

THE
Phrenological Magazine:

A JOURNAL OF
EDUCATION AND MENTAL SCIENCE.

EDITED BY
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THE
Phrenological Magazine.

JANUARY, 1886.

MR. JOHN MORLEY, M.P.



HE likeness of this gentleman indicates balance of power. There appears to be a fully and strongly developed body, a healthy organization, and a tenacious hold on life. There is an ample amount of body, soul, and spirit; his rather large and prominent



features indicate strength throughout the entire organism, which renders him equal to almost any task and disposes him to take hold of a subject like a master. He is quite alive to what is going on around him, because of great impressibility of mind; and because of quick and correct

sight and hearing. His brain is rather large and amply developed in the various parts, so that he is not eccentric or one-sided. He has no loose screws, nor any too light ; nor has he too many or too few ; but is well put together, as though he was made for wear and use. His temperaments are well balanced and favourably developed, so that he walks, works, and thinks easily, and without friction.

The majority of his phrenological organs are fully and strongly developed, which would indicate a distinct and individual character, quite like himself. They make him strong enough to be independent, to think for himself as well as to make a marked impression on the minds of others, and to help to form public opinion. His perceptive faculties give great range of observation and aid him to see and judge correctly of what he does see. He sees with an intent rather than from curiosity : hence he forms opinions about what he sees ; but he sees men and minds more than things in general. The bent of his mind is more to study laws and principles and their application than to study how to be rich or in the fashion. One of his largest perceptive faculties is Order, giving him great power to systematize, organize, and bring all his powers to bear harmoniously, so that he gains strength as he advances. Calculation enables him to make correct estimates, to figure up closely, and to understand how to use his forces to the best advantage. He easily takes in the whole geography of the country, and is able to map out his work accordingly. The strength of his intellect is in the correctness of his judgment, which comes from the action of his intellect as a whole, guided by his very large Comparison, which gives him great power to analyze, compare, and judge of differences and resemblances, and to see the bearing, application, and utility of a subject. He has also great sagacity, intuition, and discernment of truth in opposition to error, and is a good judge of mind in its various phases and conditions ; this arises from a large organ of Human Nature, located between Comparison and Benevolence.

By the aid of Comparison and Human Nature he acts with a definite object in view ; he wastes no time or mental force, but comes directly on to his subject and concentrates all his force in one direction. He is a student of law and of human nature, and knows how to make the most of the application of the one to the other. He has large Language, which enables him to use the most appropriate words in order to express his meaning most effectually. He is broad in the temples, which indicates ingenuity and versatility of talent, making him ingenious in argument and in the con-

struction of sentences. He takes broad and liberal views of all subjects, and is no sectarian ; he may believe in general moral principles, but not in creeds or in ceremonies. His mind is so purely analogical and critical, that belief is almost entirely out of the question without a good reason as a foundation. He has poetical talent, and is able to enlarge and embellish his ideas and present them in an attractive style. He has more than ordinary ability as a writer, whether in prose or poetry, on law or philosophy. His head is high in the coronal, moral region, which aids to give strength and stability to his character, and elevation to the tone of his mind. His large Benevolence mellows his whole character and gives him sympathy, and makes him interested in the human race ; and modifies his selfishness so as to render him neighbourly and kind. Conscientiousness and Firmness being large, give him stability and consistency of character and moral courage enough to have distinct opinions and to vindicate them. He is not extravagant in his hopes, had rather not venture farther than he can see his way clearly. He is not so enthusiastic and jubilant as he is really in earnest and sincere ; he is reticent, politic, and prudent, and talks and acts with an object in view rather than to get up an excitement. His influence will be permanent and lasting, for he lays good foundation and keeps within bounds. He is equal to almost any responsibility connected with an institution of learning, great undertakings, or taking a responsible situation in the government ; for there is no danger of his being too radical or crotchety or one-sided. He is still a growing man, and it does not yet appear what he is not able to become.

L. N. F.

THE EYE PHYSIOGNOMICALLY CONSIDERED.

OF all the organs of the human body the eye appears to be the most related to the soul, the most subtle and unlike flesh and blood, the most apt means of communicating with the outer world, both in conveying to the mind intelligence of what is passing without and imparting to the world without revelations of what is going on within. When the mind is elated and happy, the eye beams with joy ; if care and sorrow weigh it down, the eye betrays the grief even to the most unintelligent observer. The hard-working heart and stomach know no respite from their labours ; but when the wearied mind forgets itself in sleep, the eye, as its close

companion, finds opportunity for repose. When the direst of human calamities takes place, and reason is unseated, the vacant, purposeless eye indicates the melancholy fact. The daily and hourly passing changes of expression are instinctively understood by all; but I invite attention to some of the more permanent varieties, colour, form, position, movements, surroundings, indicative of corresponding powers and inclinations of the soul within.

