important factors in the end as the brightest and highest coloured ones. It is the comprehensive genius who faithfully arranges these in close imitation of nature, either in the mosaic or in medical practice, who is the great artist or the great physician. The bacteriologist, the pathologist, the histologist and microscopist, are but accessories or component parts of the edifice. We have always held that the real starting point of Medicine,—the corner stone as it were,—was to be looked for in general demography, and more particularly in those branches which treat of preventive medicine and hygiene.

We are glad to see that the "de-novo" views of the origin of disease — the spontaneous origin of typhoid fever,

diphtheria, &c.,—are again resuming their sway; we are coming back to safe holding grounds and a sound anchorage. New fads, complicated *mean-nothings*, insinuate their way and obscure the true horizon of Medicine just as they, in other walks of life, at times tyrannize and sweep every thing before them like a West Indian hurricane—all that will not bend before their sweep, must be either torn or uprooted and ruthlessly hurled aside. We have experienced the tyrannical sway of these professional fads more than once. That of the bacteriologist has been the most persistent and potent. To doubt his tenets, was equivalent to courting professional ostracism, to be looked upon as a fossil, as a back number; it was equivalent to acknowledging a want of perception and comprehension, an unpardonable amount of ignorance or stupidity, and of being guilty of a reckless disregard of that which promised the greatest good to humanity.

BACTERIOLOGICAL DYNASTY.

The reign of the bacteriological dynasty has, however, done some good with all its harm. It has been to Medicine a veritable “wandering in the desert wilderness” for nearly two generations. Its permeation into the different branches of medicine, notably into the domains of the surgeon, gynecologist and climatologist, has done much to advance and stimulate investigation. Like to the Children of Israel after their first forty years wandering, we are approaching the banks of the Jordan. We have lost much that belonged to the Egyptian darkness of the Broussaian period of Medicine, we have struggled with bacteriology and are the better for it. We now can better conceive the beauties of the Hippocratic and Galenic periods of Medicine as well as we can the better admire the clear intellects of Sydenham, Boerhaave, Cullen, of our own Rush.

KEEN OBSERVERS.

Physicians at times wonder why Le Sage, Fontenelle, Voltaire, Cervantes, and other keen observers of humanity in general, seem to hold the medical profession up to ridicule. A careful study of these authors will show that they possessed such a general insight into the science of Medicine, such a broad-minded view of its general principles, and such a philosophical idea as to what should be its aims, that the average practitioner they encountered—either conscientiously and ingeniously following up some narrow or restricted theory with the greatest industry

and perseverance, or careering about the orbit of a fictitious reputation with all the assurance and *sang-froid* of a Chaldean diviner—seemed to them either as misguided or misguiding human beings. When Smollet's physician is learnedly holding forth on the diagnostic signs of hydrophobia in Peregrine Pickle, it is but an effort on the part of the great satirical novelist to exhibit the pedantry and the too much "by rule" habits of the physicians of his own times.

MEDICINE.

The majority of physicians seem unable to make broad and general ideas of Medicine compatible with the detailed knowledge required in analyzing a restricted case. The philosophical axiom, "generalize the disease but individualize your patient" is something that does not find a proper place either in medical text books, teachings, and unfortunately not enough in practice. The people are largely to blame for this state of affairs. They expect and demand too much specific medicine. To their mind there exists an individuality to diseases in general that is only to be met by its minute recognition on the part of the physician. Remedies and medicines are to the laity as so many specifics, they cannot understand it otherwise.

KOCH.

The late discoveries of Koch in regard to the bacillus of tubercle, led many to expect that we were on the threshold of the possession of a weapon against their fell disease, just as the discovery of Jenner proved to be the death-blow to small-pox. Small-pox, although a varying disease in its quantity and intensity, is nevertheless a distinct and specific disease, whereas consumption is something of quite a different order; aside from its not being always tubercular, it may at times be but the simple closing act of a long drama of suffering and disease and entirely unconnected with tubercular consumption. These cases could in no wise be deemed remediable through Koch's lymph, were this lymph to become ever so successful as a germicide to the bacillus. There are so many sources from whence one may become consumptive, that tubercular infection is by no means as unavoidable as might be imagined. The tubercular infection is too often but a secondary process—the general or local consumption or tendency to the disease being primarily, only an inviting ground or a condition upon which tuberculosis has been engrafted.

CLIMATIC CURES.

Patients and their relatives are often inordinately disappointed with what are called climatic cures for consumption through their neglect of a knowledge and appreciation of these general facts. Consumption, as has been said, is by no means a specific disease in itself, nor is it one particularly amenable to any specified medication. The climatic treatment of this disease has to consider the general diathesis or body and constitutional habits of the patient—either as acquired or inherited—it means the application of the general laws of the chemistry of the air in their relation to the preservation of animal tissues; it also means the scientific and accurate adjustment of the body into such temperatures and degrees of moisture as are most compatible to the preservation and lengthening of life; and where there is actual tuberculosis, the actual asepticity of the air and its germicidal properties—not in the condensed sense in which we use the powder of Persian flowers to chase away fleas, or sulphurous or chlorine gases to destroy germ life,—but as being opposed to the conditions that form their propagation and existence, these being its extreme mobility and freedom from *ground* moisture, and its exposure to the greatest possible amount of sunshine, and absence of high temperature; the reverse of these conditions, stillness or stagnancy of the air, ground moisture, absence of sunshine and an excess of warmth, being those conditions most favourable to bacillary or germ, and microbic life.

SHELTERED LOCALITIES.

A patient may arrive in a region or city wherein the *general* conditions are most favourable and beneficial for the extinguishment of the malady, but the immediate and circumscribed locality that he may choose, may through some local configuration or through artificial means, possess just the opposite and required qualifications. This may be owing to the location of the house in the block or the location of a room in a house or in a hotel. We have often seen patients seeking a “sheltered” locality, find one so well “sheltered,” that it defeated the very object of all their efforts and expense, as shelter but too often means stagnation of air with a superabundance of ground air stasis—something, whose chemical composition about a civilized house is often very faulty—this shelter, if in a depression or too narrow valley, also means a greater variation between the day and night temperature.

SUNSHINE.

It seems almost impossible to convey to the general laity

a comprehensive idea of what is meant by the term "healthy." Sunshine is healthy, but basking in the sun whilst sitting against some strongly reflecting surface in a still air and being immersed in a cool but not chilly sunshiny air in a tolerable degree of motion are wholly different and have entirely different results. We have often seen chills and congestions follow the "sun bath" or baking process, whilst the other is never followed by any accident or injury. Health consists in moderation and not in extremes. Everything actually necessary to the maintenance of life is healthy because it favours the existence of life ; and everything not actually necessary, but which may either overburden or overtask an organ, a series of organs or even unnecessarily and unduly stimulate or depress the mind, emotions or the physique is at variance with the natural laws of health. These reflections hold good as to the matter of diet, rest, exercise, recreation, work or exposures. We have often seen invalids bring on a serious complication to their existing troubles by too much indulgence in accentuated sunshine, a too liberal and too sudden milk diet, too much exercise, or a too sudden and a too radical change of some habit, under the impression that they were doing something very healthy.

EXTREMES.

Many lose their health by the disregard of these rules and unwittingly expect to regain their lost health by rushing to the other extreme. The lesson that many of us have learned, that a frozen nose or ear, or a frozen toe or finger, will certainly be lost by any exhibition of inordinate haste in rushing from one extreme of temperature to the other, and that even in the application of snow to a frozen part, that we must limit the amount of friction for fear of bringing on a too sudden reaction, is a lesson that has its application far beyond the question of frozen noses or ear-tips. Its principles underlie all the questions of health and the maintenance of life, and should be well heeded by all invalids—whether dyspeptic or consumptive. All changes and innovations should be made but slowly and everything—no matter how agreeable or how *healthy* it may be known to be,—should be done or taken in moderation.

TWO OR THREE PER CENT.

Everything should be done with deliberation and forethought, and the invalid on the lookout for a climatic cure, should neither expect a too sensible or a too visible improvement in his condition at first, nor should he give way to

needless despondency. Bankers will tell you that he who makes two or three per cent. per year, is the one who is on the road to wealth. Almost imperceptible beginnings have been the rule with all great fortunes as well as with the big physical gains after lost health. Like the apprentice who engaged himself to a blacksmith for a farthing for the first day and that his wages should be doubled every other day and who soon bankrupted his employer, we should all be content with an almost imperceptible gain at first.

CALIFORNIA.

The California climate offers a variety of climates suited to all and every diathesis; the gouty and the rheumatic, the bronchitic and the asthmatic, the victim of demoralized liver or malarious spleen, as well as the slave to periodical sore throats, enlarged tonsils, or the not overhappy possessor of a pair of rebellious lungs, back-sliding kidneys, or of a disgusted and enfeebled heart, can in its table-lands, foot-hills, or broad and extensive valleys, find a haven—just as a dismasted and storm-torn ship puts into Juan Fernandez isle to recuperate and remast—and if not too far gone, he again resumes his voyage of life—possibly with closer-reefed sails, but still sailing away and probably at anchor in bright sunshiny ports years after, while much stancher and better ships have gone to the bottom.

The Hygienic Congress in London was a great stimulus in all sanitary reforms.
—ED. P.M

Notes and News of the Month.

THE *Phrenological Annual* will contain Miss Jessie A. Fowler's paper read before the Anthropological Section of the British Association (on September 18th) at Nottingham, on "Australian Natives."

* *

ALSO Miss Dexter's paper, read at the Members' Meeting of the F. I. on the "Ethics of Harmony," which has been so highly commented upon.

* *

IN our November number will appear a character sketch of Olive Schreiner; M. Zola; and a sketch of Mr. Richardson, the celebrated inventor in printing.

* *

THE November number will also contain an article on "Brain Surgery," illustrated.

NOTES on Dr. Munro's Presidential Address before the Anthropological Section of the British Association will also be inserted.

* * *

MRS. CHARLOTTE FOWLER WELLS continues her valuable biographical sketches in the American *Phrenological Journal*.

* * *

PHRENOLOGICAL examinations at Fowler Institute daily 10 a.m. to 5.30 p.m. Evenings, from 6.30 to 9 p.m.

* * *

A LIMITED space will be devoted to character sketches, with portraits of a few phrenologists.

* * *

THE December number of *The Phrenological Magazine*, including *The Phrenological Annual*, will be sent, post free, on receipt of 1s.

* * *

ONLY within 15 years have surgeons dared to probe the human brain for the cause and cure of disease. Progress in this branch of medical science has been very rapid during the last five years.

* * *

ADVERTISERS of Books, Health Appliances, Magnetic Batteries, Belts, Vapour Baths, and Hydropathic Homes, and other establishments, will find *The Annual* a most excellent medium for bringing their appliances before a special class of buyers.

* * *

THE "REGISTER OF PHRENOLOGICAL PRACTITIONERS AND LECTURERS."—No name will be entered upon this register unless the person possesses a satisfactory phrenological standing. Full particulars should be sent in by the end of October, as we shall go to press early in November.

* * *

THE *Phrenological Annual and Register* for 1894 will contain the only authorised list of names and addresses (corrected up to date) of Phrenologists, both in England and other countries, and popular and scientific articles on Phrenology will be contributed by well-known writers.

* * *

THE following are the successful candidates at the Midsummer examination :—

Mr. W. A. Williams,	Aberavon,	certificate.
„ David T. Elliott,	Sheerness,	„
„ Eagle,	London, W.,	„
„ Scott,	Denmark,	„

* * *

THE September number of the American *Phrenological Journal* contains an admirable portrait of Charles Darwin, accompanied by some "Memories," by Louisa A'Honesty Nash. His head is one of the greatest living proofs of Phrenology that we have. His Observations were phenomenal; so were his Perceptive faculties. His Patience was remarkable; so was the development of Firmness, which gave him unusual perseverance. Let those who slightly denounce the truths of Phrenology compare, analyse and dissect awhile.

DOCTORS say that the best and simplest remedy for an ordinary attack of hiccoughs is a teaspoonful of sugar soaked with vinegar.

* *

PERSONAL INFLUENCE.—Perhaps we cannot estimate correctly the extent of our influence over every one with whom we come in contact, because in the majority of cases we are not trying to wield any influence. We meet casually with half a dozen acquaintances in the course of a day; we talk on indifferent subjects and part, and straightway forget we all that passed between us, or think we do. But the impressions given and received are as ineffaceable as they might be slight, and we can never hold converse for a brief half-hour with any fellow-creature without leaving some mark and carrying some away.

* *

THE autumnal festival of British science opened at Nottingham on Wednesday, September 13th, when Professor Burdon Saunderson, the well-known Oxford physiologist, delivered his presidential address to the members of the British Association. It was one of exceptional interest, dealing as it dealt with the whole field of modern biological research and the relations of that science with the other sciences. Like the address of Huggins in 1891 it emphasized once more the profound interdependence of the varied fields of research. The programmes of the several sections promised much of interest. The sectional presidents were:—Mathematical and Physical (A), Mr. R. T. Glazebrook; Chemistry and Mineralogy (B), Professor Emerson Reynolds; Geology (C), Mr. J. J. H. Teall; Biology (D), Canon Tristram; Geography (E), Mr. Seebohm; Economic Science (F), Professor J. S. Nicholson; Mechanical Science (G), Mr. Jeremiah Head; and Anthropology (H), Dr. Munro. The excursions and popular lectures arranged were numerous and full of interest. Nottingham has not been visited by the British Association since 1866.

* *

DIFFICULTIES NOT TO SCARE US.—It is weak to be scared at difficulties, seeing that they generally diminish as they are approached, and oftentimes even entirely vanish. No man can tell what he can do till he tries. It is impossible to calculate the extent of human powers; it can only be ascertained by experiment. What has been accomplished by parties and by solitary individuals in the torrid and frozen regions, under circumstances the most difficult and appalling, should teach us that, when we ought to attempt, we should never despair. The reason why men oftener succeed in overcoming uncommon difficulties than ordinary ones, is, that in the first case they call into action the whole of their resources, and that in the last they act upon calculation, and generally under calculate. Where there is no retreat, and the whole energy is forward, the chances are in favour of success; but a backward look is full of danger. Confidence of success is almost success; and obstacles often fall of themselves before a determination to overcome them. There is something in resolution which has an influence beyond

itself, and it marches on like a mighty lord among its slaves ; all is prostration where it appears. When bent on good, it is almost the noblest attribute of man ; when on evil, the most dangerous. It is by habitual resolution that men succeed to any great extent ; impulses are not sufficient. What is done at one moment is undone the next : and a step forward is nothing gained unless it is followed up.

* *

Is Phrenology a Science ? is a question that has been raised by the correspondents of the *Western Mail* :—

Mr. W. A. Williams, secretary of the Aberavon Phrenological Society, sends us “ a modest exposition of the fundamental principles of the science of Phrenology,” which, he concludes, “ in the hands of scientific men has all to gain and nothing to lose, though, like all other sciences, it has had to struggle with difficulties, especially when handled by men like Mr. H. J. Powell, whose process of thought is stereotyped and whose eyes are closed to scientific fact.”

Professor James Allen, Cardiff, writing on the above subject, asks “ Anti-Superstition ” for the names of a murderer and a Gladstone who are an exact replica, phrenologically, of each other, and adds that though “ Anti-Superstition ” can produce such cases “ in multitudes,” he himself in ten years’ practice has never met two persons who were “ phrenologically alike.” Professor Allen complains of the action of Mr. H. J. Powell, who, after declaring that Phrenology is a sham, when asked to prove it so has “ neither the time nor the inclination.”

“ Truth-seeker ” (South Kensington) writes :—It is evident from Mr. Powell’s reply to those of your correspondents who have written in defence of Phrenology that he realises his defeat. It would have been better if he had said so plainly, instead of backing out of the discussion by saying he has neither time nor inclination to prolong it.

Mr. J. H. Beatty, Whitland, writes :—I do not hold that Phrenology is so utterly false and unfounded as augury, palmistry, and astrology. There is some degree of relationship between brain development, as manifested externally, and intelligence, &c. But, in my opinion, the greater part of the truth in Phrenology is more correctly attributable to physiognomy.

* *

THE Rev. H. B. Tristram, M.A., LL.D., D.D., F.R.S., closed his powerful Presidential address of the Biological Section of the British Association, with the appropriate tribute to Prof. Owen. He said :—

“ I cannot conclude without recalling that the past year has witnessed the severance of the last link with the pre-Darwinian naturalists in the death of Sir Richard Owen. Though never himself a field-worker, or the discoverer of a single animal living or extinct, his career extends over the whole history of palæontology. I say palæontology, for he was not a geologist in the sense of studying the order, succession, area, structure, and disturbance of strata. But he accumulated facts on the fossil remains that came to his hands, till he won the fame of being the

greatest comparative anatomist of the age. To him we owe the building up of the skeletons of the giant *Dinornithidæ* and many other of the perished forms of the gigantic sloths, armadilloes, and mastodons of South America, Australia, and Europe. He was himself a colossal worker, and he never worked for popularity. He had lived and worked too long before the Victorian age to accept readily the doctrines which have revolutionised that science, though none has had a larger share in accumulating the facts, the combination of which of necessity produced that transformation. But though he clung fondly to his old idea of the archetype, no man did more than Owen to explode the rival theories of both Wernerians and Huttonians, till the controversies of Plutonians and Neptunians come to us from the far past with as little to move our interest as the blue and green controversies of Constantinople.

“Nor can we forget that it is to Sir Richard’s indomitable perseverance that we owe the magnificent palace which contains the national collections in Cromwell Road. For many years he fought the battle almost alone. His demand for a building of two storeys, covering five acres, was denounced as audacious. The scheme was pronounced foolish, crazy, and extravagant; but, after twenty years’ struggle, he was victorious, and in 1872 the Act was passed which gave not five, but more than seven acres for the purpose. Owen retired from its direction in 1883, having achieved the crowning victory of his life. Looking back in his old age on the scientific achievements of the past, he fully recognised the prospects of still further advances, and observed, ‘The known is very small compared with the knowable, and we may trust in the Author of all truth, who, I think, will not let that truth remain for ever hidden.’

“I have endeavoured to show that there is still room for all workers, that the naturalist has his place, though the morphologist and the physiologist have rightly come into far greater prominence, and we need not yet abandon the field-glass and the lens for the microscope and the scalpel. The studies of the laboratory still leave room for the observations of the field. The investigation of muscles, the analysis of brain tissue, the research into the chemical properties of pigment, have not rendered worthless the study and observation of life and habits. As you cannot diagnose the Red Indian and the Anglo-Saxon by a comparison of their respective skeletons or researches into their muscular structure, but require to know the habits, the language, the modes of thought of each; so the mammal, the bird, and even the invertebrate, has his character, his voice, his impulses, aye, I will add, his ideas, to be taken into account in order to discriminate him. There is something beyond matter in life, even in its lowest forms. I may quote on this the caution uttered by a predecessor of mine in this chair (Professor Milnes Marshall): ‘One thing above all is apparent, that embryologists must not work single-handed; must not be satisfied with an acquaintance, however exact, with animals from the side of development only; for embryos have this in common with maps, that too close and too exclusive a study of them is apt to disturb a man’s reasoning power.’

“The ancient Greek philosopher gives us a threefold division of the intellectual faculties, and I think we may apply it to the sub-division of labour in natural science, namely, the power that divides, discerns, distinguishes—*i.e.* the naturalist; the operation of the closet zoologist, who investigates and experiments; and the faculty of the philosopher, who draws his conclusions from facts and observations.

“The older naturalists lost much from lack of the records of previous observations; their difficulties were not ours, but they went to nature for their teachings rather than to books. Now we find it hard to avoid being smothered with the literature on the subject, and being choked with the dust of libraries. The danger against which Professor Marshall warns the embryologist is not confined to him alone; the observer of facts is equally exposed to it, and he must beware of the danger, else he may become a mere materialist. The poetic, the imaginative, the emotional, the spiritual, all go to make up the man; and if one of these is missing, he is incomplete.

“I cannot but feel that the danger of this concentration upon one side only of nature is painfully illustrated in the life of our great master, Darwin. In his early days he was a lover of literature, he delighted in Shakespeare and other poets; but after years of scientific activity and interest, he found on taking them up again that he had not only grown indifferent to them, but that they were even distasteful to him. He had suffered a sort of atrophy on that side of his nature, as the disused pinions of the Kakapo have become powerless—the spiritual, the imaginative, the emotional, we may call it.

“The case of Darwin illustrates a law—a principle we may call it—namely, that the spiritual faculty lives or dies by exercise or the want of it even as does the bodily. Yet the atrophy was unconscious. Far was it from Darwin to ignore or depreciate studies not his own. He has shown us this when he prefixed to the title-page of his great work the following extract from Lord Chancellor Bacon:—‘To conclude, therefore, let no man, out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain that a man can search too far, or be too well studied in the book of God’s word, or in the book of God’s works, divinity or philosophy, but rather let men endeavour an endless progress or proficience in both.’ In true harmony this with the spirit of the father of natural history, concluding with the words, ‘O Lord, how manifold are Thy works, in wisdom hast Thou made them all, the earth is full of Thy riches.’”

The fact cannot be denied that biologists of the day are closely in touch with phrenologists.

Book Notice.

The Value of Hypnotism, by Thomas Chrisfield, London, 34, Southwick Street, Hyde Park, W. Price 1/-. The student will find nothing new in this little work, nor, indeed is it intended for deep reading, but

rather is an attempt to place Hypnotism in a more favourable light as a therapeutic agent, than is accorded it by the mass of sufferers. As might be expected, Suggestion is its keynote, and in the last few pages, the author gives, from his own experience, several illustrations of successful results by this method of treatment. It is hardly the place here to open the whole question of the value of hypnotic suggestion in disease. We are prepared to grant that authenticated cases of cure are upon record, but in all seriousness was it so indispensably necessary to the establishing of his hypothesis, that Mr. Chrisfield attacks the older school of Magnetism? The supporters of the "fluid" theory, it is true, occupy too firm a ground to be shaken by a little adverse criticism, yet we venture to say, in a brochure of this nature, such criticism might well have been omitted, to the inclusion of more interesting matter. After all, the hypnotists are but the agnostics in this case, and while respecting their labours, it might be well to casually remark that the records of vital Magnetism as a healing power, are not yet likely to be o'ertopped by those of its louder-voiced if younger sister. It is impossible to write of the phenomena of suggestion without dealing with questions of morality. When Mr. Chrisfield tells us that "the curative effect of suggestion remains," at the same time giving the reader to understand that other effects absolutely do not exist, or if they do, in such a comparatively weak degree as to be powerless, we consider his conclusion to be at variance with many facts. Who is able to predict with any certainty the course a suggested idea will take in the labyrinth of the hypnotic's brain? If, as appears probable, the suggestion links itself in many cases with associated memories lingering in the consciousness, an idea promulgated with the most innocent motive may produce actions entirely outside the range of the operator's primary intention. The author, however, very curiously enough admits that he thinks "Hypnotism might plausibly be used for criminal purposes . . . where there is a predisposition to immorality on the part of the person hypnotised." We might ask what special qualification hypnotists as a body possess for diagnosing "predisposition to immorality"? The expert phrenologist or criminal anthropologist might recognise an individual as of a type whose impulses were evil, yet suppose incipient criminality might yet have left no physical trace, or one of so faint a nature as to be not easily distinguishable! Mr. Chrisfield contends that it is simply impossible to hypnotise individuals against their express desire, or hypnotised, to influence them contrary to their will. If for the sake of argument, the first case were admitted, much might be averred against the second. Individual standards of morality vary immensely, and a suggestion which might, even from our author's standpoint, be repelled with abhorrence by a pure-minded hypnotic, might find ready lodgment in a mind whose moral instincts were of a lower grade. The sensational trial of Eyraud and Gabrielle Bompard in Paris is surely of too recent date to justify more than mere mention. Said Lombroso, the famous criminal anthropologist, of the latter, "Certainly she would be able to lend herself with good grace to the idea of a murder." It would doubtless be interesting to pursue this

subject, but our limited space forbids. We recommend the book to our readers with some caution, but it is worth reading, as showing the standpoint the professional hypnotist takes. Its price places it well within the reach of subscribers to the *Phrenological Magazine*.—P.G.T.

Correspondence.

BRAIN DEVELOPMENT AND FUNCTION.

To the Editor of the PHRENOLOGICAL MAGAZINE.

Sir,—In the Anthropological Section of the British Association this morning, the President in his inaugural address dealt to some extent with the above subject. As it is one likely to be of more general interest than those dealt with in some other sections, I should like with your permission to make a few comments thereon.

In the early part of his address, Dr. Munro dealt with what might be described as the evolution of the brain. He says (p. 6), "Thus each generalisation, when added to man's previous stock of knowledge, widened the basis of his intellectual powers, and as the process progressed, man would acquire some notion of the abstract ideas of space, time, motion, force, number, &c., and continuous thought and reasoning would ultimately become habitual to him. All these mental operations could only take place through the medium of additional nerve cells, and hence the brain gradually became more bulky and more complex in its structure."

This is evidently in accordance with facts. An infant at birth, for instance, has invariably an almost abnormal development of the posterior lobe. Gradually, as it becomes more intelligent, the anterior lobe is proportionately developed, until it is able to think, to reason, to reflect, &c.

As the learned president pointed out, however, Mr. Alfred R. Wallace is not inclined to adopt this view. He says (page 7), "That if you compare the savage with the higher developments of man, we are driven to the conclusion that in his large and well-developed brain he possesses an organ quite disproportionate to his actual requirements—an organ that seems prepared in advance, only to be fully utilised as he progresses in civilisation. A brain one-half larger than that of the gorilla would, according to the evidence before us, fully have sufficed for the limited development of the savage, and we must, therefore, admit that the large brain he actually possesses could never have been solely developed by any of those laws of evolution whose essence is that they lead to a degree of organization exactly proportionate to the wants of each species, never beyond those wants; that no preparation can be made for the future development of the race; that one part of the body can never increase in size or complexity, except in strict co-ordination to the pressing wants of the whole."

At first sight this statement of Mr. Wallace's would appear feasible, but Dr. Munro shows its fallacy by reference to the cosmic forces and "localisation of brain function." The learned president does not think the latter is in a sufficiently advanced state for us to speculate to any great extent on the relative sizes of the skulls of different races either in present or prehistoric times.

This may be so, but members, associates, and the general public who are interested in such a study, would do well to read the works of the late Drs. Gall and Spurzheim, who were the first to point out the localisation of brain function, and who, though ridiculed and scorned by leading scientists of their time, did much towards stimulating modern scientists in their recent investigations. Gall maintained that savages, as a class, had narrow, retreating foreheads, a prominent posterior lobe, while the skull was very wide between the ears, showing clearly that the reasoning or reflective faculties were least prominent. I am therefore inclined to believe that if psychologists, physiologists, and anthropologists would give some little attention to the scientific aspect of Phrenology, they would not find quite so much difficulty in arriving at some definite conclusion in regard to the relative development of savage and civilised races. I am personally much indebted to Dr. Munro for his able address, and have no doubt that it will do much to help all searchers after truth in their several investigations.—I am, sir, &c.

G. H. J. DUTTON.

Mechanics' Institution, September 14th, 1893.

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.]

LECTURERS on Phrenology are making their autumn arrangements, as we shall see by the following announcements.

* *

MR. A. HUBERT is still at Harrogate, where he has been lecturing of the Spa to appreciative audiences. His character sketches of celebrities are shown by lime-light, and include fifty portraits of leading statesmen, divines, musicians, actors and doctors.

* *

MR. MARK MOORES, who is completing his engagements for the autumn, says he will be on a lecturing tour until Whitsuntide. He

has pictorial Sunday evening lectures, illustrating the "Beauties of the Earth," "Sacred Statuary," "Rambles in Bible Lands, in the Homes of the Egyptians."

* *

MR. COOK will continue his professional work at Newport, Mon.

* *

MR. J. DYSON will lecture at Redcar, Isle of Man, Grimsby, Barrow-in-Furness, Lancaster, Worksop, Hull, Sheffield, and Elland.

* *

MR. AND MRS. JOHN THOMPSON, of Scarborough, will lecture at Newcastle-on-Tyne and Blyth during the autumn.

* *

MR. JAMES ALLEN is lecturing in Cardiff during the Autumn and Winter, illustrating his lectures with lime-light views.

* *

MR. J. W. TAYLOR, A.F.I., has engagements at Layland, Caton, Bentham, and Kendall. His Summer work has been most encouraging.

* *

MR. T. TIMSON has arranged to lecture at Nottingham, Hinckley, Enderby, Cardiff, Birmingham, Walsall, and Belper.

* *

MR. GEO. RUDD, of Ilfracombe, intends to confine his phrenological labours to Devonshire for the next few months.

* *

MR. H. J. TOMPKINS, of Leyton, will continue his work as usual in the study and practice of Phrenology.

* *

MR. WM. SCOTT has been enlightening the public in Denmark on the subject of Phrenology, by examining the heads of the Danes in some of their villages.

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MR. T. SCOTCHMER intends visiting different towns and villages in the Isle of Wight, Bournemouth, suburbs of London, Grantham, and villages near Bradford.

* *

MR. EUGENE GORRIE, of Melton Mowbray, has arranged to give several lectures on "The Philosophy of Handwriting," and "Selections from the Correspondence of a Professional Graphologist." He has a "world wide *clientèle*" in his art.

* *

MRS. WINTERBURN and family are travelling in Scotland, where she has arranged tours, and combining musical entertainment with scientific instruction. Since Mrs. Winterburn obtained the Associateship of the

Fowler Institute last year she has removed from Whitby to Leeds, and is now devoting the whole of her time to the study and interests of the science, with occasional tours for lecturing purposes into the country.

* *

MR. A. CHEETHAM, phrenologist and electrician, Rhyl, has added a printing business to his establishment, and during the autumn he intends to pay attention to the issuing of other pamphlets and books, some of which have been partly written for several years but have had to be put on one side for want of time. Mr. Cheetham has issued during the summer a new pamphlet of over 130 pages, entitled "Curative Electricity, a Manual for the Home Treatment of Disease." This is one of the best books of its size that has ever been issued on this subject at a popular price. The book is complete in three parts for 1/6, and it not only contains a complete exposure of the numerous electrical frauds, but gives the way of treating with electricity for about 150 different complaints.

* *

AFTER two months' vacation the Aberavon Phrenological Society met on Tuesday September 5th. There was a strong muster of members, and every indication of the progressive spirit that has animated us in the past animating us again in the future. Judging by the remarks of our members, it is evident that they are determined to do all they can in the interest of the Society and Phrenology. Councillor John Thomas has been unanimously elected President in place of the Rev. T. G. Dyke, whose genial presence and useful services we are deprived of through his change of circuit. It was also unanimously resolved that Mr. John Daniels succeed Councillor Thomas as Treasurer. A reading class will soon be formed with Combe's "Constitution of Man" as a text book. I trust that all members will endeavour to make it a success, by availing themselves of its advantages. After the business of the evening, Mr. W. A. Williams gave a short paper on the "Science of Ethnology."

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 photograph; 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 6s., for twelve 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.]

T. W. (Belfast).—This lady appears to have a favourable organization. The photo indicates a fair balance between mind and body. The health signs are very well represented. There are indications of

ardour, susceptibility and impulsiveness. She desires to appear to the best advantage and to be thought well of ; with her, praise is a great incentive to action. Her social nature gives her a love of friends and great attachment to them. The domestic group is well represented, giving her an ardent nature. She is energetic and persevering ; but will be at her best when her powers are called out or when acting under stimulus or excitement. She has considerable ingenuity ; her observing faculties appear strong, giving her a general desire to seek and obtain information, and she will learn rapidly. She has good reasoning faculties and reliable judgment, is rather critical, and a little too prejudiced ; her intuitive powers are strong, hence she is quick to read the actions of another. The photo is not a favourable one for delineation.

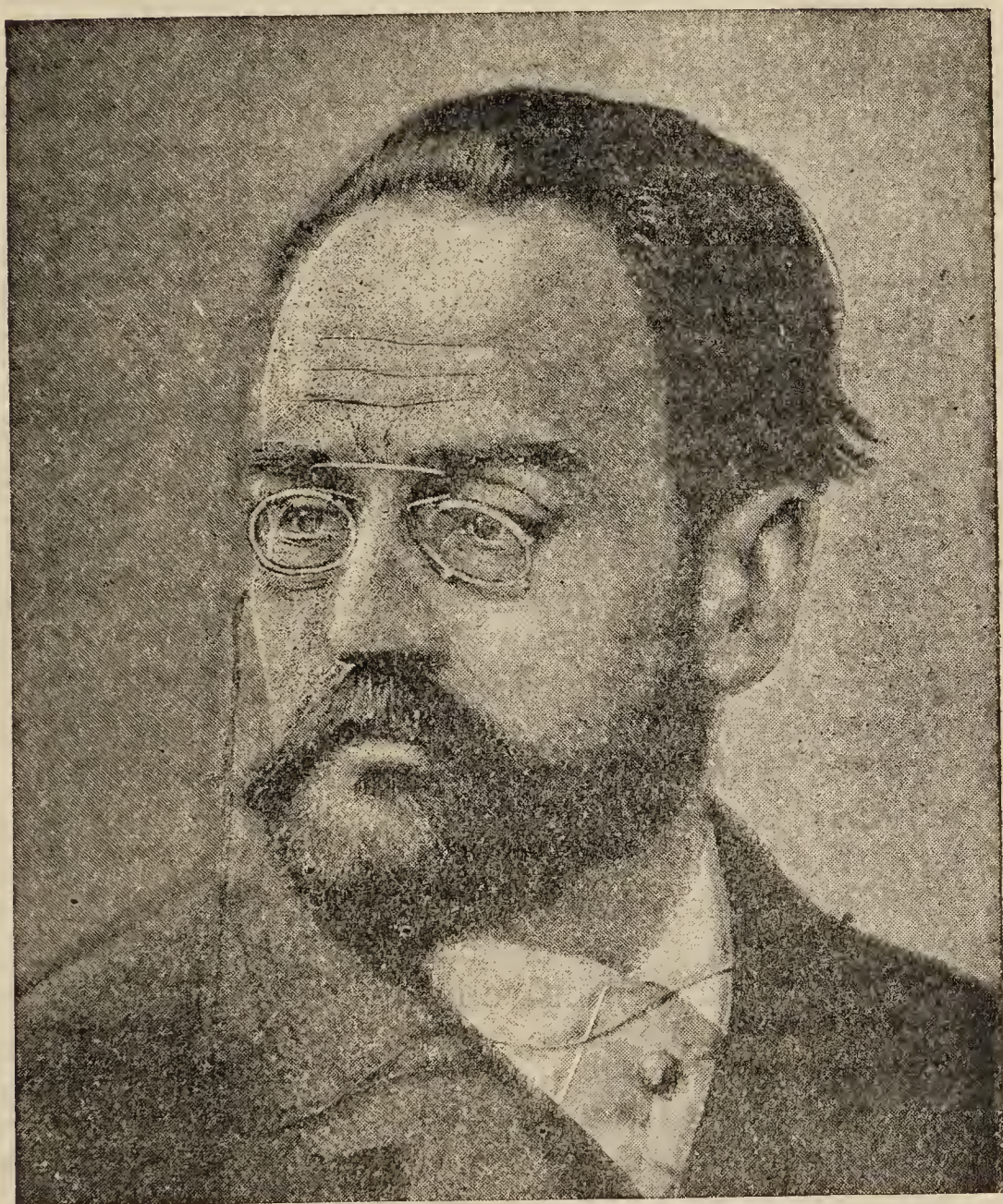
H. B. F. (London).—The photo of this gentleman indicates a desirable state of mind. There is every evidence that hopefulness and buoyancy of disposition are strong characteristics. He is candid, open-minded, and very conscientious. He requires more push, spirit and perseverance, and more selfishness, and needs to cultivate the powers of the body as well as of the mind. He should strengthen the lungs, get into the air and cultivate deep breathing. His memory of events and general details is defective, consequently he makes slow progress in acquiring knowledge, this will require careful training to overcome. He needs to use his eyes more and think less ; he has good qualities but they want bringing out.

H. C. G. (Portsmouth).—This gentleman has an active organization, and a love of locomotion. The head is broad, combining energy and spirit with strength of character to push his plans and carry out his ideas. He is impulsive and restless, and appears to be uncertain in his habits, and lacks decision. He has a mind well adapted to business pursuits, is a man of action, quick to see, and judge. His preceptive faculties are strong, so that he gathers information quickly, and soon masters any new subject. Order and system are strongly marked. He needs more restraining powers, is too impulsive, speaks too freely, and is apt to be inconsiderate. He has good critical powers, artistic skill and constructive talent. Is generally cheerful and hopeful.

FIXED STAR.—The photos of this gentleman indicate great strength of character. He has a grasp of mind and mental scope that raises him above the average. He is a worker and has great constitutional strength, the mind is vigorous and active. His propelling faculties are strongly marked. The photos indicate unusual business ability and organizing talent. His observing faculties constitute him a keen observer, and give him a command over a wide range of knowledge. As a thinker he is practical and sound, and has no ideas that cannot be used up. He has excellent planning abilities ; has always recognised the value of order in his work, and saves considerable time by his management in this direction. He is quite thorough in what he undertakes, and will see it through at all costs. A man of large sympathies and a moving spirit in his sphere.

THE
Phrenological Magazine.

NOVEMBER, 1893.



CHARACTER SKETCH OF M. EMILE ZOLA.

THE mind of every individual has some characteristic feature that gives him his identity. This may be breadth or narrowness, largeness or contractedness, brilliancy or dulness, refinement or coarseness, vigour or insipidity. Every individual has a brain peculiar to himself, and the tone of his mind corresponds with the development of his brain. M. Emile Zola is one whose

phrenology and physiognomy do not belie his cerebral capacity. He is a live man, every inch of him, yet he is not taking care of himself. He is fast using up his vitality, and appears like a man who works under some great pressure, as though he could not stop if he would ; he is a man who is controlled by his work. He spares himself no labour to gain his object. He digs his pen deep into his ink-pot, and gathers his colouring with the very force of his intellect. Earnestness is a mild term when describing his character ; he has almost a desperate strength to his intellect. He has a literary turn of mind, gathers information and knowledge easily, and has a practical way of making use of it. He is more of a scholar than a business man, but he is not short of power to value and properly estimate qualities and things. He is orderly, systematic, and works after a plan. He has a design in all he does. He is a deep thinker, and is forceful rather than refined in style of expression. His head is high and broad, and indicates a great mastery of facts and an immense power of realization. His large Perceptive faculties joined to his large Sublimity and basilar brain around and behind the ears make him dramatic in order to produce an effect. He is able to sometimes exaggerate in describing experiences, in fact such a mind must rather enjoy drawing on nature's sensual side to gratify its forceful imagination.

What would seem strong language to most intellects, would seem weak, insipid, and not sufficiently outspoken and plain to him. The line of development from the superior portion of the nasal bone to where the hair appears, is remarkably well represented. He has an excellent memory of faces, places, and facts ; is analytical, comparative, apt in his discriminations, and intuitive in his deductions of character and motives. He has the power to describe character graphically through his Human Nature, Sublimity, and Combativeness ; these faculties give spice to his utterances, whether spoken or written. The particular sad and discontented expression of his face will at times be changed and lighted with the other extreme of sentiment, but an abnormal craving for experiencing vivid and exciting scenes has left its indelible impression on his face ; an unsatiated appetite has left its usual mark of discontentment, and indicates a morbidness of mind peculiarly his own. His strong imagination gives a weirdness to his language. The height of the head, in the region of Firmness, indicates resoluteness and determination of character, which will account for his perseverance in the pursuance of whatever object he wishes to master. He has not too much modesty, nor are his adaptable faculties so

marked as to enable him to dress his thoughts to suit an elevated taste. Had he more of these faculties he would re-touch his facts and models and add beauty and grace, instead of depicting the full glare of depravity. The stern and horrible side of life has more point in it to such a character than that which has purity as its backbone. He is actuated by a belief that more good is done by a description of the extremes of human life, real or imaginary, in impressing and imparting a moral than by any other means.

He is short, thick-set, with more than ordinary concentrated power; he can consequently focus his ambitions and aspirations more readily than those who are tall, thin and of slower circulation. His hair is dark, straight and turned back from the forehead, and of late his face has become sallow and shrunken, though his portrait in front of "Dr. Pascal," his last novel, represents him as well rounded out in features. His nose is broad at the blade, narrow at the bridge. His eye has lost the kindling which it must have had when younger. He has now a haunted look as though he were going through some strange experiences, this is increased when by a nervous habit he raises his eyebrows and wrinkles horizontally the skin of his forehead. In conversation he speaks as rapidly as he thinks, and his Causality questions frequently. His voice, when raised in earnestness or expressive of surprise, rises to a thin high pitch. His sympathies are large, which he must have inherited from his remarkable mother, who was a French lady; and throughout his works he makes this faculty speak with feeling. His Perceptive faculties are strongly represented, giving him a scientific turn of mind. He could have easily turned his attention to natural history, and enriched his country (he was born in Paris) with rich stores of useful knowledge.

His latest novel, called "Dr. Pascal," was published during the present year. It is a very powerful book, and intended to be "a sermon on Heredity," to quote M. Zola's own words—"which will establish my theory that the day when men know how to master this influence they will be, what they are not now, the masters of the destinies of the human race." He dedicates it to "The memory of my mother and to my dear wife." On the other side of the leaf is the following quotation from Tennyson:—

"Then comes the statelier Eden back to men.
Then springs the crowning race of human kind,
May these things be."

M. Zola has certainly a very decided faith,—a faith in work. When addressing the General Association of Parisian

Students, he concluded as follows : " I beseech you to put your trust and your faith in work. Toil, young men, toil ! I am keenly conscious of the triteness of the advice. It is the seed which is sown at every distribution of prizes in every school, and sown in rocky soil ; but I ask you to reflect upon it, because I, who have been nothing but a worker, am a witness to its marvellously soothing effects upon the soul. The work I allude to is daily work ; the duty of moving one step forward in one's allotted task every day. How often in the morning have I taken my place at my table, my head, so to say, lost ; my mouth bitter ; my mind tortured by some terrible suffering—and every time, in spite of some terrible rebellion—after the first minutes of agony, my task proved a balm and a consolation ! I have invariably risen up from my daily work, my heart sometimes throbbing with pain, but firm and erect, able and willing to live till the morrow. Yes ! work is the one great law of the world, which leads organized matter slowly but steadily to its unknown goal. Life has no other meaning, and our one mission here is to contribute our share to the total sum of labour, after which we vanish from the earth."

Work and labour are truly essential, but in the mere grind of the world we must not let them carve away our noblest aspirations and thoughts.

THE EDITOR.

BRAIN - SURGERY.*

BY W. W. KEEN, M.D., LL.D.

IN order to understand modern progress in cerebral surgery it is necessary first to understand what has been achieved by experimentation upon the brain. When I was a student of medicine, thirty years ago, the brain was regarded as a single organ, and its various functions were not thought to have any especial localized centres of action. When the brain acted it

* To *Harper's Magazine* for June, 1893, Dr. Keen contributed some interesting facts on "Brain-Surgery." He admitted that when he was a student of medicine thirty years ago, the brain was regarded as a single organ, and its various functions were not thought to have any especial localized centres of action. And now, although he recognises that the brain instead of being a unit is a very complex organ, yet the localized faculties, according to Phrenology, he considers to be entirely overthrown by the medical profession and experiments upon animals. His mental sight is defective if he cannot see that modern research and experiment have clenched the two points inseparably, namely, Observation and Experiment.

was thought that the whole of it acted, just as the liver or the stomach acts, as a whole. Now we know that instead of the brain being a unit, it is really a very complex organ. Just as in the abdomen, besides the other organs in its interior, we have the stomach, the liver, the pancreas, and the bowel, each of which has its part in digestion, so correspondingly in the brain, besides the portions concerned in sight, smell, thought, &c., we have four adjacent portions which are concerned in motion. One produces motion of the face ; another, motion of the arm ; a third, motion of the leg ; and the fourth, motion of the trunk.

How, it may be asked, have these facts been determined ? Has it not been by observing the effects of injuries and diseases in man ? To a small extent, yes. But very, very rarely does disease or injury involve only one of these very limited regions of the brain ; and the moment two or more of them are involved our inferences become confused and misleading. As a matter of fact which cannot be gainsaid, nine-tenths of our knowledge has been derived from exact experiment upon animals, and in this way : a monkey is etherized, a certain area of its brain is exposed, and an electrical current is applied. This stimulation of most portions of the brain is followed by no motion, in any part of the body. These parts of the brain, therefore, have nothing to do with motion, but are the centres for general sensation (touch), or for certain special senses, as sight, hearing, &c., or for mental processes. But in one definite region of the brain, called the "motor area," the moment the brain is stimulated by the electrical current motion is produced. Moreover, it was soon found that stimulating different parts of this motor area produced motion in different parts of the body, and that this was not haphazard, but that stimulation of one part of it always produced motion in the arm, and in another part motion in the leg, &c. Thus have been mapped out the various portions of the motor area, as will be presently described in detail.

It is evident that by experiment upon animals the motor area can be more easily and more exactly determined than can those regions which are the seat of the faculties of Smell, Taste, Sight, and Hearing, the presence or absence of these senses in animals being difficult to determine with absolute accuracy. Still more is this true of the parts of the brain which have to do with mental processes. Yet disease and injury in man, if they alone could answer the questions what part of the brain has to do with motion, what part with sight, what part with the intellect, ought to have

answered them long ago. No better evidence could be given of the superiority of experiment upon animals over observation of accident and disease in man in determining facts of this character than this, that those centres are best and most accurately known which can be determined by vivisection, and that those in which vivisection can aid us but little are still only vaguely located.* Thus the motor area is positively and definitely located; that for sight approximately well; those for hearing, smell, and taste, and general sensation (touch) are still uncertain, though guessed at. As to those for mental processes, except, perhaps, one which will be alluded to later, we are almost wholly in the dark. Moreover, disease and accident have made their cruel and rude experiments ever since the world began. But as a matter of



Fig. 1.—Side View of the Surface of a Monkey's Brain, showing the Location of the various Fissures and of the Motor Centres.—(*Horsley and Schafer.*)

Posterior to the centres for the Face, Arm, and Leg, will be found the Fissure of Sylvius, Parallel Fissure, and the External and Internal Parieto-occipital Fissures. Down the centre of the brain, through the Centres for the Leg, Arm, and Face, can be traced the Fissure of Rolando.

fact the last fifteen years of experimentation have taught us more than the previous fifteen hundred years of careful observation and of *post-mortem* examination.

Let me now briefly explain this "localization of function" in the brain, and then show its value and certitude by cases which arouse our interest, not only by their illustrating the practical applications of science, but by the cheering and humane results in the relief of human suffering and the saving of human life.

Fig. 1 represents the motor area as ascertained by many experiments such as I have described upon the brains of

* Provided anæsthetics are given.—ED. P.M.

monkeys. On its surface will be observed certain broad black lines labelled, from in front backward, "Precentral sulcus, Fissure of Rolando, Intraparietal fissure, External parieto-occipital fissure, Fissure of Sylvius, Parallel fissure," and others without names. In the middle, running downward and forward toward the left hand of the figure, notice especially the fissure of Rolando. This and the fissure of Sylvius are the most important fissures of the entire brain. The fissure of Rolando is, so to speak, the "axis" of the motor area of the brain. At its upper end will be observed the centre for the leg, with certain minor divisions which are not marked. In its middle lies the arm centre; and it should be remarked that the part where the word "retraction" is is the shoulder centre, a little lower down is the elbow centre, and where "wrist and fingers" occurs is the hand centre. At the lower end of the fissure of Rolando lies the centre for the face, and at other points will be observed the centres for the trunk and head. By the word "centre" is meant that, for example, if you expose the part of the brain marked "arm," and apply the poles of an electric battery to that portion of the surface of the brain, you will produce muscular movement in the arm. If at the upper end you will move the shoulder; at the middle, the elbow; lower down, you will move the hand, &c. This diagram shows the fissures and centres as ascertained in the brain of the monkey, but it must be remembered that they have an exact parallel in the human brain. The same fissure of Rolando exists there, the same fissure of Sylvius, the same intraparietal fissure, &c., as is seen in Figs. 3, 6, 8, and the same centres for the arm, leg, trunk, and head. When I state that these exist in the human brain I am not stating what is theoretical, but that which, in common with scores of surgeons, I have verified in many cases in which I have exposed the human brain, applied the battery exactly at the places shown in this diagram of the monkey's brain (with such modifications as would follow the slightly altered relations of the same parts in the human brain as compared with the monkey's), and have obtained in man exactly the same resulting motions as have been thus experimentally determined in the monkey.

Naturally the first question that will occur will be, "This diagram shows the fissures and centres on the brain, but how are you going to tell from the outside of the head, without opening the skull, where they lie?" This has been determined by careful study of the human brain and skull, and their relations to each other. I will give only one illustration, and that by far the most important, namely, how we locate the

fissure of Rolando, and therefore practically the whole motor area. Measure any head in the middle line, from a point between the eyebrows to that bony prominence which any one of my readers can feel at the back of the head just above the border of the hair. These points are called respectively the "glabella" and the "inion." Divide this distance into two equal parts, and thus obtain the mid-point between them. The fissure of Rolando starts half an inch behind this mid-point between the glabella and the inion, and runs downward and forward at an angle of 67° . There have been constructed various simple and other complex apparatuses for the purpose of determining just this angle of 67° , but it was reserved for Mr. Chiene, of Edinburgh, before the Congress of American Physicians and Surgeons in Washington, in September, 1891, to



Fig. 2.—Prof. Chiene's Method of finding the Angle of the Fissure of Rolando.

point out the simplest possible method of determining this angle, which any one of my readers can use. If a square of paper be folded diagonally, it is obvious that the right angle of 90° at two of the corners is divided into two halves, or two angles of 45° each. If the paper be then again folded so as to divide one of these angles of 45° into two angles of 22.5° each, it is evident that one angle of 45° and another of 22.5° make an angle of 67.5° , which varies only half a degree from that of the fissure of Rolando. (Fig. 2.) If the middle line of the head be marked with an aniline pencil on the shaven scalp, if its mid-point be then fixed, and if the strip of paper just described be so placed that its edge indicating the angle of 67.5° runs downward and forward from a point half an inch back of the mid-point, the edge will correspond to the line of the fissure of Rolando, and can be marked by the aniline pencil on the scalp. If this line be measured for a distance of $3\frac{3}{8}$ inches from the middle line of the head, the length of the fissure of Rolando is also shown.

It is not necessary for me to go further into details. I

propose now, after having thus explained the "localization of function" in the brain, and the means of locating the motor area from the exterior, to show not only that, as a matter of fact, it has been verified in actual surgical experience, but also that it is so accurate that from the exterior of the head, without any scar or other evidence of injury (or even in the presence of an otherwise misleading scar), without any fracture of the skull, without any lump, prominence, or other means to guide us, cerebral localization is a reality, and as reliable as the needle of the compass itself to guide us exactly to the correct spot, so that we can open the head and expose the brain with an accuracy which is truly marvellous. If the last fifteen years of experimentation have done so much, what may we not expect in the next fifteen? Does not humanity as well as science protest against any hindrance to the further prosecution of work which has accomplished such results? Is this the work of "inhuman devils," as Canon Wilberforce has been pleased to term those engaged in it, or is it the work of humane men of science anxious to mitigate human suffering and prolong human life? *

Now let us see what results practical surgery has given us by the application of the doctrines of cerebral localization of function to special cases, otherwise beyond our power exactly to diagnose and to relieve. In each case I give the published authority, or, if the case has not yet been published, the records are accessible in the hospitals named. The cases are not of the time of John Hunter, or of Sir Charles Bell, but of the last few years, and can be investigated and verified now.

HAPPINESS THE OUTGROWTH OF MENTAL HARMONY.