The most obvious functions of the eye are to make its possessor acquainted with the material world; to convey correct conceptions of surrounding objects, as respects their size, colour, number; their forms, positions, motions; the similarity or dissimilarity between this object and that; their texture, arrangement, mechanism, fashion, and their abstract qualities of beauty, grandeur or utility.

The construction of the eye itself gives evidence of its power to appreciate these and other qualities of material objects; and as it serves as a key by which the mind unlocks the stores of knowledge without, so it is a key by which the initiated may enter and take note of the resources within.

Black eyes usually indicate good powers of physical endurance; but they are choleric, and may be, though not always, treacherous. Grey ones denote quickness of temper, coolness in time of mortal danger, excellent powers of calculation, desire for novelty; but without intimate friendships among those with grey eyes, may be mentioned Frederick the Great, Wellington, Napoleon I., Washington, Von Moltke, and General Scott. The tiger, jaguar, and the alligator have grey eyes. Hazel eyes belong to shrewd natures, and such as delight in intercourse with friends. Clear blue eyes are associated with love of change and progress. A mixed or indeterminate colour of eye may be taken as evidence that the individual is a poor judge of shades and hues, if not quite colour-blind.

The organic course of black eyes is that the sclerotic membrane, or outer covering is more tensely drawn. This may be, and has been, demonstrated on the eye of a recently killed ox, which is rendered black by tightening the membrane. Black eyes are universal among the natives of hot climates. Blue and grey are found in cold and temperate regions, where the blood of various races has mingled by inter-marriage.

The result of such mixture is that relaxation of the system which produces the blue eye and light-coloured hair. Intellectually, the effect is to produce progressive nations; and, as a rule, blue-eyed people are more disposed to change, progress,

and intercourse than those with black eyes. It sometimes occurs that the two eyes are not alike in colour in the same face. The right eye represents the father's people and the left eye the mother's family ; hence a brown eye on the left side, with a blue mate on the right side, is nature's record that there were more dark eyes among the mother's ancestors of that individual, than in the father's lineal descent.

The size of the eye next merits our attention. The small eye is mechanical, large eyes are literary. Small eyed people attend to details better than those with large eyes ; large eyed people have less control over their feelings ; they weep more easily, and are more sensitive and susceptible. They are likewise fond of sports, and are less inclined to physical labour than the small eyed.

The eye is generally large in warm climates, and comparatively small in cooler regions. The Laplanders, Northern Russians, Sweeds and Norwegians have small eyes ; while the Turks, Greeks, Italians, Spaniards, Arabs, and Negroes usually display large ones. Men in the colder climates need more mechanical appliances for their shelter, protection, and convenience than in summer climes ; therefore nature crowds the bones around and upon the visual organs, and by thus circumscribing the area of the vision, renders it more available for the industries necessitated by cold climates.

Nature adapts everything to the situation in which she places it ; and if the art or genius of men places it in a false position, Nature is soon seen setting to work, and effecting a remedy for the mistake by adapting it to its location.

Some individuals have one eye larger than the other. They are peculiar. If the right eye of such a one is larger, it may be inferred that his father's family were more polished than his mother's, and vice versa. The form of the eye and of its opening must be considered in connection with its size ; and here let me say that of all the human organs the eye is the handmaid of love, infallibly conveying its desires. Through the faithful performance of its duties in this respect it becomes a tell-tale, revealing, by the form it assumes, both the kind and degree of love that dwells in its possessor. While the size and prominence of the eye denotes quantity in this respect, the form bespeaks quality. Round, dove-like eyes belong to those who seek and desire but one object of affection. The almond denotes the reverse. The last sultan of Turkey (Aziz) had exceedingly prominent eyes with the almond form of opening ; and the press states that his wives numbered 640 odd. The late viceroy of Egypt

has likewise this shape of eye, and he distributed his love among some 320. As a general rule, the almond-shaped eye predominates in polygamous races, as the Siamese, Chinese, Japanese, Burmese, Turks, Arabs, Singhalese, Cochinites, Hindoos, and New Zealanders. Large, prominent, watery eyes, standing out between eyelids, forming an almond-shaped opening, are profligate in love, voluptuous and inconstant. Those formed like a half moon, with their corners turned upwards are likewise unpromising; they indicate a licentious, selfish and cunning nature. Those obliquing outward and downward are inclined to double dealing and falsifying. Large, even, round, lustrous orbs are warm and confiding in love; small, dry ones are quite natural to spinsters and bachelors. The form of the opening between the eyelids is determined by the surroundings. Small bones and fully developed muscles give the prominent eye, large bones produce shrunken, square looking eyes, or lids almost in a straight line: this is the mechanical eye. The evenness of the lids gives the power of judging straight lines and regular forms.

The white of the eyes showing between the under lid and the dark or iris of the eye denotes love of the grand and sublime.

All birds have round—or nearly round—eye commissures, and they are all monogamous, choosing one mate and remaining faithful. Though our domestic fowls are otherwise minded, they are not so in their wild state; among quadrupeds those of the deer kind, and also the feline, are good examples of circular eye commissure; and they all mate in their native wilds.