WHEN we study the principles of Zoology as touching the structure, development, distribution, and natural arrangement of the races of animals, living and extinct, and the crust of the earth as related to Zoology, we find that the growth has been gradual; first, the Metamorphic Rocks, then the Paleozoic Age; the Secondary Age; the Tertiary Age; the Modern Age. In the gradual development of the races, we find the reign

* This is a debatable point. We shall next month publish a paper which will take up the opposite views of Brain-Surgery with regard to vivisection.—ED. *P.M.*

of Fishes, reign of Reptiles, reign of Mammals, reign of Man. So with the faculties of the mind there is a gradual growth and development. Physical existence is at the foundation and beginning of all happiness. There is nothing done or enjoyed without life, and the more there is of it and the better it is employed, the better is the foundation for all kinds of happiness. A weakly, sickly birth, with little or much vitality, is the result of cause and effect, hence happiness or misery in degree are the result. Eating and drinking give more pleasure than bags of diamonds without food. Breathing good air is a source of great satisfaction. Sleep is so essential that we cannot get along without it ; a good bed is next to a good table. There is a great difference in the wakefulness of persons. Mental wakefulness affords great opportunities for enjoyment, and those who enjoy the most are the most wide-awake. Much of man's knowledge comes from sight, hence, the use of his eyes is a source of gratification to him. To deprive a man of his physical senses is to close some of his great avenues of pleasure. Hearing, tasting and smelling are no small sources of happiness, while touching and handling not only give pleasure, but aid the judgment. Free use and full control of all our functions and organs of the body give uninterrupted happiness. Cripples would give anything to be whole. Mental existence brings with it sources of happiness of a higher grade than those coming from a physical source. To have a full, large, mellow, susceptible mind is one of the best gifts of nature. A stunted, small, contracted, hard, obtuse mind is to be deplored as the greatest evil that befall a man. To begin with the growth of the basilar region of the brain, we find the Social faculties. All kinds of love give happiness, in harmony with their grades and qualities, but there is as much difference in different kinds of love as in other mental operations. Passionate love is at the foundation of all human love, and not unfrequently it controls not only all other kinds, but the entire man. The love of some never gets beyond its boundaries. It is, however, as dependent on circumstances for its gratification as it is passionate and impulsive. Conjugal love is manifested between kindred spirits, and gives steadfastness and constancy in union for life and uniform enjoyment in wedlock. Love of offspring gives unalloyed pleasure to the parent, especially the mother ; with some their entire happiness is placed in their parental love. Friendship is a powerful element of the mind, and exercises a very great influence. It blends minds, unites interests, and destroys selfishness. Love of home and

country adds much to one's happiness and makes one feel contented and satisfied to concentrate their interests and domestic enjoyments in one place, and to rear the family at one altar and fireside, and sit down under one's own vine and apple tree. The domestic faculties are so arranged that in going from the foundation of love to the climax, it becomes more pure, true and satisfying. The self-protecting powers and self-providing qualities of mind in exercise add to man's happiness immensely. They first give him courage to battle with the difficulties, and overcome the obstacles in the way of providing for life's wants, in destroying and exterminating the useless. It is a source of great satisfaction to know that we are equal to our task and to the emergency. So great a satisfaction does it give to a starving person to get something to eat, that he would give a bag of diamonds for a loaf of bread, or sell his birthright privileges for a mess of pottage. Some sacrifice everything else to gratify their appetite. To lay up something for the winter, for a rainy day, or for old age, many people work all their waking hours. The pleasures of some are in accumulating property, in others in keeping it, and others in using as they go along. Some take great pleasure in giving away their surplus before they die ; others take pleasure in giving after they are dead. The gratification of the aspiring qualities of mind gives great pleasure to most people, and unbounded satisfaction to many. Self-Esteem gives sense of independence, love of liberty, desire for power and influence. So valuable and so much desired are these qualities that man has been struggling for more of them ever since he has had an existence. Many desperate battles have been fought, great hardships endured, and dangers encountered, to get more power and to be more independent of others ; and when man has got enough to rule the world with he is not satisfied, but wants another world to rule. No man feels his importance so much as the man who has great power and liberty to do as he pleases. Ambition to be a favourite, to be popular, to attract attention, to receive commendation, to excel above all others is one of the most powerful stimulants of the mind. To get office, name, title, and reputation, man will part with his money, wade in blood, follow the fashions, cater to public opinion, and smile all over the face. Beautiful people like so well to be called beautiful that they do what they can to appear more so. Public favourites wish they had more admirers ; and those who have the highest praise wish there were some still higher in store for them. The gratification of the Intellectual faculties gives more undisturbed and perfect satisfaction than any of the organs

previously spoken of, for in their highest gratification the mind is the most tender, and as though it were on a pivot ; but the gratification of the intellect is more thorough, quiet, and permanently satisfying. All who think, invent, perfect processes of thought and invention, work out complicated problems, discover new truths, and take in large and whole ideas, know something of real soul-satisfying pleasure. The astronomer is delighted with his study of the starry heavens, and is always looking for a new star. The explorer of the bowels of the earth is in ecstasy when he has learned enough of geology and mineralogy to be able to find coal and various minerals, especially gold and diamonds. The traveller is continually on the look out with both eyes open to take in a more extensive view of the scenery around him. Who is tired of listening to music, and what is more beautiful to hear than a melodious voice ? There is not only great pleasure in acquiring knowledge, but as much also in communicating that knowledge to others. What a blessing it is to be able to talk ; it keeps many a person from becoming insane, and many a one is made happy by what is said. Memory is a source of great pleasure as well as profit. A forgetful person loses sight of half of the enjoyment of life. The imagination is a fruitful medium of happiness, it anticipates and makes up for much that is lacking. It wiles away many a weary hour, creates many pleasant surroundings, and helps a person in many sentiments, plans, and resources that would not otherwise be thought of. But those powers of the mind that have the most to do with making a man, and giving him his importance and value, must secure to him the highest degree of unalloyed pleasure. All the organs, functions, and faculties that have been thus far described are a part of the man, and go far towards making up the entire man ; yet all put together, and the moral man left out, his happiness would be very incomplete, for the best part of the man would be wanting. The intellect can reason about laws, and understand their force and meaning, but the moral faculties feel their force and have a moral consciousness of their importance. A moral consciousness of truth is a higher mental power than intellectual perception of it. Man's sources of enjoyment are upward in their tendency. There is pleasure in taking the first step, for it is the beginning of an end. When on the first rung of a ladder man cannot see much, but as he ascends much more can be seen than at the commencement, so as we ascend the ladder or climb the highest mountain we see more and more, the vision extends farther and farther. The mind is more and more completely

absorbed with the variety of objects of interest presented to the eye, till at length we reach the summit of the hill, where, as far as the eye can extend, the varieties and the beauties of nature are all spread out before us at one view. So also in the gratification of the different capacities of our being. The gratification of the lowest organic function gives pleasure according to its grade and power, and at every step we take in the upward direction additional pleasure is given, until we have exhausted the list of organic physical qualities. Then commences a higher grade of pleasures, those connected with the mind ; and in this sphere there are grades of qualities giving degrees of pleasure in their exercise. Thus the rungs of the ladder begin with the organic function, then the animal passions, then the affections, then the intellect, including the imagination and the artistic qualities, leaving the moral powers in the coronal brain to be considered as giving, in their legitimate action, the highest and most permanent degree of pleasure of any of man's qualities. Happiness should be considered by its kind, quality and extent or duration. To be as happy as one can possibly be for one hour is not easily forgotten, but remains a bright spot in the memory for life. If the gratification of an animal physical want gives its degree of pleasure for the moment, how much more pleasure and enjoyment is secured by the proper exercise of the highest gifts of our nature, which carries the mind forward to eternity, and up to the Creator of all things ! The moral brain is the capsheaf of man, and its gratification is the climax of happiness. An honest man has great satisfaction in the consciousness that he is honest. He can look the law in the face, can defy his neighbour to say aught against him. He is strong, bold, and not afraid of a just trial. Hope is continually directing the mind to the future and painting bright prospects, besides, it opens the door into another life, and gives a consciousness of immortality, and consequently no end to happiness hereafter. The influences of hope are very cheering and sustaining. Its power and duration, as well as degree, is far beyond that of having a fortune or title. Spirituality, faith or belief, opens a communication with the spirit world and spiritual existence, and gives belief in spiritual influences. By its action our pleasures are raised from earth to heaven, and from the physical to the spiritual. Man takes great satisfaction in the consciousness that he is becoming more manly, elevated, refined, pure-minded, and God-like. Veneration introduces him to his Creator, and impresses him with His power, skill, wisdom, and purity, which incline him to look up to and worship, adore, and venerate.

Benevolence softens and mellows the human mind, and makes it the recipient of influences, and disposes a person to become interested in and inclined to sympathize with others; and sympathy is never satisfied until it adds to the happiness of others. Benevolence leads a man to forget himself in part, and put himself more on a par with other human beings for their improvement. It is God-like to give; it is human to want and to receive. To be able to sympathize with the unfortunate, and bestow charity, is a much higher and more desirable state to be in than to need and receive charity. The more charity we have, the more God-like we are; and the more God-like, the more susceptible of the highest form of pleasure and enjoyment; consequently he who has the most charity is the happiest man.

L. N. FOWLER.

ANTHROPOLOGY.

BY ROBERT MUNRO, M.A., M.D.,

President of the Anthropological Section of the British Association
for Science.

PART 3. THE RELATION BETWEEN THE MORE PERFECT CONDITION OF THESE ORGANS AND THE DEVELOPMENT OF THE BRAIN.

THE science of anthropology, in its widest sense, embraces all the materials bearing on the origin and history of mankind. These materials are so comprehensive and diversified, both in their character and methods of study, that they become necessarily grouped into a number of subordinate departments. From a bird's-eye point of view, however, one marked line of demarcation separates them into two great divisions, according as they relate to the structure and functions of man's body, or to the works he has produced—a classification well defined by the words *anthropology* and *archæology*. The former, in its limited acceptation, deals more particularly with the development of man—his physical peculiarities, racial distinctions, linguistic manifestations, mental endowments, and, in short, every morphological or mental modification he has undergone amidst the ever-changing phenomena of his environments. The latter, on the other hand, takes cognisance of man merely as a handicraftsman. During his long journey in past time he has left

behind him, scattered on the highways and byways of primeval life, numerous traces of his ways, his works, his culture, and his civilization, all of which fall to be collected, sorted, and interpreted by the skilled archæologist. In their general aspects and relationship to each other most of the leading subjects in both these branches of the science have already been expounded, in the presidential addresses of my predecessors, by men so distinguished in their respective departments that they have left little to be said by anyone who attempts to follow in their footsteps. There is, however, one phase in the progressive career of man which has not hitherto been so fully illustrated as the subject appears to me to merit. I refer to the direct and collateral advantages which the erect position has conferred on him ; and to this I will now briefly direct your attention, concentrating my observations successively on the following propositions :—

(1) The mechanical and physical advantages of the erect position.

(2) The differentiation of the limbs into hands and feet.

(3) The relation between the more perfect condition of these organs and the development of the brain.

When dealing with the third point in relation to the brain, Dr. Munro said :—

Turning now to the brain, the undoubted organ of the mind, we find, in its intellectual and psychical manifestations, a class of phenomena which gives to man's life-functions their most remarkable character. *However difficult it may be for our limited understanding to comprehend the nature of conscious sensation, we are forced to the conclusion that the act invariably takes place through the instrumentality of a few nerve-cells, whose functional activity requires to be renovated in precisely the same manner as the muscular force expended in walking.* The aggregation of such cells into ganglia and nerves, by means of which reflex action, consciousness, and a variety of psychical phenomena take place, is found to permeate, in a greater or less degree, the whole of the organic world. In the higher vertebrates the seat of these manifestations is almost exclusively confined to an enormous collection of brain substance placed at the upper end of the vertebral column, and encased in a complete osseous covering called the skull. We learn from numerous experimental researches, carried out by physiologists in recent years, that the brain is a dual organ, consisting of a double series of distinct ganglia and connected to some extent by a complex system of nervous tissues, not only with each other, but with the central seat of consciousness and volition. But the

difficulty of determining the nature of its functions, and the *modus operandi* of its psychological manifestations, is so great that I must pass over this part of the subject very lightly indeed. The conditions of ordinary reflex-action require that a group of muscles, by means of which a particular bodily movement is effected, shall be connected with its co-ordinating ganglion by an afferent and an efferent system of nerves. Impressions from without are conveyed by the former, or sensory nerves, to the central ganglion, from which an impulse is retransmitted by the motor nerves and sets in operation the muscular force for producing the required movement. But this efferent message is, in many cases, absolutely controlled by volition, and not only can it prevent the muscular action from taking place, but it can effect a similar movement, *de novo*, without the direct intervention of external impressions at all. Now it has been proved experimentally that the volitional stimulus, which regulates the various movements of the body, starts from definite portions of the brain according to the different results to be produced. This localization of brain functions, though still far from being thoroughly understood, comes very appropriately into use in this inquiry. From it we learn that the homology which characterizes the structural elements of the bodies of animals extends also to the component parts of their respective brains. The law which differentiates animals according to the greater specialization of the functions of their various organs has therefore its counterpart in the brain, and we naturally expect an increase of brain substance in every case in which the functional activity of a specific organ is extended. Thus the act of stitching with a needle and thread, an act beyond the mental and physical capacity of any animal but man, would entail a certain increase of brain substance, simply in obedience to the great complexity of the movements involved in its execution, over and above that which may be supposed to be due to the *intellectual and reasoning faculties which invented it*.

That man's brain and his intelligence are correlated to each other is a fact too axiomatic to require any demonstration; nor can it be doubted that the relationship between them is of the nature of cause and effect. But to maintain that the amount of the latter is directly proportional to the size of the former is rather straining the laws of legitimate inference. In drawing any general conclusion of this nature from the bulk of brain substance, there are some modifying influences which cannot be disregarded, such, for example, as the amount of cranial circulation and the quality of the brain

cells. But the determination of this point is not the exact problem with which the evolutionist is primarily concerned. To him the real crux in the inquiry is to account for the evolution of man's comparatively large brain under the influence of existing cosmic forces. After duly considering this problem, and casting about for a possible explanation, I have come to the conclusion that not only is it the result of natural laws, but that one of the main factors in its production was the conversion of the upper limbs into true hands. From the first moment that man recognised the advantage of using a club or a stone in attacking his prey or defending himself from his enemies, the direct incentives to a higher brain development came into existence. He would soon learn by experience that a particular form of club or stone was more suitable for his purposes; and if the desiderated object were not to be found among the natural materials around him, he would proceed to manufacture it. Certain kinds of stones would be readily recognised as better adapted for cutting purposes than others, and he would select his materials accordingly. If these were to be found only in a special locality, he would visit that locality whenever the prized material was needed. Nor would it be an unwarrantable stretch of imagination to suppose that the circumstances would lead him to lay up a store for future use. These simple acts of intelligence assume little more than may be seen in the actions of many of the lower animals. Consciousness of his power to make and to wield a weapon was a new departure in the career of man, and every repetition of such acts became an effective and ever-accumulating training force. What a memorable event in the history of humanity was the manufacture of the first sharp stone implement! Our sapient ancestor, who first used a spear tipped with a sharp flint, became possessed of an irresistible power over his fellow men. The invention of the bow and arrow may be paralleled with the discovery of gunpowder and the use of cannon, both of which revolutionized the principles of warfare in their respective ages. The art of making fire had a greater influence on human civilization than the modern discovery of electricity. The first boat was in all probability a log—an idea which might have been suggested by the sight of an animal clinging to a floating piece of wood carried away by a flood. To scoop this log into a hollow boat was an afterthought. The successive increments of knowledge by which a single-tree canoe has been transformed into a first-class Atlantic liner are scattered through the unwritten and written annals of

many ages. In his expeditions for hunting, fishing, fruit-gathering, &c., primitive man's acquaintance with the mechanical powers of nature would be gradually extended, and *pari passu* with the increasing range of his knowledge there would be a corresponding development in his reasoning faculties. Natural phenomena suggested reflections as to their causes and effects, and so by degrees they were brought into the category of law and order. Particular sounds would be used to represent specific objects, and these would become the first rudiments of language. Thus each generalization when added to his previous little stock of knowledge widened the basis of his intellectual powers, and as the process progressed man would acquire some notion of the abstract ideas of space, time, motion, force, number, &c.; and continuous thought and reasoning would ultimately become habitual to him. All these mental operations could only take place through the medium of additional nerve cells, and hence the brain gradually became more bulky and more complex in its structure. *Thus the functions of the hand and of the brain have been correlated in a most remarkable manner.* Whether the mechanical skill of the hand preceded the greater intelligence of the brain, or *vice versâ*, I will not pretend to say. But between the two there must have been a constant interchange of gifts. According to Sir C. Bell, "the hand supplies all instruments, and by its correspondence with the intellect gives him universal dominion." *

That mind, in its higher psychical manifestations, has sometimes been looked upon as a spiritual essence which can exist separately from its material basis, need not be wondered at when we consider how the pleasing abstractions of the poet, or the fascinating creations of the novelist, roll out, as it were, from a hidden cavern without the slightest symptom of physical action. It is this marvellous power of gathering and combining ideas, previously derived through the ordinary senses, which gives a *primâ facie* appearance of having here to deal with a force exterior to the brain itself. But, indeed, it is questionable if such psychological phenomena are really represented by special organic equivalents. May they not be due rather to the power of volitional reflection which summons them from the materials stored up by the various localized portions into which the brain is divided? From this point of view there may be many phases of pure cerebration which, though not the result of direct natural selection, have nevertheless as natural and physical an origin as conscious sensation. Hence imagination, conception, idealization,

* *The Hand, &c. Bridgewater Treatise*, p. 38.

the moral faculties, &c., may be compared to parasites which live at the expense of their neighbours. After all the greatest mystery of life lies in the simple acts of conscious sensation, and not in the higher mental combinations into which they enter. *The highest products of intellectuality are nothing more than the transformation of previously existing energy, and it is the power to utilise it that alone finds its special organic equivalent in the brain.*

(To be continued.)



MISS OLIVE SCHREINER.

CHARACTER SKETCH BY OUR SPECIAL REPRESENTATIVE.

THE popularity attending the works of one of our comparatively recent writers is enough to make us ask phrenologically why has she so completely won for herself a place in the "first rank" (to quote a contemporary) of lady

novelists? She is a lady who has only written three books, the third is in the press, therefore she is known to the public by only two at the present moment, and one only is practically quoted by the public, and this one, a tale of less than three hundred pages. How can we account for this? First of all her head indicates she has great originality of mind, is a clear thinker, understands herself well, is good at explaining and teaching, and makes the subjects she speaks of clear to others. Secondly, she has scope of thought and quick sympathies, which bring her in touch with many people and enable her to look at many sides of a question. Thirdly, she is fond of the beautiful and poetical, and her mind is more *imaginative* than scientific, and more theoretical than practical. Fourthly, she has a refined and spiritual cast of mind, combined with considerable force of character. Fifthly, she should be gifted in the use of language, both in conversation and in writing, but more especially in the latter; she is not wordy, but fills out her meaning principally through the means of her Causality rather than by large Language. Sixthly, she has considerable force of character, which is indicated just above the ears, as well as in the breadth and length of the ears themselves, and the length and depth of the nose. Seventhly, she has dark eyes, a sad face, and a taciturnity of expression, which latter point is also noticeable in the developments on the lateral portion of her head. Her lips are thin and firmly set, which correspond with the above remark, and also with the height of her head. Eighthly, she has a special development of Human Nature, which pierces the surface of everything her mind encounters. Had we not known the writings of this head we could not but have said there was a weird, pathetic, melodramatic, and highly sensitive tone to her mind. No doubt for her sensitiveness she has become credited with egotism, and her reticence, except when specially called out, has been accounted as nervousness. Then, if we consider for a moment the novelty of the South African landscape, the red, sandy plains, with a thin coating of karroo bushes, low hills that bound the horizon and break the lonely monotony of the dead level, a heap of stones piled together to form a kopje, a red-bricked homestead with its fringe of sheep-kraals and Kaffir huts, milk bushes scattered about with their long finger-like leaves; these items, from a geographical point, touch with a delightful freshness English readers (of "The Story of an African Farm") who are tired of the green fields of England, the exciting backwoods of Bret Hart, or the Indian scenes of Rudyard Kipling.

Her characterization, too, is remarkably novel, from "Taut Saunie, Gregory, Rose, Uncle Otto, Waldo, and Lyndall." Another attraction is found in the pessimistic religious sentiment that runs through the book, which, like "Robert Elsmere," "Donovan," "John Ward, Preacher," carries a popularity peculiarly its own. Is not this volume a wail of an individualist in religion, who, having lost the blissful belief in special salvation, found humanitarianism a poor substitute? Have we not the pointing to a creed, and a review of the various theories as to a future life? Then again, have we not the delicious insight into the sufferings of child-life which is summed up into this—its intense loneliness and ignorance, yet holds out the belief that the entire man is to be found in the cradle of the infant? She is no less than a phrenological physiognomical thinker when she says through her little Lyndall, "Look at this little chin of mine, with the dimple in it. It is but a small part of my person, but though I had knowledge of all things under the sun, and the wisdom to use it, and the deep loving heart of an angel, it would not stead me through life like this little chin." In her work on "Dreams," which was commenced some ten years ago, she draws some fine word pictures, the beauty of whose diction is well worth a study to fathom. For instance, she says "The road to honour is paved with thorns, but on the path to truth at every step you set your foot down on your own heart." "In our upward climbing in search for the white bird Truth, we may not make ladders of our emotions; we may be well content if, after ceaseless and painful effort, we hold in our hand as we die but one feather from her wing."

She has like all our best people that vivid personality which at once gives the impression, even to one who does not read the character from the head, of something higher than the ordinary, something nearer the divine, and "though I saw her but for a moment, methinks I see her now!" So pleasant, so chatty, so straightforward looking, genial, well-read, knowing much both by experience and intuition, yet so homely withal, that one feels to bless her for her sweetness. She was interesting and also interested, asked many questions about myself and family, which showed how soon she might become quite friendly, and yet not too ready to give herself away or rush with too much enthusiasm after new people or projects. Our conversation was limited: had it not been I would like to have asked her her ideas about women, about work, climate, and fifty other questions.

I noticed among other things that she is exceedingly sensible about her dress. She had on a very easy fitting one.

One that accentuated the grace and beauty of the natural figure, and was not deformed by the usual corset arrangement. The style of her dress was not at all conventional but very simple, in fact it is whispered that she makes her own costumes ; I am not surprised to hear that, as I am quite sure the ordinary fashionable costumes would be nothing in her line. There is a certain Dutch look about her face and figure. She is short, and has dark hair and eyes—eyes that are very pleasant to meet. Her tone of voice is just *slightly* nasal. Her accent and manner of speaking quite English, and very pure. She must be a delightful woman to know.

She had been very wishful to get her “Story of an African Farm” published at the popular price of 1s., and had simply been fighting (as she expressed it) with her publishers till it was an accomplished fact. She started for home on Saturday, October 7th, in the *Dunottar Castle*. Her visit to England has been unexpectedly shortened ; a warm grasp of the hand, a few words of intercourse, a hasty glance at the advancement in old England, and she turns again to Africa, the land of sun and colour she so well appreciates. She is very much interested in Vegetarianism, but she says they were forced to live on meat as it was so plentiful, and bread was so dear. I understand she wrote the “Story of an African Farm” when she was seventeen, and that she has modified her views of the marriage question somewhat since.

It is difficult for a person to keep up a reputation when his or her first book has made a stir and been well received, unless the author or authoress is a genius, but we trust Miss Olive Schreiner will sustain her well won popularity.

“ L I F E , ” *

THE TRUE SERVICE OF MAN, OR THE RELIGIOUS SIDE OF PHRENOLOGY.

THE true “Service of Man” is an important subject, and one that touches humanity, and therefore cannot be separated from the throes of the present life. The only service possible of a God who loved all men, was a service of all the men God loved. To understand God Himself and the principles underlying His infinite programme, it is necessary to understand our own finite natures. No man can begin to

* This lecture was given at St. Helier’s Hall, Wellingboro’, on a recent Sunday afternoon, the outline of which is now printed by special request.

comprehend the divinity of God without first studying the laws which govern humanity.

The text for this afternoon's remarks is to be found in every chapter of the Bible, and in every book of Nature, so everyone can choose for himself the one that suits his own individuality. Persons prize life in proportion as they use it. Some only begin to use it properly when they are called to give it up. Is this consecrating their lives to God? Is this blessing and glorifying His name by giving Him the last half-hour of their existence? It seems a downright mockery to give only to Him the least, the poorest, and meanest part of our lives. Mothers should inspire their children from the beginning of intelligence to consecrate their lives to the highest possible attainment. Life is a preparation! For what?—for a future life. Man is the only animal that holds his head upright; the tendency of the flesh or animal propensities is downward, but it ought to be upward, for no other creature looks up, and as far as we know heaven is above us, and the drawings and inclinations ought to be heavenward, as we look upward for strength and not to the earth. The speaker then contrasted the characteristics of men and women. It is not intended that they should be exactly alike. Women have qualities peculiarly their own; so have men. We cannot get away from the fact that we all have gifts, talents, and characteristics that fit us for certain positions in life but not for others. We all have the same faculties, but in a more or less degree. We cannot read the Word of God without realizing that Phrenology is true to the core. The study of Human Nature is a beautiful one. You may ask what Phrenology has to do with our subject. It has everything to do with it. It explains the moral and spiritual nature of man and why people have a different way of looking at moral and religious subjects. We do not need to be told what is right and what is wrong if we would educate our highest sense of truth. Phrenology does not lessen our responsibility but rather increases it; it intensifies the responsibility we have, it opens our minds to what we are and helps us to cultivate and improve the qualities we possess. Phrenology and Christianity recognise a social side of life. The world must be won from its selfishness through love. There is too much creed and not enough love in the world. The best people in the world have been lovers of humanity; we live because of love. If there were no love in the world we should wither and die. Phrenology explains the wants of the Social nature, and the faculties that control it. Phrenology and Christianity recognise an executive working nature. Works and faith must go hand-in-hand.

Phrenology and Christianity recognise an intellectual as well as a moral nature which enable men to think, plan, organize, observe, sympathize, hope, venerate, and adore.

Our identity is an important point. By what shall we be identified? What work shall we have accomplished? Character should be the chief end of life, not happiness, as Mrs. Carlyle puts it. Hence, we must learn how to form our characters. Character is not given to us at birth. Our various developments are, but our characters we must work out for ourselves. It is by our character we shall be known hereafter, and it largely rests with ourselves whether we increase our one talent into two.

It does not matter so much whether we are members of this church or the other. We must put our ideas of religion above a certain narrow conception of God and His works in order to do Him justice, and we can do this by studying ourselves and opening our attic windows so as to let in the sunlight that is constantly asking for admission. Why will not people take down their shutters and wash the windows of their souls? It is because they find impediments, and they will not face them. Phrenology steps in and helps a person to see the hindrances in his path to spiritual growth, and points out a way to cultivate and restrain deficient or abnormal developments.

If we believe in the Christian idea of the importance of this life as a preparation for a higher life, and further, in the giving up of life as a means of Salvation, the value of life is greatly intensified. If Christ gave up His life as a sacrifice, He gave His all. What more could He have given? Does He not foreshadow what we should do in our lives, in whatever sphere we shall be called to work? It does not matter whether you or I believe in this view or the other, to prove its truth. The truth exists without us. It is said that man brought nothing into the world and that he will take nothing with him when he dies. But if he lives hereafter—and I am disposed to think he does—he takes his character with him. It is essential, therefore, that we use our brains aright; that we live so that our example and influence may be beneficial to others. It is more creditable for those who have much to overcome, whose education and environments make life a struggle, if they succeed in overcoming their impediments, than it is for those whose circumstances are easy, whose surroundings are congenial and happy, and who know nothing of the real adversities of life.

The Bible should be read by the aid of human science. Ruskin says if people would only read their Bibles with a

heartier desire to understand them, than with a superstitious rendering, they would come nearer the spirit of the book.

Again, he truly states that "the love of the human race is increased by its difference"—giving and taking—all along the road. We cannot grow to be alike, but by the purifying process of development and progression we shall become more fit companions for one another, better able to carry out our mission, and more prepared to understand the divine plan for us all.

Another strong point brought out in the address was an appeal to teachers and mothers. The speaker said, "Mothers do not begin early enough to train their children in the right way. There ought to be Government inspection in our schools, so that all need not be trained alike."

Madame Antoinette Sterling had truly said, "I think it is very wrong to be continually curbing and checking the child's growing individuality. If," she continued, "its mind is cramped at the outset, the *faculties* with which it is endowed may never have a chance of expression."

At the close some interesting questions were asked, which evoked further explanation on the subject.

THE FACULTY IN ANIMALS THAT LEADS THEM BACK HOME.

It is well known that any of our domestic animals can find its way home from a distance of many miles, even after the lapse of some time. This faculty is perhaps oftenest seen in the dog, the horse and the cat, but is known to be almost or quite as fully developed in the ox. The faculty has been supposed by some naturalists to depend upon a sixth sense, independent of sight or smell. Such a theory involves an organ of sense by which the needed observations may be carried to the brain, an organ which must be distinct from eye, ear and nostril. Physiologists have not as yet found any such organ in the constitution of any animal, nor have they found any nerves different from those which belong to our own nervous system. This is almost conclusive evidence that animals possess no sense different from ours.

If we watch the conduct of a dog when he is thrown upon his own resources to find his way home, we shall see that he has made good use of his five senses up to this time, and that he purposes to make good use of them in the immediate future. It is always assumed that the dog has not slept during the time that he has been carried from home. If he were to sleep, he would lose all clew whether he had a sixth sense or not, for in sleep all the senses are equally dormant.

The case has been submitted of a dog taken by rail a distance of 200 miles in a circuitous course and set down 50 miles from home. He disappears and the next day is at his old haunts. He could not have followed the rail by which he came, for this would take him a longer time. He must have struck across country.

The question is, Did he take a direct line for home or did he shape his general course so as to come out upon some familiar spot, miles, it may be, from his home, and from that point follow remembered paths? Hunters say that the latter is most frequently the case.

Suppose that in the dog's absence the old home has been burned down and his master's family have moved five miles to the right or left, but at the same distance from the point at which he was set down. He will go back to the old spot and from there will trace the family by scent if he traces them at all. He has no sense to inform him of the changed position of the family, nor of anything more than would be known to a man under the same circumstances.

But the case is made clearer by supposing that the dog's master has left home, gun in hand, while the dog has been detained for a time. The man goes straight to the woods, but after getting out of sight makes a turn so as to bring him to the opposite side of the house. If now the dog is let loose, he takes to the woods at the point where he saw his master enter. From there he trusts to his eyes and nose, keeping close upon his master's trail.

If the dog had a special sense of direction, he would not so easily be thrown off the pursuit of a deer or a fox by the animal taking to the water. Every species of animal that has been made the prey of dogs has learned to baffle pursuit by deceiving the sight or scent of its pursuers. Such creatures would have been likely to find out before this time if the dog had any special sense, and we should see them acting upon the knowledge.

The most interesting and perplexing cases are those in which animals that have been taken some distance from home in closed cages have yet found their way back without difficulty. This shows a highly developed sensitiveness to every change of direction.

This faculty of perception is low in man, but it may be developed and trained. There are persons who sleep best with the head toward the north. Let such a person when travelling on a sleeping-car make it a point to decide upon the course the train is going as soon as he awakes from sleep in the night, and he will find himself rapidly gaining new power to determine directions.

Darwin's experiment is an interesting one. He put some bees in dark paper boxes and carried them by a circuitous route a distance from the hive. When they were set free they all returned in a straight line to their home.

Again he took them over a similar route, but on the way he spun the boxes rapidly around. This time only one or two bees reached the hive, and perhaps these got back only by accident. While spinning around in the boxes they lost perception of the direction in which they were being carried.

It is often observed that when a dog returns home by a way which he must have made out with care and on his own account he at once throws himself upon the floor or the ground and sleeps soundly for a time. This is apt to be referred to physical exhaustion, but is more likely to be due to the fact that the animal has kept his faculties all on the alert and has quickened his perceptions to their difficult task. All our domestic animals show wonderful power of application when their faculties are bent to the accomplishment of some cherished design.



REPRESENTATIVE SKULLS.—ARTICLE V.

THIS skull indicates the full development of all its regions. It is a feminine skull and unusually well-balanced. The height of the head is a remarkable feature, which indicates that the moral faculties must have been very active, and that she possessed an elevated tone of mind. She must have shown a strong reverential spirit. She was very conscientious and probably held a monitorship in some responsible position. She was hopeful and sanguine, and must have possessed a mind open to new truths and spiritual impressions. Benevolence was particularly large, which gave her a marked degree of sympathy and capacity to take a broad interest in humanity. The intellectual region is also

highly developed, the Perceptive and Reflective faculties being all strongly marked. Her desire for knowledge must have been of a superior order. She could collect facts and general information readily, and was quick of observation. She had a superior memory of all that was going on, and manifested great versatility of character and knowledge.

The social and domestic faculties are decidedly prominent and strongly represented. She must have manifested much attachment to friends, place and home. There is a fair development in the crown of the head, indicating self-consciousness and desire to exert an influence over others.

It is an exceedingly interesting, well-marked, and beautifully-shaped skull. It could not have belonged to the class of women spoken of by Sir C. Browne, who get uglier the better educated they become.

L. N. FOWLER.

Hygienic and Home Department.

KNOW THYSELF.

“THE proper study of mankind is man,” and the solution of all social, economic and political problems is only to be found through an intelligent, systematic and comprehensive study of human nature. The science of man is the supreme, all-inclusive science, and points the way to a satisfactory adjustment of all the perplexing questions which belong to modern civilization.

“Knowledge comes, but wisdom lingers,” and the reason is, first, that knowledge of the human in its threefold nature is not more universally recognised as the end and aim of all true education ; and, second, that we have not yet learned how to apply the measure of knowledge we possess.

The recent educational congress in Chicago shows that prominent educators in our own and other lands are more than ever impressed with the importance; not only of developing the mental faculties, but also of bestowing proper care and attention upon the training of the physical and moral powers.

The hindrances we meet with in applying our knowledge of man to the interests of government and society are apparently due to the fact that we do not, as law-makers or as social reformers, take sufficiently into consideration the reactionary influences of these three divisions of the human organism and of the power that binds them together.

We recognise the mission of the specialist, and realize that

humanity owes a debt of gratitude to those whose researches and discoveries in the domain of physiological and psychical science have done so much toward the amelioration of human conditions ; but we realize, also, that the most proficient specialist is the man who is first of all a thorough, all-round student.

To truly know any *part* of the human organism, he must know the relation that part sustains to other parts and to the whole ; he must know Man, not as a machine, not even as an intellectual or a moral being, but as all three ; in short, he must know man *as* man. The most successful doctor of medicine is he who best understands not only the mechanism of the physical structure, but also the make-up of the mental and moral nature of his patient, and the relation of each to the body. And he who would minister to a mind diseased, he who would become a true physician of the soul, must not ignore physical conditions, must not fail to consider the influences of mental and material environment.

Science and religion alike testify to the truth of the affirmation that "Reciprocity is the one comprehensive rule of life," whether that life be macrocosmic or microcosmic. The study of any one of the three sides of human nature will show that "we are fearfully and wonderfully made," but it will *not* reveal to us the divine image. Only by a proper adjustment of each to the other shall we be able to gain a right conception of that complex creature, man.

To *know* ourselves lifts us out of ourselves and discloses our relation to our kind, to the universe, and also to Him in whose likeness we are made, and in whom we live and move and have our being.

Without a right knowledge of himself the "chief end of man" cannot be attained. The measure of glory he ascribes to the Creator is necessarily proportionate to the estimate he places upon man, the highest manifestation of creative power. If he view an honest man as a "worm" he cannot consistently possess a very exalted idea of the Being whose noblest work he is.

"Wouldst know thyself ? In others self discern.

Wouldst know the world ? Then read thyself and learn."

The poet and the materialist are agreed upon this point, and the world has a perfect right to judge a man by his opinion of other men.

An intuitive perception of the upward tendency of human nature is universal among men, and whenever a man evinces downward tendencies he is called "inhuman" and "brutish." The aim of all human development is to "work out the beast, and let the ape and tiger die" ; and the true philanthropist, the true statesman, is he who falls into line with the evolutionary forces, and sets his being toward that "divine event to which the whole creation moves."

The better we understand ourselves, the wiser and more righteous will be our conception of duty toward our neighbour ; hence the study of man is especially important for those to whom are entrusted the making of laws and the administration of government. It is

clearly the duty of government to bring about such conditions as shall best conduce to the destruction of the brutish elements in man, and give the human a chance ; in other words, "to make it as easy as possible to do right and as difficult as possible to do wrong." It is the province of our statesmen to discover and put into operation the most effective methods for working out the beast. They should be as vigilant in the slaughter of the ape and tiger in man as our physicians are in the destruction of the microbe and bacillus. If we took as vigorous precautions against the development of the germs of moral disease as against cholera or typhus, we should soon have no "criminal population." Whether the case be one of crime or of cholera, prevention is better than cure, and to *form* than to *reform*.

The individual is a type of the whole, and it is through a study of the individual that we must learn the needs of society, of the nation, of the race. In man himself, as God's image, we shall find the pattern of a social structure, solid and symmetrical. Wrapped up in the human organism we shall find the plan for a system of government, perfect because divinely appointed.

The injunction to "Know Thyself," involves vastly more than the old Greek philosophers dreamed of—more even than nineteenth century scientists and teachers are prepared to admit.

U. S.

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., NOVEMBER, 1893.

A STUDY OF CHARACTER. IF one is at all interested in the study of character, a charming At-Home Gathering, convened by the leaders of the West End Mission, is one of the best opportunities for gratifying one's desires in this direction.

One is ushered into fairyland, and might easily imagine that one was in a natural Australian fernery, were it not for the electric light and the first class music. After taking light refreshments one must be pardoned for looking around the room to see whom one knows, and from first to last it is one long evening of delight. One meets with the lovable, genial Sisterhood, in their neat black dresses and white collars and cuffs—dresses, I always think, which throw up the animated faces of the Sisters. Look London over and I put you a hard test to find a happier band of workers, more capable of moving London than these individualities. Even in these there is great diversity of character, from the

practical observer to the theorist ; the writer to the worker ; the talker to the thinker. As one tours the room one is struck with the variety of character in the visitors or guests of the evening. One is the picture of health, his brother troubled with dyspepsia ; the former always carries a winning countenance which makes one the better for being in such company. Such people are the healers of the world. On turning round one shakes hands with a tall, thin, hard worker, with a well-balanced head, yet expending no unnecessary heat and animation. To the right is the Christian scientist, with powerful brow and well developed observing faculties. He must be the fact gatherer, the one to collect information about everything that is going on, in this and every other world. With him is talking a keen critic with full central forehead, while just behind them stands the deep thinker.

At the other end of the room one finds the gifted talker, who seems strung on wires. He gesticulates and puts his fingers into fifty different attitudes. He looks as though he were not unaccustomed to the sunny clime of Australia. Moving about everywhere is a gentleman of short stature, thick-set, of Vital temperament, and with good base to his brain, which must add force and power to his intellect.

By the door stands a tall, slim, dark-haired, distinct-featured gentleman, with a high head, intense fervour of mind, quick power of observation and ready language in conversation and debate. While near him is a fatherly, well-balanced, genial, sympathetic, warm-hearted and humorous fellow-worker.

Would time and space allow one could describe with pleasure the several hundred guests, but one must draw the curtain until another year affords a similar opportunity.

CRANIOLOG- ONLY a short time ago the opinion was ex-
ICAL INVESTI- pressed by Virchow that all alleged modes of
GATIONS. distinguishing the skulls of the sexes are
worthless. According, however, to the later
researches of Dr. Thiem-Cottbus, a craniological criterion of
sex is by no means impossible. The ostym-panicum, he says,
forms part of the posterior wall of the glenoid cavity of the
inferior maxillary and also closes in front of and below the
bony meatus of the ear.

It arises perpendicularly from the petrous portion of the temporal bone posteriorly and turns backward in woman at about half the height of the mastoid process, but in man at a less height. In the male the bone develops a sharp edge,

which divides to form the sheath of the styloid process, but in woman this sharpened edge does not exist, the bone is rounded into a tubercular form, and the fossa is shallower and flatter.

Thus, in the male this "fossa-tympanico-stylo-mastoidea" is small, and the posterior wall of the glenoid cavity extends so deep that it is not possible for the condyloid process to slip over it. In the female it is so much more spacious that this feature alone will serve to distinguish the crania of one sex from the other.

RACES OF RUSSIA.

RUSSIA is so vast and includes so many races that it might seem well-nigh hopeless to determine its most ancient inhabitants. Nevertheless, this is a problem at which Prof. Anatole Bogdanov has been labouring for the past 25 years, and which he attempts to solve in a paper read before the recent congress of anthropologists at Moscow. The kurgans, or tumuli, of Central Russia, contain the relics of a tall, strong, dolichocephalic race, with light brown hair, as well as a short, smaller bracycephalic race, with dark brown hair. The blonde type preponderates in the south-western districts, and the brunette in the north-western. Bogdanov considers the longheads to have been Slavs, and that the modern Russians of those parts are an amalgam of the Slavs with the broader-headed race, which is probably Mongoloid.

Fowler Institute.

MEMBERS' NOTES.

"A great deal of talent is lost to the world for want of a little courage."

—S. SMITH.

THE October monthly meeting was held on Monday the 9th, when Miss Crow, F.F.I., read an interesting paper on "Representative Men." Miss Fowler presided.

Miss Crow said that diversity of character is a vast subject, and one which is of interest to all, the phrenologist and anti-phrenologist. Each of us is more or less interested in the character and actions of some one else. We scarcely meet two persons who would act the same, under the same circumstances, or have precisely the same opinion upon any given subject, and we are daily surrounded with instances of these diversities of character. Why is it we continually hear of successes,

failures, similarities, and differences in reference to those we know? How do these differences arise, unless by the variance of character? Why are we not all suited to the same professions? Why are we not all Landseers, Beethovens, Stephensons, Dickens', Wilberforces, or Gladstones?

Miss Crow also spoke of the differences in mental manifestation as displayed in literature, science and art. Anatomically speaking, brains are practically composed of the same properties, hence, the difference must therefore be in the quality, size, method of working, and the influences of temperament, organization, education, &c. If we admit that the brain is the organ of the mind, the seat of thought, and, in fact, the chamber of the inner man, *i.e. the man*, then we may be able to see how one man with a strong mental development may differ from another with a more physical development of power.

Four celebrated and representative men were taken as examples to prove that the manifested characteristics and the cranial developments agreed, and she demonstrated that Phrenology is to be relied upon.

After giving short biographical and phrenological sketches of Sir William Herschel, James Russell Lowell, Hugh Miller, and Dr. Edward Jenner, Miss Crow said, "We have before us the lives of four well known, well respected men, each very different from the other, yet all successful, useful characters. How is it that they were what they were? Why was not Jenner an astronomer? Herschel a doctor, &c.? You may answer because they happened to have been born into circumstances which favoured their following their own mode of life. But I say emphatically, No!—had Jenner been born into just the same circumstances as Herschell he would never have been an Astronomer Royal, unless he had possessed the same active faculties of the mind, the same temperament and the same hereditary tendencies; and in that case it would have made but little difference what his educational circumstances and surroundings had been, the living passions of the mind would have enabled him to work his way through all obstacles and he would and must have been the man he was meant to be.

I believe God has given each one of us specially-developed faculties and consequently innate desires which He intends us to cultivate and use; and He would never have put these powers within us unless He had also made the corresponding niche for us to fill in the world. Here we see that responsibility is not done away with by a knowledge of Phrenology, but that it lies within the power of every man either to waste his time, energy and power, or to rise and fight till he has reached his full height and power. Let us learn from the examples of these men that perseverance and an undaunted spirit will in time overcome all obstacles. Let us give up disputing the truth or falsity of Phrenology, and heartily accept it as a divine interpretation of character, losing no opportunity of studying the subject, and tracing for ourselves the correspondence between certain cranial developments and the living representations of those developments in the character.

A discussion followed, in which Messrs. Harper, Ramsay, Whittaker, and Piercy took part, and an interesting evening was brought to a close.

Mrs. A. M. Campbell, of London, and Mr. Thompson, of Keswick, were among the number of those whose names were proposed for election.

* * *

E. BREAKSPEAR, ESQ., Vice-President, has sent the following interesting report of a lecture given by Professor Windle, Dean of the Queen's Faculty of Medicine at Mason's College, Birmingham, on the Human Race. The lecturer showed, with the aid of lantern views and specimens, the essential differences between man and other animals. One of the most striking differences was the erect position. Even in the animals most resembling man, the anthropoid apes, the natural position was on all-fours. And the apes that sometimes walked otherwise only did so with the aid of their long fore limbs. Correlated with this was the structure of the skull, and the mode in which it is balanced on the spinal column. The great contrast even between the lowest races of mankind and the highest apes in regard to the amount of space allotted to the brain was pointed out, and other anatomical differences were dealt with. For instance, the thumb, which in man played an important part in manipulation, was in the ape very short and ineffective. The ape's hind feet, however, which were practically hands, had toes greatly superior to those of man. It was only fair to point out that in the case of the latter, the ineffectiveness of the toes was largely due to the custom of boxing the feet up in shoes, and that among races which did not wear shoes, men could be found who could pick up pins with their toes, without resorting to the unpleasant expedient of sticking the pins into them. Even among Europeans there were men, who, being without hands, had found in their toes very efficient substitutes. There were, however, other differences between man and the apes, and *a fortiori*, the lower animals, which could not be accounted for by custom. Having described some of these, the lecturer turned his attention to the different races of mankind. A picture from an Egyptian tomb showed that thirteen hundred years before Christ mankind was regarded as consisting of four typical races, the white, the yellow, the red, and the black, which was pretty much the division which we should make to-day. A statue of an Egyptian Court beauty, made 6,000 years ago was shown to bear a remarkable resemblance to an Egyptian lady of the present day, and other resemblances were alluded to. These, the lecturer considered, showed that the differentiation of races proceeded very slowly. He did not propose to go into the question of the antiquity of the human race, but he would say that his faith in the Bible as a book of morals and religion could not be affected by the fact that certain theories which some people chose to read in it were disproved by modern science. The theory of the unity of the human race was favoured by physical facts, such as the intermarriage of different races. For instance, the Pitcairn Islanders, the offspring of English sailors and Tahitians, doubled their population in half the time it took to double that of England. Then there was the universality of certain intellectual qualities and developments. The uniformity of the working of the human mind was shown by the fact that savage races of the present day made flint arrow-heads in exactly the same way as did the neolithic

men of thousands of years ago. Still more striking was the universal prevalence of certain customs, some of which seemed to us inexplicable, such as that known as *la couvade*.

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F. F. P. writes :—"The Brain"—the organ or seat of the will ; nerve centre ; the source of feeling ;—so runs the average dictionary definition. What inadequacy of expression ! What poverty of words ! How utterly impossible is it to give a really lucid explanation of this, the greatest, the most important organ of our bodies, that are "so fearfully and so wonderfully made." What different powers, what utterly unalienable forces are found in individuals. How deep are the depths, almost unfathomable, of this most interesting subject. That various parts of the brain are the homes of various faculties is the most indisputable of facts. It is well known that it is possible by destroying certain portions of the brain to cause a total loss of the faculties which have their seat there. Yet, how are the fine lines of distinction drawn between the various parts ? Where does the one begin and the other end ?

Again, what great gifts, what glorious talents, what conception, what fine comprehension of all that is beautiful in Nature or in Art, are possessed by some. On the other hand, how infinitely greater is the number of those who are mentally colour-blind, who pass through this lovely world unconscious of its beauty, and deaf to the myriads of voices loudly singing its Creator's praises ! Moral blindness and deafness, like their physical sisters, are the causes of the greatest calamity possible. If our brains are denied proper food and work, they gradually lose their powers, and, as a natural sequence, become entirely useless.

With what untiring zeal, then, should the culture of the brain be carried on, especially in the case of parents, who, as a law of nature, transmit to their children faculties and tendencies. Observation shows that in children whose parents are plodding, and unambitious, content to vegetate rather than to live, is only too apparent "the visitation of the sins (of omission, of neglect) of the fathers upon the children."

* *

MR. GORRIE writes us that an infant prodigy that was mentioned in the Chinese classics who, at four years old, was able to recite the 360 verses of the T'ang poetry as well as the Ancient Book of Odes, has been eclipsed by an infant prodigy of the same age, who has presented himself at the recent Licentiate Examinations in Hong Kong as a candidate for literary honours. The P'anyu Chehsien personally examined this tiny candidate, and found that the child could write a concise essay on the subject that had been given him, although of course in an infantile scrawl. It is observed by a local commentator that it now remains only for the Literary Chancellor to "pass" the prodigy ere he can be styled as "having entered the portals of the Dragon's gates"—that is, obtained the degree of "Siu-ts'ai," or Licentiate.

MR. WHITTAKER sends us the following notes of the Gilchrist Science Lectures, which are being given at the Great Assembly Hall, Mile End Road, E. :—

“On Thursday, 28th September, Professor V. B. Lewis, Royal Naval College, lectured on “Our Atmosphere, and its relation to Life.” Mr. Lewis first dealt with its early history, and how the experiments of Galileo, Torricelli, and Pascal, proved air to have weight.

This he showed by experiments, such as making a barometer, describing the upper portion of the glass, from which the silver had fallen, as being the most perfect vacuum known.

The pressure of air was also shown by filling a thick can with steam, and screwing it down, after which he poured cold water over it, condensing the steam ; the can having no support inside, was burst in by the weight of the atmosphere.

The next experiments were with oxygen and nitrogen. Having a jar of oxygen in which he burnt pieces of steel and other metals, some of which gave out a very bright light ; on the other hand nothing would burn in the nitrogen—it being the most inert gas known, diluting and keeping in check the oxygen.

Mr. Lewis then described the arteries carrying the blood to the capillaries, showing how they extended to the extremities, and tracing them back by the veins to the lungs.

The tissues consisting chiefly of carbon, nitrogen, and hydrogen ; when the oxygenated blood meets these it attacks and burns them, converting the hydrogen into water, which escapes as perspiration, whilst the carbon dioxide is brought back to the lungs and discharged with the expired air ; it is in this process of slow combustion which maintains our bodies.”

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SIR ROBERT BALL, LL.D., F.R.S., gave the second lecture on Oct. 12th, entitled “Other Worlds.”

Speaking of the planet Mars, he said it is a world in many respects like our own, and showed some lantern slides of his continents and oceans, his polar regions, and his two moons.

He believes there is life on Mars, although it cannot be seen with the telescope. He came to his conclusion from this world, which is teeming with life everywhere we look, in the deserts, in the Arctic regions, or in the depths of the sea where light has never penetrated. So there must be life in these planets in accordance with their laws, the same as in this world.

He said he had been amused lately by some talk in the newspapers about signalling to other worlds. To do so with flags they would want one several miles long with a pole 500 miles high, and if they were on the look out through their telescopes, and happened to look the right way, they might see a white speck moving a little.

“Light travels very quickly, but it can be measured ; it would travel round the world seven times in a second. Now if we could send a message to the nearest star at this rate it would take several days, but there are some so far that it would take eighty years for it to reach

them, again there are some so far off they cannot be seen by our astronomers, who bring to their aid the camera, which gives a photograph showing myriads of stars so far off that it would take hundreds of years for the message to reach them, so vast and illimitable are the heavens."

This subject will shortly be taken, on a Wednesday evening, in its relation to Phrenology.

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ENGAGEMENTS, NOVEMBER.

Monday, 13th—Members' Meeting, 7.30. Paper on "Phrenology and Further," by Mr. P. Tovey, F.F.I.

Monday, 6th, 20th, 27th, and Tuesday, 14th—The Advanced Class in Phrenology.

Wednesday, 1st—Lecturette, "Life and its Mental Dependencies," 7.30.

" 8th— " 7.30. "High Pressure Life, and how to meet it," by Mr. Forward. Ed. H. H.

" 22nd—Lecturette, "Architectural Phrenology," by Jessie A. Fowler, 7.30.

" 29th—Lecturette, "People I have met," by Countess Alice Kearney, 7.30.

Receptions after each lecturette at 8.30. Coffee at 9 o'clock.

Monday, 6th—Council of Fellows (Practical Work), 7 o'clock.

" 20th— " " (Discussion), 8 o'clock.

Physical Culture Class, Wednesday and Saturday afternoons.

Application to be made to the Secretary, 4 and 5, Imperial Buildings, Ludgate Circus, E.C.

J. A. F.

Notes and News of the Month.

THE Institute is open daily for Phrenological Consultations from 10 a.m. to 5 p.m., and from 6.30 to 9 p.m.

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EXAMINATION FROM PHOTOGRAPH.—See Character Sketches at the end of Magazine. Or, if preferred, send your photograph for a private Delineation of Character, for advice on Health, Proper Occupation, and choice of a Business Partner, or Life Companion. Terms 5s., 10s. 6d., and 21s. *Name and address of the Person to whom the character is to be sent*——*Circumference of Head*——*inches*. *Height of Person*——*General Weight*——*Colour of Hair and Eyes*——*Age*——*Extent of Education*——*Occupation hitherto*——*Health*——. Address :—L. N. Fowler & Co., Imperial Buildings, Ludgate Circus, London.

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THE Fowler Phrenological Institute Subscription Fee includes the *Phrenological Magazine* (monthly) for one year, admission to Museum, Library, and to Weekly Lecture in the Lecture Room, the use of the Circulating and Reference Libraries, subject to rules.

THE *Phrenological Annual and Register for 1894* will contain the only authorized list and addresses (corrected up to date) of phrenologists, both in England and other countries, and popular and scientific articles will be contributed by different writers. Interesting features of the *Annual* will be an interview with Mrs. Campbell, the first lady massuese in London, with full size portrait; photographs, by our Institute photographer, of the skulls at Hythe, with their description; articles by L. N. Fowler; J. L. Corning; J. Dyson; J. Coates; E. M. Russell; S. Dexter; J. A. Fowler; and others.

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A FEW character sketches, with portraits of phrenologists, will also be given.

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THE *Register of Phrenological Practitioners and Lecturers*. No name will be entered upon this register unless the person possesses a satisfactory phrenological standing. Full particulars should be sent in at once, as we shall go to press early in the month.

* *

THE December number of the Magazine will contain character sketches of Paderewski and Gounod, and special interview and character sketch of Countess Alice Kearney.

* *

ALSO an article on "Vivisection," by Dr. Houghton. Some interesting facts about Ears; and a Phrenological Christmas Story.

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THE December number of *The Phrenological Magazine*, including *The Phrenological Annual*, will be sent, post free, on receipt of 1s.

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On Monday, Oct. 16th, the Fellows and Associates of the Fowler Institute held their first meeting for debate since the formation of the Council of Fellows. The discussion was on Phrenology *versus* Physiognomy, when a paper was read by E. M. Russell, F.F.I. All the members took part in the debate. Miss Fowler presided.

* *

DR. HAIG BROWN, the headmaster of Charterhouse School, says that it is impossible to judge, by the position he takes at school, how a boy will turn out in after life. The feeblest at study are indeed frequently leaders of men in after life. Here is an admission which many teachers feel compelled to make, but they might be greatly helped by a thorough study of Phrenology.

* *

LADY lawyers are so successful across the Atlantic that they have just held a Congress at Chicago to consider the extension of their sphere. Altogether there are 110 feminine lawyers practising in the United States, and eight are admitted to the Bar of the High Court.

* *

CHRISTIAN BIOLOGY.—In his opening service, after the summer vacation, at St. James's Hall, Mr. Hugh Price Hughes made use of Dr. Burdon Sanderson's address at the British Association, as illustrating the mystery of the Christian life. Dr. Burdon Sanderson

had, he declared, dealt the death-blow to modern materialism. Ten years ago Professor Huxley and others were talking of protoplasm as the basis of life. They thought with a little further investigation with the microscope they might be able to produce a low form of life. The President of the British Association now says it would be equally true to say life was the basis of protoplasm. The hope of explaining life chemically has, he says, been abandoned. It has been discovered that life is not the product of liquid diffusion, but of specific energy. In like manner, this immaterial and insoluble factor is found in every real Christian. When a Christian has been analysed to the uttermost an ultimate living cell is found, a life of which no scientist can give any explanation. Every Christian is a Divine manufacture.

* *

THE Association of Women Pioneer Lecturers has accomplished good work during the last nine months. It commenced its career in January last, and was formed for the purpose of providing lectures in centres not yet touched by University Extension or similar teaching, which are delivered by thoroughly competent Women Lecturers.

During the summer, lectures in the form of instructive rambles have been given at the British and Natural History Museums, on Egypt, Assyria, and Chaldea, and on the animals. These were originally started for children during the holidays, but they were so much appreciated by grown-up people that they will probably be made continuous, taking a different group of subjects for each set.

Although this Association has had but a short career at present, forty lectures have already been given on English Literature of the Nineteenth Century ; ten on Dante's Inferno ; thirteen on Egypt, Chaldea, and Assyria ; twelve on Animals ; three on the Ancient Kingdoms ; one on Domestic Economy ; one on "Men and Monkeys ;" four on "Flowers ;" and there have been two Field Excursions.

The practical work accomplished by these "Women Pioneer Lecturers" is a proof of what can be done in a very limited time. If such is the present work of the Association what may we not hope for in the future ?

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WE deeply regret that death has snatched from our midst one whose name is honoured and beloved throughout the Temperance world, Mr. Benjamin Whitworth. He lived, however, a long and useful life, covering seventy-seven years. A life that wrote its own character in shining lines of truth, diligence, and beneficence. He was almost alone in being able to say that he had never tasted intoxicating drink during a life so prolonged. But he had the wisdom to see that to make this kind of experience general it is necessary to make custom and law the servitors of Temperance. Hence the depth of his attachment to the Alliance, and the corresponding depth of the attachment felt for him by members of the Alliance. Were a medal struck in his honour it might bear on one side the last syllable of his name "Worth," and on the other side, "True Glory."

Book Notices.

BOOKS AND MAGAZINES RECEIVED—*Health and the Various Methods of Cure*, by J. H. Rausse ; *A Handbook for Mothers*, by Jane H. Walker, L.R.C.P., &c. ; *Constitution of Man*, New Edition ; *English Illustrated Magazine*.

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.]

PHRENOLOGICAL UNION.

It is my purpose to form a Phrenological Union for upholding the Science of Phrenology in all parts of Great Britain and Ireland where I have constantly laboured for the last thirty-three years. My object in starting this Union is to form a nucleus of recognised phrenologists. The fact is constantly brought before my notice that Phrenology is being degraded by the cheap fees of 6d. and 1s. for phrenological consultations, and I am asked to do something on behalf of Phrenology to raise the dignity of the science. Those whose names will be included in this list and charge a minimum fee of 2s. 6d, will, I am sure, find that in time this recognized list will become powerful in its influence throughout the country.

It is my intention to circulate widely this list of members of the Union, and also to publish it from month to month in the *Phrenological Magazine*.

L. N. FOWLER.

ON Wednesday, Oct. 18th, Wm. Brown, Esq., F.F.I., of Wellingborough, Vice-President of the F.P.I., lectured on "Types of Men." He first gave a description of the various races according to Blumen-thal's classification, which he considered was the most comprehensive, as in it the races were classified according to colour and hair, as well as configuration of skull.

The Caucasian race was the highest in development, and included the English, French, Italian, Teuton, &c, &c. It was the fair-haired, mental, and Christian race, having the most intellect and veneration.

The Mongolian race had rounder heads and the temperament was Bilious-mental. The Chinaman, who came under this race was more lymphatic, a useful type of man, but not mirthful ; the Chinese were not a smiling people.

The Malays as a race were higher in organization, and were between the Chinaman and the Mongol. They were broad-chested and strong, but were being killed by opium and drink.

The Indian race had the 'Motive' temperament, with copper-coloured skin and straight hair. They were characterized for large Firmness and Self-Esteem.

The Negro race had the Vital temperament, a prognathous jaw, and flat foot. They were large in Tune, and very fond of words, but were not characterized for intellectuality.

Mr. Brown then gave a more detailed description of the different branches of the Caucasian race, sketching each type on the blackboard as he proceeded. The national temperament of the English was Vital, but as a race they were rapidly developing the Mental also. They had a large brain, quality of organization, prudence, Causality and Veneration, and also a good physical organization.

The Scotch had a longer head, and their temperament was Motive blended with the Sanguine. As a nation they were more moral, and particularly prudent, but had not so much humour. We never heard of a Scotch mimic.

The typical Irishman was well built, with prominent features. He was not so prudent as the Scotch or English, but was very patriotic, witty and social.

The Welshmen of South Wales were darker than those of North Wales, while those in the north had squarer heads than those in the south. Living among the rocks had moulded their characters until they had become rugged like their surroundings.

After speaking upon the Germans and the French, Mr. Brown then graphically portrayed types of men. The physician required a good quality of organization with large Intuition and Perceptive faculties, Hope, to inspire the same feeling in his patient; active sympathies, strong, Social faculties and a distinctly marked moral brain.

The surgeon did not require to be of quite such a high type as a physician, though he had a special work to do. He needed a strong Perceptive intellect, Cautiousness, yet courage to cut deeply enough in operations, also large Destructiveness.

The lawyer—and if they wanted to know what class of heads lawyers possessed, they had only to get their names put on the list of jurymen and they could soon spend three or four days at Bow Street or the Guildhall, get one-and-sixpence a day, and a splendid opportunity for studying the lawyers. He needs a mental temperament, very good organization, a large brain well stocked with facts, and an excellent memory, large Intuition and Conscientiousness, and a good base to the brain to give force. He needs the Reflective faculties to be well developed also, or he will not gain his case.

Then several types of preachers were sketched on the blackboard, and a few remarks made upon each. The preacher needed to be a healthy, hopeful, magnetic man, with Mental Vital temperament, and a good development of the upper part of the brain, ability to compare and illustrate, and must be able to talk to all kinds of men.

John Wesley took after his mother, and in both mother and son were seen the same kind of nose. Henry Ward Beecher was an example of language and observation; C. H. Spurgeon of force and

energy. Moody was broad-chested, and it is the broad-chested men who move the day. Pusey, Dr. Parker, and others, were also drawn.

In conclusion, Mr. Brown gave a description of the physiognomist and then the phrenologist. The latter should have a good quality of organization, he must be apt in description, conscientious, a gentleman, and a Christian. The more Ideality, Constructiveness, and Intuition he had the better. The temperament should be well balanced or Mental and Vital. He must be a man of extensive knowledge, knowing something of all the different trades and professions. He holds the happiness of half the world in his hands, and wields an immense influence, for he has to deal with soul and body. He must be conscientious and have the courage to tell his client what he should know of himself, and with this force of character he needs to know how to say it in an agreeable manner. The phrenologist holds a unique position.

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MR. WM. SCOTT, of the Orkneys, who recently obtained the certificate of Associateship of the F.P.I., writes from Denmark :—"We started our phrenological work on the 20th of September ; my partner, Mr. Winther has lectured in one of the public halls, and two editors of local newspapers have noticed Phrenology very favourably. We expect to be here a few weeks longer."

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MR. and MRS. JOHN THOMPSON'S engagements are as follows :—
 Until October 23rd—Central Hall, Blythe.
 October 24th until November 7th—Temperance Hall, Bishop Auckland.
 November 8th until 27th—Town Hall, Gateshead.
 November 28th until December 18th—Albert Hall, Edinburgh.

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PHRENOLOGY AND PHYSIOGNOMY.—On Monday, Mr. Roe, phrenologist, of Banbury, delivered a very interesting and able lecture at Stony Stratford, on "Hheads and faces, and how to read them," illustrated by numerous diagrams, skulls, busts, &c. Mr. Jones, schoolmaster, took the chair. After making a few appropriate remarks, he introduced the lecturer, who had a hearty reception. The lecturer commenced by describing the malformation of two skulls, one of them being a murderer's. He said he did not believe in fatalism or materialism. The malformation of children's heads was largely owing to the influences of the parents, especially those that were brought to bear upon the mother during pregnancy. To prove his remarks he referred to history. After one hour and a half's demonstration the lecture was brought to a close by two gentlemen going on the platform to have their heads examined publicly ; the gentlemen acknowledged to the truth of the examination, one of them remarking that he had lately had his head examined by another phrenologist, who agreed *in toto*. Several remained behind to be privately examined.—*Banbury Telegraph*.

* *

MR. H. WILLIAMS, phrenologist, continues his lectures at Accrington, Clayton-le-Moors, and Haslingden.

MR. J. DYSON will lecture at Grimsby, Barrow-in-Furness, Lancaster, Worksop, Hull, Sheffield, and Elland.

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MR. J. W. TAYLOR, A.F.I., has engagements at Layland, Caton, Bentham, and Kendal.

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MISS JESSIE A. FOWLER will lecture at Sheerness on November 8th and 9th.

The Employment Bureau.

A YOUNG LADY of good birth, education, appearance and of literary tastes desires daily employment in an office. She writes a good and rapid hand.

A YOUNG GENTLEMAN desires to hear of some secretarial work, is a good art critic, would not object to journalistic or light literary work, or reporting. Writes shorthand well. Has Large Causality, Comparison, Human Nature, Order and Sublimity, Small Hope and Self-Esteem.

A YOUNG LADY desires work as a Secretary. She is a good writer, also a good musician. She has large Conscientiousness and Approbativeness ; good intellectual powers.

A HIGHLY Intellectual Young Gentleman desires to get some Journalistic, Elocutionary, or Artistic Work.

A YOUNG GENTLEMAN desires to obtain employment in Mechanical Engineering.

A LADY living at Rickmansworth has a comfortable home to offer a delicate lady, or a lady and gentleman. The house is situated on gravel soil, and is a pleasant winter residence.

AN Artistic Young Lady desires work in a Millinery Establishment or Drapery Business.

Character Sketches from Photographs.

R. A. (West Hartlepool).—The photo of this lady indicates a good hold on life. She is well proportioned mentally and physically, and is full of spirit and animal vigour. She has a broad head giving her a strong executive brain ; is very forcible, and does things with a strong hand. She should be known for her pluck, courage, and power to endure. She is full of energy and has rather a defiant spirit ; this may make her at times appear harsh and hard in her actions. She has a sharp, shrewd, and penetrating brain ; there is a strong love of order and

desire to be systematic in her work. She has a good memory, is an apt student, and possesses considerable scholastic ability. Her mind is an acquiring one ; she shows considerable ingenuity and has good power of language. She is cautious, but is active, and may be hasty and passionate at times. The Social faculties are strong, giving her a love of home and a sociable, friendly disposition. She is independent and self-reliant ; quite firm and positive in her actions.

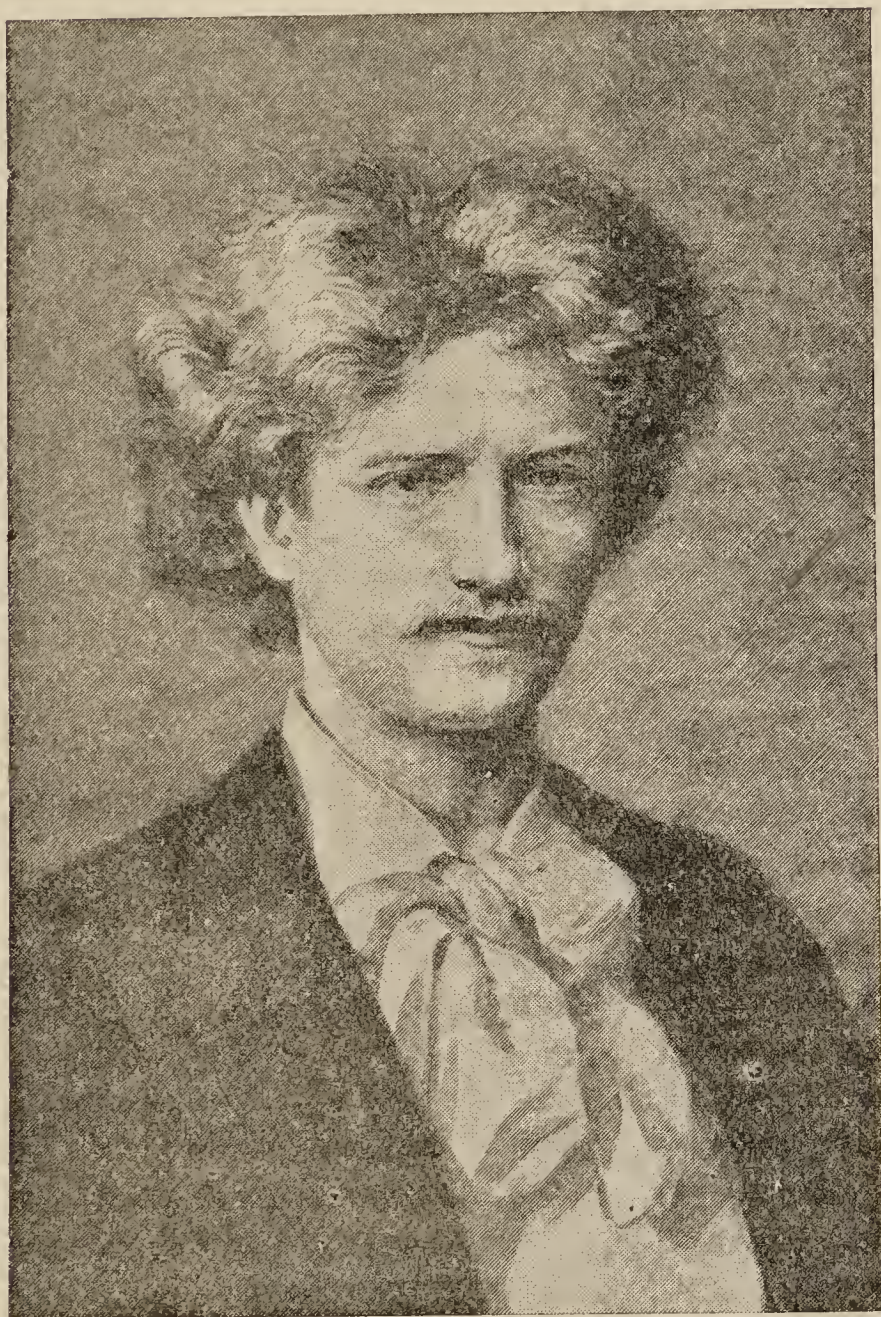
W. S. (Newcastle).—This gentleman has a peculiar organization. He has an aspiring mind, blended with high moral qualities. His head is narrow, consequently he has not sufficient force and energy to carry out all his ideas. He should be known for his even temper and good heartedness ; there is an absence of self and self-interest. The Social qualities are well represented, making him warm-hearted, affectionate, a good friend and constant companion. His memory of events is good but he lacks a ready expression of his thoughts and ideas. There is evidence of constructive ability, and he has good imitative power ; he would learn quickly and easily adapt himself to new surroundings. Physically he needs to cultivate deep breathing, and to improve the digestive organs.

W. P. B. (Lurgan).—The photo of this gentleman indicates an aspiring mind. The temperament favours the mental, disposing its possessor to desire to think, write, speak, and study, rather than take a more active path of life where physical strength is necessary. There are indications that the constitution is not so vigorous as it should be, and that there has been a drain on the vital forces. The lung power needs cultivating ; there is a demand for exercise, fresh air, and attention to diet. He has considerable constructive talent combined with good imitative power ; this should enable him to show considerable ingenuity in what he does. It is natural for him to be cautious and prudent. He has a critical mind ; is apt in comparing and illustrating. He has not a ready command of language, and would need practice to become a fluent speaker, but he has no lack of thoughts and ideas, and has a good memory. The Moral faculties are well represented. He is patient and plodding, but needs more energy and to stimulate his Hope. He should turn his artistic abilities to some account.

W. E. (Northampton).—This gentleman possesses a practical cast of mind ; plenty of energy and ability to work. He is an active man, full of spirit and vigour, which enables him to carry through whatever he undertakes. He has a large, constructive brain, and good Perceptive faculties ; is shrewd, sharp, and a keen observer. There is ability for designing, engineering, or architectural work. His ability to judge by the eye is excellent, also his memory of faces and forms. The organs of Size and Weight are large, giving him correct judgment in these directions. He has good conversational powers, and with cultivation would make a public speaker. He has plenty of will power, and a positive nature. The Social faculties are well developed ; he is capable of strong attachment, is friendly in disposition, warm-hearted, and has a sympathetic nature.

THE
Phrenological Magazine.

DECEMBER, 1893.



A PHRENOLOGICAL SKETCH OF IGNACE
JAN PADEREWSKI.

IGNACE JAN PADEREWSKI must have come from a very highly organized family. He is exceedingly sensitive, nervous, and susceptible, hence is highly impressible. He has a very intense Mental temperament which enables him to take more pleasure in mental manifestation of every kind than in that which is physical.

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He is capable of intense suffering, and of great joy and pleasure. He is generally experiencing the one or the other, for he is no half-and-half man in any sense of the term, and such a temperament is unique in every way.

He possesses a musical type of head. By this is meant that it requires more than the organ of Tune to make a musician, also fine Mental temperament, an exquisite quality of organization, and a high development of the Intellectual and Moral faculties, especially Ideality, Sublimity, Comparison, Human Nature, Spirituality, and Benevolence. These qualities are not deficient in Paderewski, hence the wonderful power of his execution, the depth of his meaning in playing, and the power of his execution. He has small hands, hence it is not size that gives power in his case; but he knows how to use them; there is a force behind that guides the emotion and enables the arrangement to be about perfect.

His Perceptive brain is very strongly represented, which gives him large Form, Weight, Proportion, and enables him to show exquisite light and shade in his musical performances. His head is high, which shows considerable prominence in Benevolence, Sympathy, tenderness equal to a woman's. His Reflective faculties give scope and comprehensiveness to his mind, but they are not so distinctly represented as his observing powers. He has very keen imagination, and hence is able to conceive some very exceptionally fine and powerful variations. He has a very versatile mind, and can suit himself to many changes; and as his mind has a distinct musical bias, he shows his versatility in this direction. He has an emotional nature, and an intensely social and friendly one, which is largely assisted by his Benevolence. He is passionately fond of his boy, which accords with his Social brain. If anyone has done one kindness for him, he feels under obligation to do two in return. His Sublimity gives breadth to his head, and expansiveness of mind. He takes large and comprehensive, as well as extravagant and weird views of subjects; and in musical compositions this quality is elaborated. He has exquisite taste, and likes the best of everything.

For such a susceptible organization his head is broad in the base, giving force, energy, and executiveness. This power is necessary to all musicians, and is particularly necessary to a genius like the subject of our sketch. He is not overburdened with large Self-Esteem—in fact he has hardly enough to give a consciousness of his own worth. He overrates his friends and underrates himself. Drawing a line from the ear to Approbativeness, an observer will find more power from this last named faculty than Self-Esteem. He is ambitious, and

rightly so ; he is stimulated much by this organ, and he does much to please his friends. He is anxious to excel in everything he takes hold of. He is above the medium height, and is exceedingly graceful and gentlemanly in his bearing ; he has a profusion of light hair, which falls over his face and head without any respect to orthodox style.

Paderewski was born in Russia, November 6th, 1860. He began to play at a very early age—at three years. At seven he was placed under a teacher, and in five years' time he developed into a public performer. When he was eighteen he was appointed Professor of Music in the Conservatory at Warsaw, and in 1884 he went to Strassburg to fill a similar position. In 1887 he prepared himself for a formal *début* as a competitor for the highest pianistic honours, before the critical musical circles of Vienna, and immediately became recognised as one of the greatest living players. Three years ago he was the delight of the musical audiences in London. He literally took London by storm, and has twice visited America, where he was lionized and made the musical hero of the period.

THE EDITOR.

THE RELATION OF EXPERIMENTS ON ANIMALS TO THE PROGRESS OF MEDICAL SCIENCE.

BY EDWARD HAUGHTON, M.D.

WE live in an age when clinical observation and inductive reasoning are somewhat at a discount with medical professors, whose science is now supposed to be advanced principally by cultivating noxious principles or inferior forms of microscopic life, with a view to injecting them into the human body for the cure or prevention of various disorders.

Formerly the professors of this new cult spoke with modesty as to the utility of the knowledge which had been thereby acquired, and acknowledged that it was to the future that they looked for the justification of their methods. But now the case is altered. Whether they think it necessary to state a case, so as to meet objections raised on the ground of cruelty ; or whether they have persuaded themselves that confusion has been succeeded by order, and boasting by exact knowledge, I cannot say. But there can be no doubt that modern claims, as put forth in articles and reports, display an amount of self-confidence worthy of a better cause.

Claims have been made on behalf of subjecting animals to terribly painful and apparently useless experiments, in which so much exaggeration has been used that one is in danger of losing confidence in the utterances of some very prominent leaders of the medical profession. Of one thing there can be no doubt, and that is, that in spite of very intelligent protests on behalf of humanity by some members of the profession, there still remains a bar to advancement when any physician, young or old, refuses to be identified with the new craze for inoculation with septic fluids or virulent poisons derived from the animal kingdom. On the other hand, a considerable section of the public have been so horrified by the details of some published laboratory experiments that they seem determined to fight the matter out in the public press, despite the manifest vantage ground possessed by their opponents. To be sure the public unbelief has been much strengthened by the result which has attended the commendation by some of the medical profession of a secret remedy introduced by a German Professor, and which has been known in this country as "Koch's cure" for consumption and lupus. The writer of this article did not hesitate to pronounce against it when in the height of its popularity; but the result has left Dr. Koch a highly honoured man, and he continues to be just as much confided in as if he had saved so many thousand lives instead of shortening them by his doubtful invention. We have also had cures for cholera, yellow fever, and anthrax; besides the perennial one for hydrophobia; and a brand new one for tetanus is now amongst us; but so far as information has reached us, deaths from that disease do not yet show the smallest numerical diminution. If it were not for the general death rate published in most civilized countries there would seem to be little chance of exposing the plausible statistics published by anti-rabic institutions. But, without taking any notice of the mere failures which are constantly recorded, we have only to turn to the general death rate for hydrophobia in any country where such institutions have been set up, in order to see that no diminution in the number of such deaths has taken place; whilst some deaths have apparently been caused by the method employed, and cannot be put down to the bite of the dog, whether we are to regard it as rabid or not.

It is easy to see why so great and such constant efforts are made to show something resembling scientific progression in the methods introduced by Mons. Louis Pasteur, for the prevention of hydrophobia. The system in question has introduced indefinite possibilities for the obtaining of fame

and fortune without possessing the necessary qualities of mind or heart, which should distinguish the practical physician. It is easy enough to effect a cure when the existence of disease in the patient cannot be proved. Given a Pravaz syringe—along with other things, a credulous person who has been bitten by a dog, scratched by a cat, or hunted by a “mad” wolf, can be sent home to his friends fully convinced that but for the introduction of the said remedy, he must have died of an agonising disease. When it is known that some Pasteur patients have died of hydrophobia immediately after treatment, and some after several years of fancied security, it will be seen that it is not science, properly so called, which predicates a cure before the expiration of the longest usual period of the incubation of rabic virus. As the controversy still continues, it is enough to point out that no final conclusion can be reached until it is settled, and that in every instance the claims put forward by the vivisectionists for their new science have been publicly challenged, and in many instances completely disproved. This is not after the manner of scientific controversy. There is no other science, whose accredited representatives are accustomed to have the leek presented to them without shame, and without either proof or retraction of their oft repeated boasts. But it may be said that there are inherent difficulties and complications in medical science which render it excusable for errors to creep in, in spite of every effort to prevent them from doing so. Just so—there are many difficulties; and therefore there ought to be no puffing of insufficiently tried remedies. But, in good truth, medicine has not much to gain from this source; hitherto we have had prophecies only, which we could afford to laugh at. But when it is gravely proposed to inoculate healthy human beings with a number of noxious principles, as substitutes for hygiene and common sense, it ceases to be a laughing matter, and becomes a grave danger to society, which must be resisted *a l'outrance*. Even if there were no cruelty proved; and that all important experiments on animals admitted of their being satisfactorily anæsthetized (which is not the case), the prospect which is opened up by these professors is positively appalling, and constitutes such a burlesque of true science that even a worm might turn in contemplation of their unnatural proceedings. What rouses suspicion of the sort of science that looms in the future is the inexperience and youth of those who are now most prominent, and the small acquaintance which they display

with the principles of ordinary hygiene. The useless cruelties which they describe daily in the medical journals, and the general tendency to make exaggerated statements is also, alas, too common amongst them. The individual judgment of the writer may be a small matter ; but the facts above alluded to are notorious ; as is also the fact that vivisection has now become a profession in itself ; and it by no means follows that the person who records experiments on animals has received a medical education. One thing is quite certain : when elementary physiology is placed on a level with clinical observation, the result is generally of the most fallacious character, and has often been destructive to health and life itself when unwisely followed. We are not dependent on "experimental physiology," so called, for the progress of medicine. Those who assert the contrary have not always given satisfactory proof of their averment ; whilst it would be easy to point to well-known instances in which it has proved an *ignis fatuus*. Lest it should be supposed that I write these things merely from prejudice, or to support a foregone conclusion, the writer can give some few quotations from eminent physicians which will be sufficient to show that those who state that there is anything like unanimity in support of the claims recently put forward for vivisection are drawing largely on the credulity of the public, and are unworthy to be entrusted with money for the foundation of what are euphemistically called "Institutes of Preventive Medicine," or of being regarded as true spokesmen of the divine art of healing.

Alluding to the utterly unscientific way in which many Physiologists and Physicians seek to explain morbid states by physiological theories, Claude Bernard observes :—
"I find this mode of proceeding essentially *disastrous for the science of medicine*, inasmuch as it subordinates pathology, a complex science, to physiology, a simpler science."

Bernard frequently told his "class" how difficult, if not impossible, it is to accept the phenomena obtained by Vivisection, as manifesting the order of nature, whether in health or labouring under disease.

"When living nature is dealt with," he observes, "the extremely complex nature of her acts, and the great mobility of her manifestations hinder a complete examination of all the conditions to which a phenomenon is subordinate, and hinder us even from reproducing it at pleasure. You have, in fact, seen that it is not even enough, in order to produce recurrent sensibility, to take an animal of the same species, and apparently in the same condition ; but we must

take into account a number of circumstances, exacting a precision which no chemical or physical instrument can afford: such as, for example, the exhaustion of the animal, the loss of blood, the chilling of the spinal marrow, &c."—C. Bernard. Vol. I, 1858, p. 55.

The testimony of a famous Vivisector may be quoted, as it at once disposes of all Dr. Ferrier's assumptions, based on (who knows how many) dreadful experiments. The editor of the *Medical Times and Gazette*, alluding to a series of lectures delivered at Liverpool by Dr. Brown-Sequard, observes:—"In these, as in his recently published Lectures, Dr. Brown-Sequard vigorously opposed what he conceives to be the unfounded theories of Fritsch, Hietzig, Drs. Ferrier and Jackson, and those of other physiologists, who maintain that there are special psycho-motor centres in the cerebral convolutions for the face, arm, leg, and other parts of the body."—*Medical Times and Gazette*, July 7th, 1877, p. 19.

Sir Charles Bell says:—

"In a foreign review of my former papers, the results have been considered as a further proof in favour of experiments. They are, on the contrary, deductions from anatomy; and I have had recourse to experiment, not to form my own opinions, but to impress them upon others. It must be my apology, that my utmost efforts of persuasion were lost while I urged my statements on the ground of anatomy alone. . . . Experiments have never been the means of discovery; and a survey of what has been attempted of late years in Physiology will prove that the opening of living animals has done more to perpetuate error than to confirm the just views taken from the study of anatomy and natural motions."—*Nervous System, Part II. Nerves of the Orbit*, p. 184, &c.

And he adds—

"For my own part, I cannot believe that Providence should intend that the secrets of nature are to be discovered by the means of cruelty; and I am sure that those who are guilty of protracted cruelties do not possess minds capable of appreciating the laws of nature."

(2) Sir William Fergusson, Bart., F.R.S., *Sergeant-Surgeon to the Queen, and Surgeon to St. George's Hospital*, testifies:—

"I am not aware of any of these experiments on the lower animals having led to the mitigation of pain, or to improvement as regards surgical details. . . . I have thought it over and over again, and I have not been able to come to a conclusion in my own mind that there is any single operation in surgery which had been initiated by something like it on the lower animals."

Again—

"The operations that have been performed on the lower animals, with a view of elucidating similar procedures upon the human subject, have all

been performed after those operations had been done on the human subject." . . .

And again—

"Even with reference to the subject of chloroform, the best and chief experiments were made on the human subject; all the experiments on the lower animals have been done since the experiments were conclusively applied to the human subject."



(Kindly lent by "Hearth and Home.")

THE COUNTESS ALICE KEARNEY.

AN INTERVIEW BY JESSIE A. FOWLER.

WE live in an age of work and activity when women as well as men find scope for their talent in public capacities, and are coming to the fore and taking their part in the progress of the world to a degree previously unknown in history.

Workers of all kinds and all classes the world gladly welcomes in their various spheres of usefulness, but when ladies of title join the ranks and take up public work, their position enables them to wield a power beyond that of the ordinary worker, especially where intellectual ability and charm of manner are united, as in the subject of our present sketch—the Countess Alice Kearney.

She is a Countess in her own right, her father, the Count Cecil Kearney, having no male heir.

The Countess Alice Kearney is very highly organized, and possesses a predominance of the Mental temperament, which, with an excellent combination of the Motive, gives to her nature, mental and physical activity, expertness, dignity and grace. Her head is well filled out, like a beechnut full of meat. It is high and broad in the front, giving her moral aspirations and intellectual ability. She has many of the Irish characteristics; for instance, she is exceedingly hospitable, kind and sympathetic. She is the friend of humanity and of the masses, rather than of the classes. She is genial, approachable, and youthful in manner. She will never grow old; her Agreeableness and Imitation will not let her. Mirthfulness is large; she has the true Irish wit, which sparkles in her conversation. She has an abundance of good humour which keeps her and her audience on good terms and in high spirits. Her Reflective brain is strongly developed, which enables her to think readily, plan rapidly, and organize logically. She has energy of mind as well as of body, hence she is apt to go beyond her strength and live upon her spirit. She is self-forgetful, and works to accomplish an end rather than for selfish ambition. She is capable of enduring and going through more than ordinary fatigue, and after resting can start again with a fresh amount of energy owing to her large Destructiveness and Vitativeness. She has uncommon durability of affection, does not forget her friends, and has more than ordinary geniality, hence she does not wound or offend although she knows how to be perfectly frank, candid and straightforward. She is quite independent, capable of taking responsibility and of being equal to the occasion. She has versatility of talent, and can turn her abilities to a good account. She has great appreciation of music, and shows talent in performing it, hence her ear for true melodies and harmonies is excellent. Her quickness of perception is remarkable. She is able to take in at a glance the situation of things and can turn off work with despatch when necessary. There is a deep and serious side to her character; she must be very devoted, reverential and sincere in her beliefs.

The drawing room into which I was shown was arranged in Eastern style, and contained many Oriental curiosities. Everything was most harmoniously decorated. As I was anxious to know what the experience of the Countess was in regard to the audiences she had addressed, I asked her if she liked to speak to working women, mixed audiences, or the upper ten. To which she replied: "Decidedly to working women, as they are more progressive. As, for instance, I well remember an old woman in the train who knew all about the Bills passed in Parliament relating to woman's work, and she was decidedly a member of the working class." "When did you first begin to be actively interested in woman's work?" I asked. "When I joined the South Kensington Women's Liberal Association,—Ward Committee—some three years ago; but I have been interested in politics as long as I can remember. For generations our family was Conservative, but my father is a Liberal, and long before the Home Rule party was formed he was convinced that Ireland ought to have Home Rule." "Do you think," said I, "that the Home Rule Bill is likely to pass in its present form?" "Yes," said the Countess confidently, "in time, in a very few years, though probably the Welsh Disestablishment and Parish Councils Bills will receive the early attention of Parliament and the Home Rule Bill will be shelved for a time. I can quite see the difficulties raised with regard to the retention of the Irish Members. I was much struck with the speech of the Rev. Mr. Perkes, President of the Wesleyan Conference, who made a very telling one on the subject, in which he said there had been no case of persecution mentioned in Ireland during the past year." "Do you think the bulk of the Irish people want Home Rule?" "Yes, the working classes." The Countess then told me she had been speaking in public for a year and a half. She considers committees tiresome, and much prefers to devote her attention where she can work on less restricted lines.

She speaks a good deal in the Provinces, and finds her time pretty fully occupied. She said, "I have done a good deal of canvassing too, the members of the South Kensington Women's Liberal Association, not being so fully occupied in their own division, went to work in North Kensington, and I spent some considerable time in North Hackney also, in canvassing. I well remember my first experience in this work, it was in the Drury Lane district, and as one cannot very well go alone to such localities, my mother

accompanied me. I like to go to agricultural towns and speak at election meetings. It is an encouraging fact to me that I am stronger in health and voice now with all my active work, than I was before I commenced public life. My voice has been carefully trained for singing and I believe this has in a great measure enabled me to bear the strain. In addition to speaking I have considerable correspondence to keep up, as I have travelled extensively in France, Germany, Italy, Spain and Egypt. I also spent three months in America, New York, Jersey and Pennsylvania, and found the American people exceedingly kind and attentive. It is only within the last three or four years that we came back to London and settled in this house."

Do you ever speak in the open air ?

"Yes, quite recently at Colchester and Pontefract, I spoke for half an hour at a time without any fatigue ; but the most enthusiastic open-air meeting I ever attended was the Hyde Park Demonstration. I have a great aversion to Drawing Room Meetings, where ladies come in their best bonnets, and there is no expression of feeling. When in Boston, Lincs., I spoke one afternoon on my visit to Morocco, and amused them very much by the account of the marriage laws and the various customs. There is one thing I do admire in the Mahommedans, and that is, that they carry out all their obligations."

People generally make a great fuss over the Continental water. Did you find it drinkable when travelling ?

"Oh yes, and I find in England that Kops Ale suits me well. I easily recruit my strength, although from the time I was ten years of age I have suffered from about five different kinds of headaches ; still, latterly I have not been so subject to them as formerly, and I attribute it mainly to having regular work which absorbs my attention. I also sleep much better since having taken up public work."

Do you ever speak to one person in your audience, to begin with—one you feel is in sympathy with you, and arrange your remarks around that one ?

"I do, and sometimes find an antagonistic spirit also ; in fact I generally find with keen perception some old man who does not agree with me. I can remember some such characters now, as distinctly as though I had seen them only yesterday. I have watched the gradual alteration in the expression of their faces as they became interested and began to see with me as I was speaking. I can always think as I speak, and select even from twenty pages of manuscript what

I want to say, and say it connectedly. This has often been a wonder to my friends."

Thus we see the utilization of a keen womanly intellect which is being crystallized for the public good.

BRAIN - SURGERY.

BY W. W. KEEN, M.D., LL.D.

(Continued from page 449.)

CASE I.—*Abscess in the Brain.*—In the *British Medical Journal* of April 21st, 1888, Mr. Damer Harrisson records the following case. A boy aged fifteen had received a blow on the *right* side of his head from a pair of tongs eight days before his admission to the hospital. Three days after the accident a convulsion suddenly set in, involving the *right* side of the body, beginning in the arm and spreading to the leg and face, and following rapidly in four days by eight other convulsions and paralysis of the entire right side of the body. Most of my readers would unhesitatingly attribute the convulsions and the paralysis to this blow from the tongs. But it must be remembered that the right side of the brain supplies the *left* side of the body, and *vice versa*. Hence Mr. Harrisson suspected that the paralysis of the right side of the body indicated trouble in the *left* half of the brain. Examining his head, he found on the left side a small scar at the junction of the arm and leg centres. Inquiry elicited the fact that, ten years before, he had received a severe blow there, which, however, had not been followed by any serious symptoms. Could this old injury, after so long a time as ten years, possibly be the cause of his present serious trouble? Further inquiry brought out the fact that for about a year before his admission the boy had had repeated twitching of his right arm. So convinced was Mr. Harrisson that modern cerebral localization was right that he opened the boy's skull, not where most people would suppose would be natural, namely, on the right side of the head, where he had received the blow from the pair of tongs eight days before, but on the left side, at the site of the blow ten years before, and at a definite point, namely, over the fissure of Rolando, at the place corresponding to the motor centre for the arm as established by experiments on animals. Although the first injury was received so long

before, yet the paralysis showed that it was the left side of the brain that was involved, and the twitching of the arm showed that this was the particular part of the left side of the brain where the injury probably existed. Mr. Harrison punctured what seemed on the surface to be a normal brain, and opened an abscess, and this boy, otherwise absolutely doomed to death, made an uninterrupted recovery. This is only one instance out of probably more than one hundred and fifty cases of abscess in the brain which have been reported within the last seven or eight years which have been diagnosticated with the same accuracy and by the same means.

CASE II.—In the *British Medical Journal* for August 11th, 1888, Dr. MacEwen, of Glasgow, relates the case of a patient who, among other symptoms of abscess of the brain, had partial paralysis of the right side of the face and right arm, and paralysis of the nerve supplying the left eyeball. For reasons stated in the paper he concluded, with great acuteness of reasoning, that the abscess could not be *in* the motor area for the face and arm on the left side of the brain, but in the projecting part of the brain just *below* these centres, but producing pressure upon them (Fig. 3). He confidently operated



Fig. 3.—Side View of the Human Brain. The Shaded Area shows the Location of the Abscess producing pressure on the lower part of the Motor Area. (See Fig. 1.)

at this precise spot, and opened an abscess in the inside of the brain in the exact position described, and gave exit to *six table-spoonfuls* of pus, when the symptoms vanished, and in three weeks the patient was well!

CASE III.—*Brain Tumors*.—Nothing could be easier than to locate a tumor of the brain which showed itself externally. In a case in which a tumor is large it might be thought easy to locate it, though, as a matter of fact, it is very difficult, owing to the large area of brain involved. But when I say that the existence of a tumor about the size of the end of the forefinger can be diagnosticated, and that before touching the head it should be said (and I was present when the statement was made) that it was a small tumor, that it did not lie on the surface of the brain, but a little underneath

it, and that it lay partly under the centre for the face and partly under that for the arm in the left side of the brain, and that the man was operated on, and the tumor found exactly where it was believed to be, with perfect recovery of the patient, it is something which ten years ago would have been deemed the art of a magician rather than the cold precision of science.

In the *American Journal of the Medical Sciences* for July, 1888, this case is detailed by Drs. Seguin and Weir, as follows. A gentleman thirty-nine years of age had been perfectly healthy until August, 1882, when he had malarial fever, accompanied with a good deal of pain. One day, as he rose to go to the window, his wife noticed a spasm of the right cheek and neck, which did not involve the arm, nor was consciousness lost. In 1886, two or three similiar attacks having occurred in the interval, he fell, unconscious, and bit his tongue. These attacks were all accompanied with twitching of the right arm and hand and right-side of the face. His memory became impaired and his speech thick. No injury had ever been received on his head, nor was anything abnormal observed even when his head was shaved. Gradually his right hand and arm became weak, and, as a result, his handwriting became bad. This weakness of the right arm slowly increased, and along with it a weakness of the right leg, and, as a consequence of the increasing paralysis of his face, drooling at the right side of the mouth set in.

Dr. Weir examined him at Dr. Seguin's request, and both of them reached a diagnosis, chiefly based upon the facts already given, that the man had a small tumor situated as above described, and on November 17th, 1887, the skull was opened at the junction of the arm and face centres. This operation I had the pleasure of witnessing personally. Nothing abnormal was seen on the surface of the brain. Yet so confident was Dr. Weir of the correctness of the diagnosis that he boldly cut into the brain substance, and from its interior removed a tumor of the size indicated by means of a small surgical spoon. The man made a perfect recovery. When examined microscopically, the tumor was found to be of a malignant character. It returned in about four years, and finally destroyed his life.

In one sense, as a surgical feat, the removal of a large tumor is a much more difficult and extraordinary operation (and one nearly twice as large, weighing over half a pound, has lately been successfully removed by Bramann!); but as a matter of diagnosis and of surgical skill, locating and

removing so small a tumor from the brain so successfully, and without the slightest indication on the exterior to guide one, is a much more brilliant and remarkable operation.

In an address which I published in 1885 I alluded to the first and then the only case known of removal of a brain tumor, and I said: "By these experiments and operations a wide door is opened to surgery in the treatment of diseases within the skull, diseases heretofore so obscure and uncertain that we have hardly dared to attack them. The question is not whether death or recovery followed in this particular case. The great, the startling, the encouraging fact is that with this experience we can now, with well-nigh absolute certainty, diagnose the existence of, and with the greatest accuracy locate, such diseases, and therefore reach them by operation, and treat them successfully." That my prophecy has been verified, let me quote the statistics gathered by Dr. Knapp, of Boston, in 1891. He collected forty-six cases of operations for tumors of the brain, operated on in the last six years, of which thirty recovered (!), fifteen died, and the result was unknown in one. It must be remembered that these thirty which recovered would every one of them have died had not vivisection given us the means of accurately locating the disease. That we have not yet reached the accuracy which is to be desired is shown by the fact that in fifteen other cases no tumor was found at the point of operation, and of these thirteen died. Most of these tumors lay not in the motor region of the brain, but in other parts of it, in which our means of diagnosis are as yet very imperfect for the very reason that vivisection has thrown but little light on the function of these regions. There were also four cases of tumors which were found, but were so large as to be irremovable, and of these three died. To these statistics I can add three other cases. In one of these the tumor was not rightly located (it was not in the motor region), and therefore was not found at the operation, and the patient died. In the other two cases the tumor was found, but was irremovable. One patient died, and the other recovered from the operation, but died from the disease four months afterwards. He had, however, been relieved from the atrocious headaches which rendered life a burden, and his delusional insanity had almost wholly disappeared—results which fully justified the operation by the comfort of his few remaining days. (Another remarkable case, in which a growth of the under surface of the bone pressing on the arm centre was exactly located and successfully removed, is related by Dr. A. B. Shaw, of St. Louis. *American Journal of the Medical Sciences*, December, 1892, p. 691.)

CASE IV.—*Hemorrhage inside the Skull.*—Let me next give a case of different character, but equally accurate and astonishing. An artery about as large as the lead in an ordinary lead-pencil runs in the membranes of the brain on the inside of the skull, in the region called “the temple,” and grooves the bones quite deeply. In some cases in which a heavy blow is received on the surface of the skull, without fracture, or it may be even without leaving any mark whatever on the skull, this artery is ruptured, and a large clot is poured out on the surface of the brain. Formerly it was not only almost impossible to make a diagnosis of such an injury, but, even if the rupture of the artery was suspected, before antiseptic surgery (itself the child of vivisection) arose, such patients were only treated with a little opium, rest, and regulated diet. Most of them died, but occasionally one got well. Of 147 cases collected by Wiesmann which were *not* operated on, 131, or over 89 per cent., died. The symptoms of such an injury are fairly clear, but, until the doctrines of cerebral localization were accepted, were often misleading. The patient is stunned by the blow, but usually recovers consciousness, only to relapse again into unconsciousness when the amount of blood poured out is sufficient to compress the brain, this compression of the brain producing also paralysis. Generally the artery on the same side of the head as the blow is ruptured, and the paralysis will be on the opposite side of the body. But sometimes, instead of the artery being ruptured on the same side as the blow, it will be ruptured on the opposite side; or, again, if the blow be in the middle line, as in a case recently under my care, it may be difficult to tell which side has been involved. Moreover, as the artery splits into two branches, one of which runs in the direction of the motor region and the other back of it, it may be difficult to know where to open the skull in order to reach it. Now it is very evident that if we make an incision into the forearm to reach an abscess or a tumor, and it is found that the trouble lies one or two inches further up or down, the incision can be easily prolonged in the right direction, and will heal readily. But in the skull our diagnosis must be correctly located within a very small limit of error, for it is evident that we cannot enlarge the opening in the bone at will to almost any extent, as we can in the flesh. Wiesmann has also collected 110 cases which *were* thus operated on, of whom 36 died, or only 33 per cent. ! What a contrast to the 89 per cent. of deaths when no operation was performed ! In the majority of these 36 who died the clot was not found, and was therefore not removed,

because in the earlier days we lacked the boldness and therefore the exactness of modern times.

Let me now give the case furnished me by Dr. Dench, by permission of Dr. Bull, of New York (*Buck's Reference Handbook of the Medical Sciences*, vol. viii., p. 227). A young man had been shot in the head, the ball entering above the ear, two and a half inches to the left of the middle line of the head. When first seen his right arm was paralyzed, and shortly afterward the paralysis had extended to the right leg and face. A diagnosis was made of hemorrhage from one of the arteries of the brain, by reason of the fact that the paralysis had extended so rapidly from the arm centre to the leg and face centres, for no other cause excepting hemorrhage could be so rapidly progressive. The wound was exposed, and a considerable clot gushed out, when motion immediately returned in the leg. The bone was then trephined, not at the bullet opening, but a quarter of an inch below and in front of the wound, when this bleeding meningeal artery was exposed and tied. It was found that a large branch of an artery in the brain itself had also been severed. This was tied, and in two months the man was well, no fever following, and no "matter" having formed. He could speak perfectly well, and could use his arm, but not his hand. The ball was never found.

CASE V.—It may be objected that here there was a wound to point out exactly the situation of the injury. Let me therefore give a somewhat similar case in which no such guide existed: M. Michaux (*Medical News*, May 2nd, 1891, p. 504, from *Revue de Chirurgie*, 1891, vol. xi., p. 376) reports a case of trephining, followed by cure, for a case of meningeal hemorrhage, probably of spontaneous origin. A man was brought to the hospital in a state of complete apoplexy, with paralysis of the left face and right arm. There was no sign of fracture or other injury. During the next few days the paralysis extended to the right leg. Epileptic convulsions set in, at first limited to the paralyzed regions, then becoming general. Occurring at intervals in the beginning, they became continuous at the end of three or four days. The patient was addicted to absinthe, and his head had troubled him for several months. The trephine was applied over the fissure of Rolando on the left side, over the "motor area" for the arm and leg, and an opening six centimetres long was made, through which the membranes of the brain were incised. This was followed immediately by the escape of four table-spoonfuls of large blackish clots. After the operation the patient improved rapidly, and in a month most of the symptoms had disappeared.

Drs. Bremer and Carson, of St. Louis (*American Journal of the Medical Sciences*, February, 1892, p. 134), and Drs. Homans and Walton, of Boston (*Boston Medical and Surgical Journal*, February 12th, 1891), have published cases in which, also without external signs, such clots have been accurately located and removed with success. In the latter case there was evidence of an injury but the clot was on the opposite side of the head.

CASE VI.—*Mental Disorders*.—I shall now add a case involving the centres for mental process, in the establishment of which vivisection has done but little, for reasons already explained, but a case of great interest and value.

If the reader will look at Fig. 1, and will find the fissure of Sylvius and follow it to its upper end, he will see that this end terminates in a Λ -shaped convolution between the intraparietal and the external parieto-occipital fissures. In this portion of the brain have been located certain mental processes, including the ability to recognise objects and their uses. The location of this convolution of the brain can be made with almost the same accuracy as that of the fissure of Rolando.

CASE VII.—The following case of MacEwen of Glasgow (*British Medical Journal*, August 11th, 1888, p. 306) will illustrate the accuracy of this localization. A year before Dr. MacEwen saw him the patient had received an injury which had resulted in melancholia. Though formerly a happy husband and father, he now repeatedly contemplated the murder of his wife and children. There were no phenomena connected with motion in any part of the body by which the injury could be located; but it was discovered by that careful, close investigation for which this surgeon is so well known, that, immediately after the accident, for two weeks he had suffered from what is called "psychical blindness," or "mind blindness"; that is to say, his physical sight was not at all affected, but his mind was not able to interpret what he saw. I presume he was a staunch Scotch Presbyterian. He knew that, as was customary, his New Testament was lying by his side, but when he looked at it he was utterly unable to recognise it. While, however, his mental sight was thus affected, his sense of touch was perfect, and when he passed his hand over the smooth leather cover of his well-known book and felt the deep-indented letters on the back he recognised it as his familiar friend; but when he opened it, the printed words were unknown symbols to him. This gave to MacEwen the key to the injury. He located on the outside of the skull this Λ -shaped convolution (Fig. 4, shaded area), known as the

"angular gyrus," and found, on removing a button of bone, that a portion of the inner layer of the bone had become detached and was pressing on the brain, one corner of it being imbedded in the brain substance. The button of bone was



Fig. 4.—Side View of the Human Brain. The Shaded Area shows where the Bone pressed on the A-shaped Angular Gyrus. (*MacEwen*).

removed from the brain, and after removing the splinter, was replaced in its proper position. The man got well, and, although still excitable, lost entirely his homicidal tendencies and returned to work.

(To be continued.)

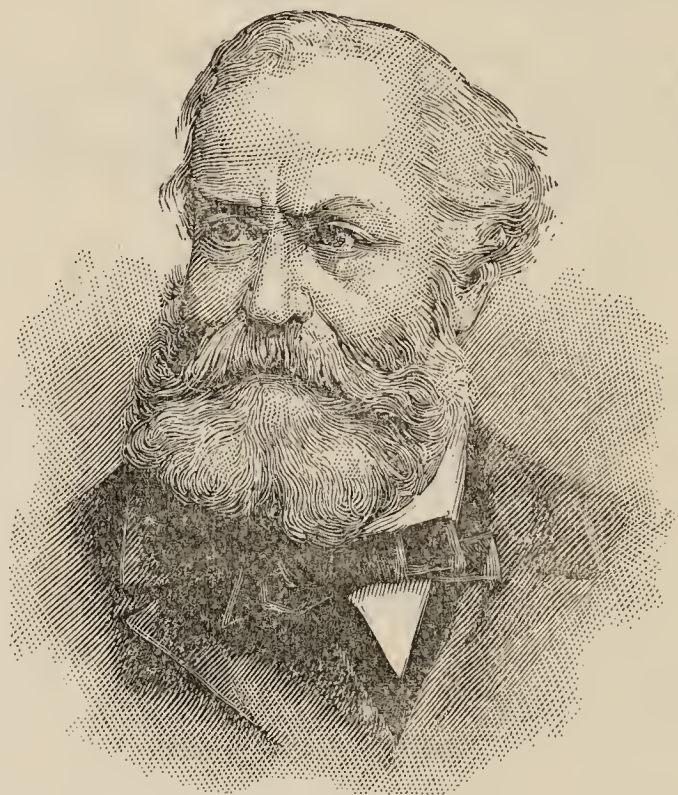
M. CH. GOUNOD.

CHARACTER SKETCH.

THE remarkable man of genius had a fine temperament and a high order of mental development. His organization favoured a clear strong mind of his own that could do its own thinking. He relied on himself, and appeared to be well developed in moral qualities. He had keen perceptive intellect which introduced him to the external world and made him a close and accurate observer. He had also a good mind for understanding and taking quickly the sense of things. He was intuitive in his perceptions of character, and judgment, he discerned character quickly and accurately. He was a level headed man and made use of his knowledge like a master. He had great versatility of talent, had good power to adapt his knowledge. He had a lofty brain which gave an elevated tone to his mind. He saw correctly at first sight, and seldom had occasion to change his opinion, he was a man of more thoughts and ideas than words. He said much in a little, did not talk for the sake of talking, but because he had something to say. He was a man of method and order, and was very precise in what he

said and did. He had good constructive talent and readily devised ways and means. He had good executive power, and put an energetic spirit into what he did. He finished as he went along, and did not often have to correct himself. He was a guide to others, more than they to him. He had great industry and always had plenty of work on hand. He had ingenuity and skill which joined to his large Ideality high Moral brain. Imitation and Comparison gave him superior talent in the Arts, particularly music.

By the death of Gounod, Europe loses the second of the three great composers who have left their impress upon the music of the period. Wagner, the most powerful, if not the popular of the three, was the first to go ; and at this moment



the only one who remains—still hale, hearty, and in the fullest possession of his admirable faculties—is Verdi ; now more than ever, what Rossini long ago used to call him, *ultimus Romanorum*.

Of the three great composers of the latter half of the century there is not one who has not delighted in his work and who has not shown a fine example of labour continued until the very last. Wagner, however, was in his seventieth year when he completed "Parsifal ;" Verdi, considerably past seventy when he produced "Otello," was nearly eighty when he brought out "Falstaff ;" while Gounod, after composing "Polyeucte" for the Grand Opéra of Paris, when he was already sixty, turned his attention for the rest of his life to sacred music, and began by giving to England first the "Redemption" and afterwards "Mors et Vita."

At Rome, in 1839, when he had just gained the "Prix de Rome" at the Paris Conservatoire, Gounod studied assiduously the church music of the early Italian composers. He showed, indeed, through life a tendency towards the ecclesiastical style. Almost the first of Gounod's works produced in London was a mass—performed at a Long-acre concert-room which disappeared years ago; and he was engaged (like Mozart) on a requiem at the very moment that death came upon him. Even in Gounod's love-songs there is often a religious character; and it was not the music of the Cathedral Scene in "Faust" so much as that of the Garden Scene that made a French critic say of "Faust" generally that it was the work of "a voluptuous priest."

Gounod wished at one time to take orders. He even began his novitiate; and he always maintained, if only as a volunteer organist, a certain connection with the Church. Not many years ago, when he was composing his cantata of "Joan of Arc," he obtained from the Archbishop of Rheims permission to place his desk in front of the high altar of Rheims Cathedral, where Joan of Arc herself had stood. Writing there day by day, he might perhaps (he said to the Archbishop) be inspired by some of the noble thoughts which had animated the Maid of Orleans.

Poetry.

TWO ANGELS.

SUSAN MARR SPALDING.

ANGEL of the parting year,
 Winging back to heaven thy flight,
 Sad the burden thou must bear,
 From the darkness into light;
 Burden of my wasted days,
 Fragments of my broken hours,
 Budding promises that grew
 Never into fruit or flowers;
 Happiness I might have won,
 Worthy deeds I might have wrought,
 Wrongs I hate, but did not shun,
 Good I crave, but never sought;
 All my proud and lofty aims,
 Withered now to vain regret—
 Feeble, foolish, as the will
 To no noble purpose set.

Angel of the coming year,
 Though thy face is veiled I see,
 By the glory round thee shed,
 Thou hast some good gift for me.
 Is it gold, or power or fame?
 Perfect peace from toil or care?
 Or some sweeter, greater bliss
 I had never hoped to share?

Nay, I know 'tis none of these;
 Still I walk my narrow ways;
 Still does lowly labor fill
 All the measure of my days;
 This the treasure thou hast brought,
 Prized in every age and clime,
 Life no greater boon can crave—
 God's most precious gift of Time.

Time to shape my common cares
 Into duties high and sweet;
 Time to learn that patience smooths
 All rough ways for tired feet;
 Time to scatter here and there,
 By the wayside, love's small seed,
 Knowing lowliest hands may oft
 Minister to highest need.

So may each day be a cup
 With life's sweetest flavours fraught;
 Every hour a shining pearl
 Strung on golden threads of thought;
 Every moment a bright flower
 Shedding perfume far and near.
 Lend thy grace to make it so,
 Angel of the coming year!

“ A MERRY Christmas and a glad New Year ! ”

'Tis easily said, in sooth :

It is an old trite phrase ; but is it,

Too old and trite for truth ?

If so then let me change the trite old phrase,

And break the quaint set rule :

“ May Heaven gladden all your future days,

And God bless every Yule ! ”

(S. K. C.)

LONDON,

4, 5, 12, 13, IMPERIAL BUILDINGS, NEW BRIDGE STREET,
LUDGATE CIRCUS, E.C., DECEMBER, 1893.

*The joys that feed the merry heart,
The mirth of Christmas Cheer,
Be yours for many a Christmas Day,
And many a glad New Year.*

LOBENGULA, THE photo of Lobengula indicates a strong
KING OF character with very strong likes and dislikes.
MATABELE. His head is broad rather than high, showing
force rather than piety ; not much religious
feeling. His organization indicates that he is a great lover of
power. He has energy equal to any emergency ; a man of
not so many words as actions. What he does is thoroughly done.
He is not characterized so much for his moral gifts as for the
force of his mind ; he is a man more to be followed than
beloved ; he makes strong friends and strong enemies ; he
loves power, and when called out can use it to some purpose.
He makes his presence felt wherever he goes.

Mr. Thompson, a native of Natal, who has met and traded
with the King more than once, gives the following account of
his mode of life in times of peace :—

“ In the early morning, if the weather be cold, he takes a
pannikin of black coffee, well sugared. Between this and
about eleven o'clock he may have a few drinks of beer. At
eleven he has breakfast, which consists of grilled or steamed
beef, with beer afterwards to wash it down. Occasionally he
may have a small dish of mashed pumpkin or beans, or some
other vegetable, placed before him. He has similar courses
for dinner about three p.m.—that is, if he wants any dinner—
and supper at seven p.m. Before breakfast he washes his
hands and face, using soap, in a basin which is brought to him
by one of his slaves. After his ablutions, another slave brings
forward the meat, which is heaped on a large wooden ashet,
which the slave holds, kneeling, in front of his royal master
till he has finished. He picks out the dainty bits, and throws
the remainder either to his dogs or slaves. He uses a knife,
and his fingers usually serve the purpose of a fork, although I
have seen him use the latter instrument occasionally. After
feeding, instead of wiping his greasy fingers with a table
napkin, he rubs them over his bare arms and legs. Lobengula
does not require a tonic to assist his appetite. To his meat

he seldom uses salt, the gall of the animal, which is poured on the meat when put into the pot, serving that purpose. It is also supposed to make the meat tender.

Fowler Institute.

MEMBERS' NOTES.

“The most difficult thing in life is to know yourself.”

ON Monday evening, November 13th, Mr. Tovey, F.F.I., read a paper on “Phrenology and Further,” before the members of the above Institute. Mr. Tovey said:—“It is only the hopelessly pessimistic individual who maintains that man is unprogressive, and it is only the hopelessly materialistic philosopher who, while admitting the evolution of man’s present superiority from a much inferior condition, forbids him the consolation of inferring from the fact a further development, through the unfolding of powers latent within him.

“Around every circle another may be drawn,” says the poet. There is no limit to development, and it is one or two of man’s unfolding powers that I wish to draw brief attention to this evening. I consider man to-day occupies the condition he does in nature, simply because by the force of a mighty impulse his faculties have evolved to a certain point, he is fighting his way along an upward path bounded by what we call circumstances, as he struggles, strives, and learns, and the newly gained data of experience is added to the knowledge of the race, he evolves a faculty for the cognisance of similar experiences, and a new world is opened by those efforts. The result of the growth of vast ages we delight to call man. Speaking broadly, we live between certain lines of vibration which are broader or narrower according to the power to perceive of each individual. Phrenology traces in a man the sum total of human life. If there is any truth in what is termed Comparative Phrenology, we must admit that all that extra brain that man possesses over the animals is the result of the accumulation of ages and experience, handed down from sire to son in the form of capacity. Our powers of mind, it seems to me, have developed as we needed them. Phrenology interprets these powers—those related to the physical life and nature, and throws some light on man’s position. The brain is one of the vehicles of the soul, but grand as I imagine the teachings of Phrenology to be, its scope is like some other sciences, limited. In my opinion we can learn from Phrenology as a race, nothing that we, as a race, knew not before, for it can take us no higher than the highest individual amongst us.” Mr. Tovey then went on to explain that the brain contained organs whose power was not perceivable unless the operator has studied sufficiently the occult science to enable him to be a clairvoyant. He also spoke of the wonderful phe-

nomenon of colour sounds, and the power to hear and think with various parts of the body, other than the brain and ears, *i.e.*, the stomach, toes, and fingers. He also mentioned that we possessed a second body composed of material so delicate as to be beyond the solid, liquid, or gaseous, consequently imperceptible to any but a clairvoyant. After coffee was passed round the meeting was thrown open for discussion, in which Misses Fowler and Crow, Messrs. Harper, Whitaker, Smith and Piercy took part. In reply to the questions, 1st, as to the power of Occult Science to enable one to live a higher and nobler life ; 2nd, if Mr. Tovey would name the central organs of the brain which he considered are yet undeveloped ; 3rd, if the clairvoyant and those who study Occult Science are of a finer quality of organization, Mr. Tovey said he thought it better that each individual should study the subject for himself ; that he was bound to admit that many clairvoyants were of a low type, and that the power was exceedingly subtle and sometimes possessed by bad as well as good characters.

* *

WE are indebted to Mr. Smith for the following most interesting fact. "An old lady of my acquaintance, whose brain is large, and of good quality, and well balanced in most points, but particularly in the moral and social, has, as may be expected, a large circle of friends, and devotes a great deal of her time to philanthropic work. Wherever she goes she takes the lead, and draws around her an army of co-workers whose energy and sympathy she enlists on behalf of the deserving poor. She is most generous and calls forth the same virtue in others. Her children are exceedingly fond of her and are a credit to themselves and their country. The husband of this lady was a student of Phrenology when a young man, and took the science as his guide in selecting a wife, a step he never had occasion to regret. The above is a simple but very true instance of the benefit and reliability of Phrenology, when applied to the social side of life."

* *

WE have received the following from A. R.:—I do not consider Theosophy calculated to make men more unselfish, more willing to give their whole lives for the good of mankind, asking for no reward, but to leave the world a nobler place for their having lived in it. Christianity does this.

* *

I do not consider Theosophy a safe bridge by which the nearing pilgrim could cross that dark river, which no knowledge has yet enabled any mortal to avoid. Christianity has made many a death-bed as fearless as the passing from one room into another. Seeing that it is not possible for the longest lived of us to gain all knowledge, I deem it wise to secure that which makes the best lives and the most peaceful deaths.

ENGAGEMENTS, DECEMBER.

- Monday, 11th—Members' Meeting, 7.30. Paper on "Phrenology, the handmaid of Psychology," by E. M. Russell, F.F.I.
 ,, 4th, 18th, 25th, and Wednesday 13th—The Advanced Class in Phrenology.
 Wednesday, 6th—Lecturette, "Types of Animals," by Mr. Holding, 7.30.
 ,, 20th—Lecturette, "Mental Force and how to use it," by L. N. or J. A. Fowler, 7.30.
 ,, 27th—Lecturette, "The dying of the old and the opening of the New Year in Human Crania," by J. A. Fowler, 7.30.

Receptions after each Lecturette at 8.30. Coffee at 9 o'clock.

Monday, 4th—Council of Fellows (Practical Work), 7 o'clock.

,, 18th—,, (Discussion), 8 o'clock.

Physical Culture Class, Wednesday and Saturday afternoons.

Application to be made to the Secretary, 4 and 5, Imperial Buildings, Ludgate Circus, E.C.

E. CROW.

CHRISTMAS IN SYDNEY.

It was Christmas Eve, and Pauline Browne, M.D., and Thomas Winstthrop were pacing the P. and O. Dock in Sydney Harbour, awaiting the arrival of the P. and O. S.S. "Oceana," one of whose passengers was Dr. Annie Barnes, the dear friend of Pauline.

The hour of ten had just chimed from the grand cathedral belfry. In the distance around the harbour were to be seen the little glittering lights from the houses on the hill top, while the steamers were plying from point to point in the harbour, and ever and anon the whistles blew to denote their approach.

Hans Andersen's Fairy Tales were nothing compared with the wonders of the harbour that night, as it was specially illuminated for the celebration of the Season.

Several foreign vessels lay in and around the docks. The "Austral" was preparing to take her homeward journey in a few days, being newly painted and beautifully decorated with flags; while from the port-holes of the hurricane, and other decks streamed the electric light. Truly some festive celebration was close at hand.

The bells were ringing merrily. Bands were to be heard in the distance as they played on the steamer decks, and from the water there floated a pleasant echoing sound. The

moon was gloriously bright overhead. The headland lights at the Inner South Cliff were to be seen. Behind was Lord Nelson's Hotel; to the right were Darling Point and Watson's Bay; to the left, the opening to the Cove which led to the Paramatta river.

The scene was a never to be forgotten one. Around the Dock, waiting for the arrival of the "Oceana," were to be seen a group of Australian Squatters who were talking about the prospects of the coming season, their special stock, and the condition of the orange groves at Paramatta and up country.

To wile away the time, Tom Winstthrop, who was Mathematical Professor at the Sydney University, entertained his friend by describing the characters of these Natives of Bushland—not that these were the Native blacks by any means, but they were certainly original characters. As he remarked on first one and then another, curiously enough they made some comment on their work which verified his statements.

"You see, Pauline, if there were not some truth in Phrenology I could not hit off their peculiarities as I have done. No credit is due to me, all I want you to do is to compare what I have said with their shape of head and the remarks they have let drop, and in time you will find there is more in it than you will admit," said Tom.

Dr. Pauline Browne was the first lady doctor in Sydney. She had a well-earned practice which she had built up from attending the Children's Hospital, as well as a Woman's Hospital which she had been instrumental in starting herself. In fact, her work had so much increased during the past year that she had urged her friend and fellow student, Dr. Annie Barnes to come and join her. It was for the arrival of this friend that she and Mr. Winstthrop were waiting on this memorable Christmas Eve.

"And so you still believe that nonsense do you, Tom? I thought you had had more sense driven into your head by this time. But you must be a clairvoyant not a phrenologist to be able to judge so accurately of their character."

"I see you do not understand the principles or the scope of Mental Science, or you would not attribute to me a power I do not possess, and at the same time refuse to believe in Phrenology," said Tom with a smile.

Their attention was called away from the squatters to a lady who had just come and seated herself by their side. Her features were broad and distinctly marked as though they had been chiselled away north in bonnie Scotland.

"What do you think of her character?" said Pauline, with a warming interest in the subject.

"Well! you see her broad, well filled-out forehead, high crown, and large back head. These indicate practical talent, intuitive insight, rigid conscientiousness and great ambition, joined to a very social nature," said Tom in a very impressive way—a style, by the way, which he reserved for special occasions such as these.

"But do you believe the brain is a sensitive plate capable of registering all our emotions and actions?"

"I should like to tell you of a case"—

"The steamer is in sight!" they heard; so everyone made a move in the direction of the sighted vessel, but it was only the light in a small steam launch turning the corner round Darling Point. So Pauline and Tom decided to pace the Landing Pier and watch more closely for themselves.

"As I was saying," Tom continued, "a friend of mine could play twelve games of chess blindfold with ease, but when the number was fourteen he confessed the extra two games were all but failures. He died about three years ago. His brother, a friend of mine, who is a skilful anatomist and physiologist, was anxious to examine the brain of his brother who was so great a blindfold player, in the hope of discovering some peculiarity of structure that would account in some way or other for his marvellous gift. He obtained for this purpose the consent of the rest of the family, who felt that their respect for the memory of their relative ought not to interfere with the interests of Science. The doctor did me the honour to consult me as to which of the cerebral organs he ought to examine most closely as being most active in the conduct of the Royal Game. I told him that a keen sense of locality is the chief mental attribute of the Chess master; that other organs are but subsidiary, though essential in arduous play, such as *Firmness*, which gives endurance, while *Combateness* gives zest to the fight, *Constructiveness*, "the reconstructive faculty," also *Concentrativeness*, Ideality, Comparison and Causality, all lend their aid to form a player of the highest quality. Number, Order, and even Tune may also assist. Indeed it is astonishing to find what a large number of musicians are chess players."

"But do you think that we use different parts of our brain to play chess, and are you egotistical enough to think that by taking out a fellow's brain you can presume to tell what parts were used?" inquired Pauline, with genuine curiosity, and at the same time a great amount of incredulity.

"Let me tell you my experience in this marvellous case, and then you can do as you please about believing me," said Tom, calmly. "The doctor and I had some further talk on

the action of the brain in forming a cognition or arriving at a conclusion. Not one of us poor mortals can realize himself to himself or establish his own personal ego apart from some sensation. The philosopher Hume remarked that he could never find himself alone with himself, but that his ego was always, as it seemed, necessarily accompanied by some external object or internal sensation. So now, as we are talking about the sensitive nature of the brain to impressions, I may as well explain that I can see no reason why every complete cognition made in the course of our varied life, is not stored up in the brain and may be reproduced at any time sooner or later, by some one or other of those accidental circumstances which seem to be beyond our control. Some individuals, as you know, Pauline, in our own circle of friends, possess the power of reviving at will certain classes of cognitions depending on the peculiar development of their cerebral organs. Think of Clara Wilson, whose large organ of Tune enables her to play without note or book, overtures, oratorios, or songs ; or there is my brother George, whose memory for dates is phenomenal, though his memory for names is so weak that he is a perfect duffer. So in the case of Morphy, whose chess cognitions were so vivid that he could recall whole games years after they had been played, in a marvellous manner.

Now if you are not tired of my talk, and there seems every likelihood of our having to stay here until midnight, I will continue," said Tom, in an apologetic manner, as he was just a little afraid lest he was pressing the subject too far.

"Pray go on, I want to learn all I can on the subject before Annie comes, because she has studied it a great deal more than I have, and I confess I know very little about it." Though Pauline had her faults, want of candour was not one of them, and she freely admitted her ignorance on this point.

"The fact that the special cultivation of any one organ of the brain, in common with any organ of the body, increases not only in power, but in size and capacity, the founders of Phrenology explained with great clearness, and further, that this growth is manifested by certain modifications of the skull which can be measured and tested by a skilful operator. The result of the examination of my friend's brain is intensely interesting to me, for the doctor microscopically examined the organ of Locality, which 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 last 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 extra games always embarrassed the blindfold player. The general result, however, of this enquiry leads us 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 material wooden boards and men before him. Dr. Dean is preparing drawings of his experiments for the Royal Society, and the purely anatomical details for the College of Surgeons."

Just here a party came up to where Pauline and Tom were promenading.

The party consisted of four bright, intelligent girls, who were attired in light muslin dresses and light wraps. They were chatting about their last summer's holiday in the Blue Mountains, where they had been camping out in picnic fashion, and hoped to do the same again very shortly. Their audience was a handsome young man, something of the fashion plate style. A fine moustache, evenly pointed features, a straight and becoming nose,—not bumped or crooked; a high forehead, and healthy colour in the cheeks and lips, and keen, susceptible eyes—ones that looked as though they could be all things to all men—and women too—polite, affable, friendly.

CHAPTER II.

At last the "Oceana" appeared in the distance, and truly she looked like a floating palace coming towards the dock. In another half hour every one would be shouting their welcomes, waving their pocket-handkerchiefs, and clasping their friends by the hand.

As Pauline's only relatives in Sydney were an elderly invalid aunt and a still more elderly uncle, she went alone to welcome her friend, but meeting Mr. Thomas Winstthrop, a friend who was interested in all Scientific Societies in Sydney, he offered his services. Dr. Annie Barnes was to spend Christmas with her, and then after the New Year go to Wentworth on the Murrumbidgee river, where some of her relatives were spending the summer, and after a short visit she intended to join Pauline in her medical work.

"At last, my dear Annie, you have arrived," said Pauline.

"Yes, and we have beaten the record too. We have had a delightful passage, only two unpleasant, stormy days; we passed several steamers that started before us, but there, how are you, my Pauline? It is good of you to come to meet me at this late hour."

"What about your luggage?" "Oh! the third officer has promised to get someone to see after it, and sure enough here is the man he described, who would give me help."

"Allow me to relieve you of your valise," said Tom, who was not a man to wait on ceremonies, for an introduction at such a time, and this had been forgotten in the hurry of the moment.

As quick as lightning the man had the box on his shoulder and ran ahead, calling out as he went, "Come along! be quick if you want the first buggy," while Tom brought up the rear with another.

Pauline was glad to get away so quickly, but was sorry for her friend to miss seeing her special shipmates again. The thought flashed through her mind, why do people leave their important messages such as, "Give my love to all at home, send me your address, and let me know how you get on," and scores of others—to the most awkward moments, instead of making all these arrangements earlier. They had to drive through the City which was astir with many queer sights; while the shops were ablaze with light, busy with late customers. Every breath of air and every breeze was acceptable. The day had been the hottest of the season, and the night was only a shade less intense. When they arrived home a delicious little supper awaited them. Martha was a jewel of a maid for Sydney, and with Dr. Pauline's usual thoughtfulness they had most of it ready before she left home. Not that she had had much spare time, as she had been occupied with extra patients. The season had been a very trying one, even to those who had lived in Sydney all their lives, and Dr. Pauline was a great favourite in the suburb where she resided. The old people had gone to bed, but out on the verandah while partaking of their supper, these two friends sat and chatted; and when they retired to their rooms, which opened out of one another, they found sleep was the last thing that would come to them; but as the cuckoo-clock was striking the early hours of the morning, the quietness was only broken by the songs of the mosquitoes outside the gauze nets which encircled the beds.

Christmas was a holiday to everyone in Sydney with the exception of the minister and the doctor, so accordingly the doctor's carriage had been ordered as usual at 9.45.

"I shall be back by one, and then you will feel rested, and

as I do not expect many calling patients to-day we will go for a sail on the Harbour at four o'clock. All who are able to eat their own English plum-pudding and Australian goose (stuffed mutton) will forget their illness for one day. But perhaps you would like to accompany me. The carriage is an easy one and you can rest quietly while I make my calls," said Pauline with her usual intuitiveness.

"I should indeed. Instead of being tired I feel I have had one long rest of over six weeks, and as I am never seasick I have nothing to recover from," replied Annie.

"Martha, put up luncheon for two as quickly as possible. We must start in ten minutes."

This was indeed Christmas day, but C. Moore's account of a visit from St. Nicholas, driving his ten tiny reindeer over house-tops, &c., while he himself was furred to the throat, as there was six inches to a foot of snow on the ground, was a picture so fanciful for that sultry day, that big-eyed, large-headed boys and story-loving girls never tired of the picture. So when Dr. Pauline reached the Children's Hospital she was besieged with questions from the tiny patients, who St. Nicholas was, where he came from, what he did, and where he lived? "Auntie Paul," said a child of five, do just tell us one thing about this wonderful man Father Christmas, we will do without medicine to-day if you will tell us that." This bright-eyed snowdrop seemed the spokeswoman for the ward. So, fitting the answer to the request, she gave them a ten minutes' story about the great Father Christmas, and what Christmas meant. She finished up in her charmingly fascinating way, which made her beloved by all in the ward, by telling the children how "Santa Claus is a universal friend of children in nearly every civilized country, but in different lands he goes by different names. Our young cousins in England call him Father Christmas, while in Holland people know him as the good Bishop St. Nicholas, who goes from house to house in December and fills the shoes and stockings of all good children with presents and grand surprises. German children hang up their stockings for Kris-Kringle, who is always accompanied by his brother Pelsnichol or Nicholas with the fur, who carries the birch rod for the refractory children.

"In sunny Italy the little folks are taught to give thanks to Santissimo Bambino (Holy Child) for all their gifts and sweet things. In Russia, Christmas presents are supposed to be brought to the children by Babouscha, who is represented as an old crone having a sad, sad story, which makes her drop tears on the pillows of the children's beds when she

comes to leave the gifts. She hobbles along with difficulty, but makes no noise in her work of carrying presents. In Norway, Belgium, and Sweden, and other cold countries, sports and pastimes in the snow or on the ice make the day a happy one, while due regard is paid to offering up thanks for the enjoyment of another Christmas Day. The simple peasants have some funny customs in bestowing presents. In Sweden, they conceal their gifts in turnips and cabbages, or some other vegetables, and throw them to each other through the windows. In Normandy, they conceal packages of bon-bons in the two ends of the huge Yule-log which burns and blazes in the big chimney-place. This is called the *souche de noel*. So now you can think, my dear patients, what the children do in other countries on Christmas day."

From here they drove about, until, at ten minutes to one, she had visited her last patient and was turning homeward. The gardens were luxuriant with flowers and fruit, and from her own garden, Pauline gathered grapes and five or six different kinds of fruit. During the drive throughout the suburbs of Sydney these two friends talked about their studies when they were students together at the School of Medicine, in Handel Street; the Professors, the Demonstrators in Anatomy, the Chemical Laboratory, &c.

"Since you left England, Paul dear, I have had much more chance of studying many subjects in a scientific way, than when you were in England. You know we used to have some interesting discussions on Psychology, Heredity, and Occult subjects, you took the negative, and I the affirmative side. I must tell you about them.

"Many people say that a man does not change in intelligence, when he loses a part of his brain substance, and further that it does not matter where the lost brain has been located, as it all acts alike. Now I know differently. I know of a case in America that a gentleman friend of mine has told me about. He was a student at Harvard University, and in the Medical Museum they have a skull which he has seen. The history of this skull proves my point. The young man had been engaged in stamping a blasting charge in a rock with a pointed iron bar 3ft. 7in. in length, $1\frac{1}{4}$ in. in diameter, and weighing $13\frac{1}{4}$ lbs., the charge suddenly exploded. The iron bar propelled with its pointed end first, entered at the left angle of the patient's jaw, and passed clean through the head near the sagittal suture in the frontal region, and was picked up at some distance covered with blood and brain matter. The man was for the moment stunned, but within an hour after the accident, he was able to walk up a long flight

of stairs and gave the surgeon an intelligent account of the injury he had sustained. Everyone thought he would die at once, but he lived for twelve and a half years away from medical attendance, so that his brain was not preserved, but the doctor who attended him after his accident asked that his skull might be preserved for scientific purposes. Now what I particularly wanted to point out was this, the bar passed through the frontal lobe, from what the doctors say, through the moral and religious organs, Faith or Spirituality, Veneration and Benevolence. The intellectual and religious organs were therefore either entirely destroyed or very considerably injured. You must, dear, follow me in this respect, that Phrenology teaches that where any part of the brain is superiorly developed or predominates over another part we may expect more stimulus and mental action in that region. In this person there had been a serious loss of brain matter, and what was the result? His employers, who had regarded him as the most efficient and capable foreman in their employ previous to his injury, considered the change in his mind so marked that they could not give him his place again. His balance of mind seemed destroyed. He became fitful, irreverent, and indulged at times in the grossest profanity, which he was never known to do before; he showed no respect for his fellows, but was impatient of restraint, even obstinate and changeable. These characteristics were so different to his former disposition that every one who knew him could not but notice the change."

"This is most certainly very convincing, and I have never thought of this point before. Tom and you have done more to enlighten my ignorant mind on the subject than all the previous attempts I have made to understand it. As Tom has promised to come in at four o'clock to accompany us for a sail on the Harbour we can then continue our talk on the subject," said Pauline.

CHAPTER III.

As the afternoon was wearing away and the heat of the sun was moderating a little, Mr. Tom Winstthrop knocked at the picturesque bungalow of Pauline Browne, M.D. Certainly he was looking at his best that afternoon. The warm weather suited him and he was full of spirits at the thought of the treat before him. The water was a delight to him, and working very hard at the University all the week, a sail on the Harbour was always a great relief to his active organization.

When they were seated in their little vessel, the thought struck Tom and he breathed his thought aloud, "Dr. Annie, you are much more energetic to-day than I should have been if I had just come off a journey of over 12,000 miles. I wonder you have not wanted to rest all day."

"Oh dear no, I have so thoroughly enjoyed the passage out and never had a suspicion of *mal de mer* that I used to go down to the steerage passengers and help some of them to get about. I had such a parting with English friends, that was the most upsetting part of the journey. I do so dislike to say good-bye to friends. I just had to steel my heart and put it in my pocket, and be brave for my mother's sake. It was about her I thought the most, for she did not want me to leave her, though she never objected to my wish when she saw my mind was fully made up.

"Dr. Ferrier, Mr. and Mrs. Gladstone, came as far as Malta with us, and there was a large and distinguished party of doctors and statesmen to see them off. Many of the former I had met and been introduced to at the British Association, and the Anthropological Institute, and as I had read a Paper before both Societies, on 'Psychology from a Phrenological standpoint,' I was soon recognized as the lady who caused so much animated debate on the much tabooed subject—Phrenology. Thus we chatted pleasantly, and threw out challenges to one another when we should meet again."

"But surely no one of any note believes in it now in London, or ever has done for that matter, have they?" queried Pauline.

"Here you err, but your mistake is pardonable, because you have not kept pace with the subject. Even the late Prince Consort believed in Phrenology, had all his children examined, and, in a letter to Mr. Combe, spoke of the written descriptions as 'portraits of the phrenological conformation of the children.' In fact, George Combe dined with the Prince of Wales the month before he passed away."

"If you had read the accounts of the work done at the British Association this year you would be a little astonished at the advance made in scientific circles in regard to the investigations, brain, and biological research.

"Dr. Munro, President of the Anthropological Section, said, in the course of his opening remarks, 'that the brain can no longer be regarded as a single organ, but rather as a series of organs connected by bonds of Union—like so many departments in a Government office in telephonic communication—all, however, performing special and separate functions.' He even went further by saying in effect, though I may not quote

him correctly, word for word : When we attempt to compare the brain capacity of one animal with that of another with the view of ascertaining the quality of their respective mental manifestations, we must first determine what are the exact homologous parts that are comparable."

"That was exactly the line of my argument last night, Pauline, when demonstrating to you the case of the blind-folded chess player," said Tom, earnestly.

"I am so glad to find I have an ardent supporter in you, Mr. Winsthrop. I was also struck with another point in Dr. Munro's address that is so convincing, from a scientific point of view, that Phrenology is true. It was this : to draw any inference from a comparison of two brains by simply weighing or measuring the whole mass of each would be manifestly of no scientific value. For in the brain of the savage the portion representing highly skilled motor energies might be very much larger, while the portion representing logical power might be smaller than the corresponding parts in the brain of a philosopher. Now, Pauline, don't you see Dr. Munro is right ? Compare the Australian native's head with Mr. Winsthrop's high mathematical forehead and you see the comparison is logical enough that where the one fails the other excels and has brain to correspond. Equal-sized brains do not display equivalent nor indeed analogous results. To postulate such a doctrine would be as irrational as to say that all people *see alike* which would be as utterly absurd as untrue and unfounded."

"But do you believe that an inch of brain located here in the top of the head makes you firm, and another inch somewhere else makes you generous, another makes you quarrelsome ? I believe in the general outline of the head, but the division of the four regions of the head must be so confusing that the difficulty in finding out the faculties would greatly puzzle me," said Pauline.

Just here they stopped for tea in one of the beautiful coves or glens for which the Harbour is noted ; and on their way home their attention was called to the Southern Cross. It was composed of stars exactly like those to be seen in the Great Bear in the Northern Hemisphere, but they were differently grouped. So in this Southern Hemisphere, life in its familiar Anglo-Saxon form of civilization is seen under a changed aspect. Melbourne and Sydney are both of them cities of which any country might well be proud, and when we take into account the brevity of their existence, they rank among the wonders of the world. Sydney is unrivalled for beauty. Its widely famed Harbour

justifies all the encomiums and pride of its citizens. It abides in the mind of one who has sailed about its many picturesque bays and evergreen shores and islands, presenting to the gaze a constant and ever-varying panorama of loveliness, "a thing of beauty and a joy for ever." Along one side of the Harbour was the Public Domain, and also the Botanical Gardens, with their wonderful variety of foliage.

"With two such clever exponents of Phrenology there is every prospect of the world becoming the richer and the better for your having lived," said Pauline, enthusiastically, as the lamps were lighted in the drawing-room. "I am certainly convinced as to the truth of your statements, but you must not expect me to dispose of all my objections at once. I have many I should like to ask you about, but we will have a little music now. Come Gertie, give us a solo on the harp." This child, who was blind, often came in and played for Pauline in the evening, when the latter was fatigued with her work, and nothing seemed to soothe her nerves, and allay her anxieties, like this girl's music. She often took her with her to soothe her patients' aches and pains. Thus the Christmas day wore away to make room for many Christmas days yet to come, but the memory of this happy reunion was not likely to be speedily forgotten, and a strong nucleus for a future Phrenological Society was thus started.

ORION.

ANTHROPOLOGY.

BY ROBERT MUNRO, M.A., M.D.,

(Continued from page 459.)

BUT this brings us on controversial ground of the highest importance. Professor Huxley thus expresses his views on the phase of the argument now at issue:—

"I have endeavoured to show that no absolute structural line of demarcation, wider than that between the animals which immediately succeed us in the scale, can be drawn between the animal world and ourselves; and I may add the expression of my belief that the attempt to draw a psychical distinction is equally futile, and that even the highest faculties of feeling and of intellect begin to germinate in lower forms of life." *

* *Evidences as to Man's Place in Nature*, p. 109.

On the other hand, Mr. Alfred R. Wallace, who holds such a distinguished position in this special field of research, has promulgated a most remarkable theory. This careful investigator, an original discoverer of the laws of natural selection, and a powerful advocate of their adequacy to bring about the evolution of the entire organic world, even including man up to a certain stage, believes that the cosmic forces are insufficient to account for the development of man in his civilized capacity. "Natural selection," he writes, "could only have endowed savage man with a brain a few degrees superior to that of an ape, whereas he actually possesses one very little inferior to that of a philosopher." This deficiency in the organic forces of nature he essays to supply by calling in the guiding influence of a "superior intelligence." In defending this hypothesis from hostile criticism he explains that by "superior intelligence" he means some intelligence higher than the "modern cultivated mind," something intermediate between it and Deity. But as this is a pure supposition, unsupported by any evidence, and merely a matter of personal belief, it is unnecessary to discuss it further. I would just, *en passant*, ask Mr. Wallace why he dispenses with this "higher intelligence" in the early stages of man's evolution, and finds its assistance only requisite to give the final touches to humanity.

In dealing with the detailed objections raised by Mr. Wallace against the theory of natural selection as applied to man, we are, however, strictly within the sphere of legitimate argument; and evolutionists are fairly called upon to meet them. As his own theory is founded on the supposed failure of natural selection to explain certain specified peculiarities in the life of man, it is clear that if these difficulties can be removed, *cadit quæstio*. It is only one of his objections, however, that comes within the scope of my present inquiry, viz., that which is founded on the supposed "surplusage" of brain power in savage and prehistoric races.

In comparing the brains of the anthropoid apes and man Mr. Wallace adopts the following numbers to represent their proportional average capacities, viz., anthropoid apes 10, savages 26, and civilized man 32—numbers to which there can be no objection, as they are based on data sufficiently accurate for the requirements of this discussion. In commenting on the mental ability displayed in actual life by the recipients of these various brains he states that savage man has "in an undeveloped state faculties which he never requires to use," and that his brain is much beyond his actual requirements in daily life. He concludes his argument thus:—"We see, then, that whether we compare the savage with the

higher developments of man, or with the brutes around him, we are alike driven to the conclusion that in his large and well-developed brain he possesses an organ quite disproportionate to his actual requirements—an organ that seems prepared in advance, only to be fully utilised as he progresses in civilization. A brain one half larger than that of the gorilla would, according to the evidence before us, fully have sufficed for the limited mental development of the savage ; and we must therefore admit that the large brain he actually possesses could never have been solely developed by any of those laws of evolution whose essence is that they lead to a degree of organization exactly proportionate to the wants of each species, never beyond those wants ; that no preparation can be made for the future development of the race ; that one part of the body can never increase in size or complexity, except in strict co-ordination to the pressing wants of the whole. The brain of prehistoric and of savage man seems to me to prove the existence of some power distinct from that which has guided the development of the lower animals through their ever-varying forms of being.”*

With regard to the closing sentence of the above quotation, let me observe that the cosmic forces, under which the lower animals have been produced by means of natural selection, do not disclose, either in their individual or collective capacity, any guiding power in the sense of a sentient influence, I believe that the “distinct power” which the author summons to his aid, apparently from the “vasty deep,” to account for the higher development of humanity is nothing more than the gradually acquired product of the *reasoning faculties* themselves. Not that, for this reason, it is to be reckoned less genuine and less powerful in its operations than if it had emanated from an outside source. The *reasoning power* displayed by man is virtually a higher intelligence, and ever since its appearance on the field of organic life, it has, to a certain extent, superseded the laws of natural selection. Physical science has made us acquainted with the fact that two or three simple bodies will sometimes combine chemically so as to produce a new substance, having properties totally different from those of either constituents in a state of disunion. Something analogous to this has taken place in the development of man’s capacity for reasoning by induction. Its primary elements, which are also those of natural selection, are conscious sensation, heredity, and a few other properties of organic matter, elements which are common, in a more or less degree, to all living things. As soon as the sequence of

* *Natural Selection, &c.*, 1891, p. 193.

natural phenomena attracted the attention of man, and his intelligence reached the stage of consecutive reasoning on the invariableness of certain effects from given causes, this new power came into existence ; and its operations are, apparently, so different from those of its component elements that they can hardly be recognised as the offspring of natural forces at all. Its application to the adjustment of his physical environments has ever since been one of the most powerful factors, not only in the development of humanity, but in altering the conditions and life-functions of many members of the animal and vegetable kingdoms.

I have already pointed out that *the brain can no longer be regarded as a single organ, but rather as a series of organs connected by bonds of union—like so many departments in a Government office in telephonic communication—all, however, performing special and separate functions.* When, therefore, we attempt to compare the brain capacity of one animal with that of another, with the view of ascertaining the quality of their respective mental manifestations, we must first determine what are the exact homologous parts that are comparable. To draw any such inference from a comparison of two brains, by simply weighing or measuring the whole mass of each, would be manifestly of no scientific value. For example, in the brain of a savage the portion representing highly skilled motor energies might be very much larger, while the portion representing logical power might be smaller than the corresponding parts in the brain of a philosopher. But should these inequalities of development be such as to balance each other, the weight of the two organs would be equal. In this case what could be the value of any inference as to the character of their mental endowments ? Equal-sized brains do not display equivalent, nor indeed analogous, results. To postulate such a doctrine would be as irrational as to maintain that the walking capacities of different persons are directly proportional to the weight of their bodies. Similar remarks are equally applicable to the skulls of prehistoric races, as it would appear that evolution had done the major part of its work in brain development long before the days of neolithic civilization. Huxley's well-known description of the Engis skull—"a fair average skull, which might have belonged to a philosopher, or might have contained the thoughtless brains of a savage"—goes far to settle the question from its anatomical point of view. Until localization of brain functions makes greater progress it is, therefore, futile to speculate to any great extent on the relative sizes of the skulls of different races either in present or prehistoric times.

But there is another aspect of the question which militates against Mr. Wallace's hypothesis, viz., the probability that many of the present tribes of savages are, in point of civilization, in a more degenerate condition than their forefathers who acquired originally higher mental qualities under natural selection. There must surely be some foundation of truth in the widely-spread tradition of the fall of man. And, if such be the case, we naturally expect to find some stray races with inherited brains of greater capacity than their needs, in more degenerate circumstances, may require. An exact equivalent to this may be seen in the feeble intellectuality of many of the peasants and lower classes among the civilized nations of modern times. Yet a youth born of such parents, if educated, often becomes a distinguished philosopher. It is well-known that if an organ ceases to perform its functional work, it has a tendency to deteriorate and ultimately to disappear altogether. But from experience we know that it takes a long time for the effects of disuse to become manifest. It is this persistency that accounts for a number of rudimentary organs, still to be met with in the human body, whose functional activity could only have been exercised ages before man became differentiated from the lower animals. Such facts give some support to the suggestion, previously made, that philosophy, as such, has no specially localized portion in the brain. Its function is merely to direct the current of mental forces already existing.

But, again, Mr. Wallace's argument involves the assumption that the unnecessarily large brain of the savage had been constructed on teleological principles for the sole purpose of philosophising. My opinion is that the greater portion of this so-called surplusage is the organic representative of the energy expended in the exercise of the enormous complexity of human actions, as displayed in the movements of his body and in the skilful manipulations necessary to the manufacture of implements, weapons, clothing, &c. All such actions have to be represented by a larger bulk of brain matter than is required for the most profound philosophical speculations. The kind of intelligence evinced by savages, however low their position in the scale of civilization may be, is different from, and incomparably greater than, that manifested by the most advanced of the lower animals. To me it is much more rational to suppose that the development of the large brain of man corresponded, *pari passu*, with that of his characteristic physical attributes, more especially those consequent on the attainment of the upright position. That these attributes

were acquired exclusively through the instrumentality of the cosmic forces was, as the following quotation will show, the opinion of Mr. Darwin:—"We must remember that nearly all the other and more important differences between man and quadrumana are manifestly adaptive in their nature, and relate chiefly to the erect position of man; such as the structure of his hand, foot, and pelvis, the curvature of his spine, and the position of his head."* Mr. Wallace, however, considers the feet and hands of man "as difficulties on the theory of natural selection." "How," he exclaims, "can we conceive that early man, *as an animal*, gained anything by purely erect locomotion? Again, the hand of man contains latent capacities and powers which are unused by savages, and must have been even less used by palæolithic man and his still ruder predecessors. It has all the appearance of an organ prepared for the use of civilized man, and one which was required to render civilization possible."† But here again this acute observer diverges into his favourite by-path, and introduces a "higher intelligence" to bridge over his difficulties.

We have now reached a stage in this inquiry when a number of questions of a more or less speculative character fall to be considered. On the supposition that, at the start, the evolution of the hand of man was synchronous with the higher development of his reasoning faculties, it is but natural to ask where, when, and in what precise circumstances this remarkable coalition took place. I would not, however, be justified in taking up your time now in discussing these questions in detail; not because I think the materials for their solution are unattainable, but because, in the present state of our knowledge, they are too conjectural to be of scientific value. In the dim retrospective vista which veils these materials from our cognisance I can only see a few faint landmarks. All the osseous remains of man which have hitherto been collected and examined point to the fact that, during the larger portion of the quaternary period, if not, indeed, from its very commencement, he had already acquired his human characteristics. This generalization at once throws us back to the tertiary period in our search for man's early appearance in Europe. Another fact—disclosed by an analysis of his present corporeal structure—is that, during a certain phase of his previous existence, he passed through a stage when his limbs, like those of the present anthropoid apes, were adapted for an arboreal life. We have therefore to look for the causes which brought about the separation of man from his quadrumanous congeners, and entailed on him such a transformation

* *Descent of Man*, p. 149.

† *Natural Selection*, p. 198.

in his form and habits, in the physical conditions that would supervene on a change from a warm to a cold climate. In the gradual lowering of the temperature of the subtropical climate which prevailed in Central Europe and the corresponding parts of Asia during the Miocene and Pliocene periods, and which culminated in the great Ice age, together with the concurrent changes in the distribution of land, seas, and mountains, we have the most probable explanation of these causes. Whether man forsook his arboreal habits and took to the plains from overcrowding of his own species in search of different kinds of food, before this cold period subjected him to its intensely adverse circumstances, it would be idle for me to offer an opinion. Equally conjectural would it be to inquire into the exact circumstances which led him to depend exclusively on his posterior limbs for locomotion.

During this early and transitional period in man's career there was no room for ethics. Might was right, whether it emanated from the strength of the arm, the skill of the hand, or the cunning of the brain. Life and death combats would decide the fate of many competing races. The weak would succumb to the strong, and ultimately there would survive only such as could hold their own by flight, strength, agility, or skill, just as we find among the races of man at the present day.

In summing up these somewhat discursive observations, let me just emphasize the main points of the argument. With the attainment of the erect position, and the consequent specialization of his limbs into hands and feet, man entered on a new phase of existence. With the advantage of manipulative organs and a progressive brain he became *Homo sapiens*, and gradually developed a capacity to understand and utilise the forces of nature. As a handicraftsman he fashioned tools and weapons, with the skilful use of which he got the mastery over all other animals. With a knowledge of the uses of fire, the art of cooking his food, and the power of fabricating materials for clothing his body, he accommodated himself to the vicissitudes of climate, and so greatly extended his habitable area on the globe. As ages rolled on he accumulated more and more of the secrets of nature, and every such addition widened the basis for further discoveries. Thus commenced the grandest revolution the organic world has ever undergone—a revolution which culminated in the transformation of a brute into civilized man. During this long transitional period mankind encountered many difficulties, perhaps the most formidable being due to the internecine struggles of inimical members of their own species.

In these circumstances the cosmic processes, formerly all-powerful so long as they acted only through the constitution of the individual, were of less potency than the acquired ingenuity and aptitude of man himself. Hence, local combinations for the protection of common interests became necessary, and with the rise of social organizations the safety of the individual became merged in that of the community. The recognition of the principle of the division of labour laid the foundations of subsequent nationalities, arts, and sciences. Coincident with the rise of such institutions sprung up the germs of order, law, and ethics. The progress of humanity on these novel lines was slow, but in the main steadily upwards. No doubt the advanced centres of the various civilizations would oscillate, as they still do, from one region to another, according as some new discovery gave a preponderance of skill to one race over its opponents. Thus the civilized world of modern times came to be fashioned, the outcome of which has been the creation of a special code of social and moral laws for the protection and guidance of humanity. Obedience to its behests is virtue, and this, to use the recent words of a profound thinker, "involves a course of conduct which, in all respects, is opposed to that which leads to success in the cosmic struggle for existence. In place of ruthless self-assertion it demands self-restraint; in place of thrusting aside or treading down all competitors, it requires that the individual shall not merely respect but shall help his fellows; its influence is directed, not so much to the survival of the fittest, as to the fitting of as many as possible to survive. It repudiates the gladiatorial theory of existence. It demands that each man who enters into the enjoyment of the advantages of a polity shall be mindful of his debt to those who have labouriously constructed it; and shall take heed that no act of his weakens the fabric in which he has been permitted to live. Laws and moral precepts are directed to the end of curbing the cosmic process and reminding the individual of his duty to the community, to the protection and influence of which he owes, if not existence itself, at least the life of something better than a brutal savage."*

These humble remarks will convey to your minds some idea of the scientific interest and profound human sympathies evoked by the far-reaching problems which fall to be discussed in this Section. Contrasting the present state of anthropological science with its position some thirty or forty years ago, we can only marvel at the thoroughness of the change that has taken

* Huxley, on *Evolution and Ethics*, p. 33.

place in favour of its doctrines. Now man's immense antiquity is accepted by a vast majority of the most thoughtful men, and his place in nature, as a derivative animal at the head of the great chain of life, appeals for elucidation to all sciences and to all legitimate methods of research. But among the joyful pæans of this triumphal march we still hear some discordant notes—notes, however, which seem to me to die with their echoes, and to have as little effect on scientific progress as the whistling of an idle wind. For my own part I cannot believe that a science which seeks in the spirit of truth to trace the mysteries of human life and civilization to their primary rootlets, a science which aims at purging our beliefs of superstitious figments generated in days when scientific methods were too feeble to expose the errors on which they were founded, a science which reminds us in a thousand ways that success in life depends on a correct knowledge of the cosmic forces around us, can be opposed to the highest and most durable interests of humanity.

Book Notice.

Health, and the various Methods of Cure, by J. H. Rausse. This is the title of a cleverly-written book comparing the various healing means. With sharp logic and bold judgment the author goes through the labyrinth of contradictory medical opinions and theories to find his own method of cure in following Nature's laws. To be obtained through the publishers: L. N. Fowler and Co.

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.]

"HIGH PRESSURE LIFE AND HOW TO MEET IT."

On Wednesday, Nov. 8th, Mr. Forward, editor of the *Hygienic Review*, gave a most interesting lecture at the Fowler Institute on "High Pressure Life and how to meet it." He spoke of the beauty of the human structure, and the capability of the body. The human body is a wonderful machine, and in machinery to-day we study economy of expenditure and force, so the first thing we have to consider with regard to ourselves is how we can economise our life force, especially in these days when there is so much high pressure life.

Roughly speaking our health depended upon the condition of the three systems of the body—Respiratory, Digestive and Nervous.

For the health of the first we need to look after the lungs, and secure for them as far as possible a continual supply of pure air. Exposure of the lungs to fresh air is not the cause of consumption and pulmonary diseases, but the constant breathing an impure atmosphere, and as a rule we find that the greater number of consumptive people are found among those who live in large numbers in a confined atmosphere.

Many have to live during the day under conditions which they cannot help. If fresh air is not obtainable during the day it is essential that we procure it at night, especially as about one-third of our lives is spent in our bedrooms. This may be done in any size room by having the window open, with a board so arranged as to prevent a down draught, or a curtain between bed and window to keep the draught from coming directly upon the head. To breathe through the nostrils deeply and fully, holding the breath against the walls of the lungs, will be found to prevent to a great extent colds, sore throats and lung diseases.

The Digestive system is more complex than the Respiratory. There is a continual destruction and building up again going on in our system. Every act of thought wastes the material of the body, and this has to be replaced by fresh material. It is essential to understand somewhat of the action of the Digestive apparatus, and neither overtax or neglect any portion of it. Food should be thoroughly masticated, that the stomach may not be called upon to do more than its legitimate share of work. What we eat is not of so much importance as what we digest, and the quality of food is of more consequence than the quantity. We need to choose the class of food most suited to the kind of work we have to do in the present day, and it must be that which we can digest with least expenditure of vital force, and which will build up the system.

Fruit or where not easily attainable, farinaceous foods are preferable to animal food. The value of milk and eggs is in proportion to their purity.

The Nervous system depends largely for its health upon repose ; and next to repose, upon recreation. The present state of life is one of intermittency—high tension, counteracted by repose. The majority of centenarians have not been so remarkable for their size, but have taken things easily and quietly. But where repose is not obtainable, recreation must be had, the mind must be taken from one thing to another. In Mr. Gladstone we have remarkable versatility. He can turn from a Home Rule Bill to blue china, old books, or a dissertation on Homer.

To meet the high pressure life and secure long life we must not take business cares from Saturday to Monday, which causes so many furrows in the forehead. We must bend not break.

Two lectures on Phrenology were given in the Bethel Schoolroom, Sheerness, on Wednesday and Thursday, 8th and 9th November, by Miss Fowler, Lady President of the Fowler Institute, London ; the chair being taken by E. W. Brightma, C.C., Chairman Sheerness Local Board of Health. Unfortunately the weather was very unfavourable, which somewhat accounted for the select attendance. Those who

attended these lectures showed an interest in the science by not only refusing to be hindered by the elements, but also repeated their attendance, as most of those who were there on the first evening presented themselves on the second. Each lecture was listened to with the greatest attention, although two hours were occupied each evening. As a listener for the first time to a phrenological lecture, one would find it almost impossible to refuse to be converted to the science, especially after the masterly way Miss Fowler demonstrated the fundamental proofs of mental science. Mental science was demonstrated in reference to the important work of fitting persons, especially children, to fulfil the duties of life to which they were best suited. In addition to the question of utility of Phrenology, Miss Fowler remarked on the evils of alcohol, and the effects it has upon the brain, showing plainly not only does alcohol fail to nourish the brain, but beyond that its work seems to be nothing less than to harden it—hence paralyze it. Hence, viewing the lectures from all sides, the science of Phrenology should be familiar with every sane person, little or much, as it would often prove a safeguard to all at different crises of one's life. After each address, which was given in a style that proved the lecturer had full command of her subject, several from the audience were invited to have their characteristics publicly demonstrated so that if the lecture failed to prove to the audience, practical tests upon persons unknown to Miss Fowler would show that those acquainted with the science of Phrenology had a power in their hands to prove what the science propagated. Each evening several well known persons (locally), at the same time unknown to the lecturer, were examined, and it was indeed amusing to watch the audience brimming over with humour when certain prominent characteristics were told out. Thus practice demonstrated theory, and anyone leaving those lectures still unbelievers must have indeed been hard ones to impress.—E. BEARDSALL.

ON Wednesday and Thursday evenings, while those who were downstairs were buying and selling and getting gain, the Rev. A. Roger exhibited a number of dissolving views upstairs : the local views were of especial interest. A word of praise is due to Mr. W. Ashby, Fellow of the Fowler Phrenological Institute, who gave private delineations of character during each of the evenings ; all who visited him in the ante-room were highly pleased with the result of the interview. This is the second occasion on which Mr. Ashby has favoured us with his presence and help.—*The Monthly Record*, Nov., 1893.

AT a bazaar held by the Wandsworth Congregational Club, Mr. Baldwin, F.F.I. (honours), recently succeeded in carrying his audience with him, metaphorically speaking, by his correct delineations of character.

MISS E. M. RUSSELL, F.F.I., attended the large Sunday School Bazaar at St. Martin's Hall in November, and gave a short address, and afterwards examined a number of heads, publicly and privately, with marked ability.

Notes and News of the Month.

NOTICES FOR THE NEW YEAR.

IN the new year it is our purpose to improve the appearance of the Magazine considerably, by changing the quality of the paper, which will give a better finish to the cuts and letterpress.

* * *

A NEW YEAR'S PRIZE of a course of lessons is offered to the one who obtains 25 new subscribers for the Magazine during the year.

A second prize of a china bust to anyone securing half that number, or 12 subscribers; and "Spurzheim's Lectures" to anyone who secures six subscribers. A fourth prize of a free membership for a year is offered to anyone who obtains five new members to the Fowler Institute.

* * *

THE January Magazine will contain as a specially prepared frontispiece, the portrait of Mr. Richardson, the celebrated artistic printer; the outline of his character and life will also be given. A New Year's Story will be commenced. A Character Sketch of Sir Andrew Clark; the Children's Column will be continued. Articles on Hythe Skulls; Ears; and the first part of a Phrenological Dictionary will also appear.

* * *

SEE January Magazine for particulars of New Year's Annual Conversation.

* * *

THE following special Interviews will appear during the year:—

Lady E. Biddulph.

John Strange Winter.

John Oliver Hobbes.

Miss Blackmore, of Rowan College, Greenwich.

The Editor of *Science Siftings*.

Miss Gertrude Stewart, Secretary of the W. S. Society.

Rev. and Mrs. James Baillie.

Mrs. Cragg, Organizer for the N. V. Society.

* * *

IN the *Phrenological Annual* will be found a list of Fellows and Associates who have obtained by examination their various degrees at the Fowler Institute. The next examination will be held on January 11th and 12th, 1894.

ALL intending candidates should forward their names to the Secretary on or before the 30th December, 1893.

Correspondence.

"THE PHRENOLOGICAL ANNUAL."

TO THE EDITOR OF THE *Phrenological Magazine*.

DEAR SIR,—I am pleased to see by the circular received that it is proposed to continue and keep this useful *Annual* to the front. I

hope your efforts will meet with the entire approbation and hearty co-operation of the whole Registered Profession. Professional phrenologists, having the interests of Phrenology at heart, cannot have a more suitable publication to sell and present to patrons and clients, because it represents the status of the profession, who they are, and where they are to be found ; and because it presents, in an attractive form, all the recent advances made by Phrenology as a study, science, and as an art ; and also the reception Phrenology now receives from high quarters and the public. At no time has the outlook of Phrenology in the last thirty years been better than now. The existence of the Fowler Institute and the British Phrenological Association is an evidence in point. A thorough education in the principles, evidences, and practice of Phrenology is sought, instead of mere desultory reading and the guess work, which in days gone by constituted the curriculum of many. The educated ladies and gentlemen who are making a study of Phrenology is in itself a sign that the days of the sand professor and bran-tub mountebank of English seaside resorts and inland fairs are numbered, and education wins all along the line. At no time in the history of Phrenology in England has there been so many educated and able advocates of Phrenology in the field, or our hopes for the future been so great as now. It is for these and many other reasons I would urge on every lover of Phrenology, and every advocate of the science, professional or amateur, to make good use of *The Annual*, by subscribing freely and advertising therein, pushing, selling and distributing it, in whatever way possible, to make these facts known.

More particularly I would urge on every registered phrenologist to do his part, and make him or herself the centre for the sale and distribution of at least 50 or 100 copies during the next twelve months. What is to hinder ? Why should there not be hearty co-operation in this matter. Let every professional phrenologist treat *The Annual* as if it were his own particular publication.

I sincerely hope this year's (1894) issue, will not only eclipse, not only in matter and style, all previous issues, but that its circulation will be far ahead of the highest point it has reached yet.

I am, Sir, yours truly,

JAMES COATES

(Late Editor *Phrenological Annual*).

Glenbeg Sanatorium, Rothesay.

Character Sketches from Photographs.

M. H. (Cathays).—This gentleman possesses great strength of will and force of character ; he is a straightforward man, and prefers to pursue a uniform course without going from one thing to another. He is qualified to be the master, to lead, and have control ; he cannot be led contrary to his inclinations. He is shrewd in his judgments, intuitive in his perceptions, arrives at the truth very quickly ; and can make up his mind promptly. He is not so noted for conversational talent, extravagance of imagination, or keen wit, as he is for good judgment, a quick perception of truth, and decision of mind. He

speaks his mind promptly, and would want to go to work as quickly as possible. He feels more deeply than he expresses in actions or words.

“CURLY” (Shoreham).—This lady has a working organization; is in her element when she is employed physically as well as mentally. She is always in earnest; is practical in judgment, quick to observe, intuitive in her perceptions, methodical in habits, and prefers not to leave anything till to-morrow that can be done to-day. She possesses sound common sense; there are indications that she comes from good stock. The temperament is favourable to work, to long life, to enjoyment in life, and to success in business. She is not so hopeful or enthusiastic, but is sound, solid, and inclined to be serious. There are, however, indications of fun, and disposition to enjoy a good laugh. She will make a thorough worker and a good housekeeper. She should love enough to enjoy home, and be satisfied with the surroundings that she can secure in a home of her own, in which she will appear to the best advantage.

J. C. has a very positive mind, is energetic and spirited to overcome obstacles. He has a resolute, combative disposition to master all difficulties; is tenacious and determined in his character. He is very careful, quite ingenious, and readily devises ways and means. He has an acquisitive turn of mind. He possesses good mechanical judgment, and if he were to learn a trade he would do best as a builder or a practical engineer. He must endeavour to take life more easily, as he has not enough of the Vital temperament. He needs to take care of his health. He has good memory of faces and forms, and good observing faculties. He is ambitious and sensitive in disposition, is strongly social in his nature, and delights to take a leading part in whatever will result in usefulness or entertainment.

“FIERY” (Shoreham).—This lady has a very positive character, is always in earnest, and is liable to attempt to do too much. She has not sufficient constitutional power to meet the demands of her mind; she must learn to take life easily, and stop when she can do more rather than go to the full extent of her strength. She places a high value on character and is ambitious. She is sympathetic and readily responds to her internal feelings. Is quick to see what is going on, and alive to all surrounding influences and conditions. She is highly organized, has an ardent nature, is quite impressible, and has versatility of talent. She is correct in drawing inferences and intuitive in her judgments.

D. DALL (Motherwell).—You are by nature much interested in other people. You have an aspiring, ambitious turn of mind and will not be contented until you have gained some public position or notoriety; not that you are proud or haughty, but are quite ambitious and anxious to be favourably known. You have a fair moral brain, and comparatively an elevated tone of mind. You could easily give your life to some cause where you could do good, even if you only got a fair living out of it. You are characterized for close observation and are capable of being much interested in physical phenomena, in the study of mind, and in acquiring general knowledge. Are particularly good in comparing persons, things, facts, circumstances, and the conditions of things. Are rather metaphysical, decidedly intuitive, and have all the qualities necessary to observe character.