So do the buffalo and horse in their native wilds; sheep, giraffe, and other round-eyed quadrupeds, though some of them have been perverted through domestication.

The roe deer has his boon companion for life, being strictly monogamous, and evincing the most lively regard and affection for his mate. From which it appears that the turtle-dove has no longer the exclusive claim to be considered as the honoured emblem of conjugal constancy. On the other hand pigs, even in a wild state, as they are found in Asia and Africa, are never known to choose mates and bide by one. They exhibit very remarkably that form of the eye which has been described as polygamous. Close observers have their eyebrows crowding upon the visual orb. As a cannon will generally be more serviceable when protected by rocky battlements, so is the human eye more efficient, more able to use acute observation, when surrounded by

bones that close in upon it; thereby shutting out those surplus rays of light that would confuse the sight, and prevent minute and accurate observation.

A calm, blue eye enclosed in this fashion is an apt judge of character, and not very liable to err in its estimate of those that come under its scrutiny.

Sunken eyes denote a meditative character; and if the surrounding bones are large and prominent, we may expect to find a generally sound judgment.

Eyes that open very little belong to persons who are gruff, suspicious, and secretive; but widely-opening eyes, round, firm-looking, and surmounted with a broad forehead, are nature's testimonials to a confiding, friendly, loving, and lovable nature. Where the eyes stand wide apart there is love of travel, and good capacity for appreciating and remembering curves, roads, and scenery, and aptness to find one's way. Great space between the eyes and the centre of the eyebrows indicate large powers of belief, especially if the brows are considerably arched.

Eyes cutting square across the face denote love of system; oblique ones are untrustworthy, destitute of originality and generally of honesty. Prominent eyes standing in large sockets and furnished with long lashes, belong to those who love style and are admirable judges of it.

Eyes with openings between the lids, wide from side to side and narrow vertically, are signs of a dreamy nature. The dull, sleepy-looking eye is uncertain, apt to be dreadful in rage if aroused. When the under eyelid crowds upwards upon the ball and presents an appearance of thickness, the person is apt to be sensual. On the other hand, when it falls away from the ball, and has a puffy appearance, it betrays exhaustion of the nervous and muscular system, occasioned by intemperate drinking or other excesses; sometimes also by over-work. A drooping of the upper eyelid is unfavourable. It is generally observed in persons of low, cunning disposition and very secretive habits.

Eyes that stand on a smooth plane, level with the forehead, belong to animal natures.

Great relative distance from the pupil of the eye to the brows, measuring an angle of forty-five degrees outwards and upwards, denotes ability for drawing, painting, and sculpture; likewise for remembering forms and faces. Eyes that move rapidly belong to good judges of motion; slow-moving orbs to persons who are fond of home. Those that flash quickly in winking betray a hasty temper. Regularity in winking denotes aptitude for numbers and calculations.

Secretive people roll their eyes much about. It needs scarcely be told that humility casts down the eyes, and that little reverence or respect is to be looked for in a person who carries a steady and defiant look. And, in conclusion, with all that I have herein said, it must be added that no eye is in form or character such that its possessor must of necessity do wrong ; neither is any so perfect as to indicate absolute faultlessness.

THE CORRELATION OF PSYCHOLOGY AND PHYSIOLOGY.

BY DANIEL NOBLE, M.D.

CHAPTER III.

ON IDEAS, AND THEIR DYNAMIC INFLUENCE.

A FORM of consciousness which is higher still in the psychological scale than either sensation or emotion—THOUGHT—exists also in the present sphere of existence, dependent upon organisation. Impressions received through the sensory and emotive ganglia influence thinking, and, in some sense, are essential to it ; but thought itself is something beyond. These impressions constitute the material of *ideas*—those mental perceptions of objects and states of existence which form the basis of all positive knowledge, and which, once realised in the consciousness, can be recalled in memory, and thus be rendered available in the higher operations of mind.

It is physiologically certain that the *intelligence*, alike in the apprehension of things, qualities, and circumstances, and in the combination and arrangement of ideas, has cerebral instrumentality for its exercise ; and evidence from all sources, anatomical, physiological, and pathological, points to the cortical grey matter of the brain, the vesicular neurine investing the convolutions, as supplying the requisite organic conditions. Mr. Solly has very appropriately designated this structure the *hemispherical ganglia*.

The progress of an impression from sensation, through intuition and representation, up to thought, has supplied to psychologists the occasion of much interesting speculation ; but, in physiology, we need not attempt any such detailed analysis. An anatomical distinction, however, between the region of thought and that of sensibility can very fairly be established ; and a certain aptitude, moreover, can be recognised in the encephalic structure for conveying the impressions of sense upwards to the hemispherical ganglia.

White matter intervenes between the vesicular neurine of the sensory ganglia and that of the cerebral convolutions ; the conscious impressions received by the former may be regarded as ascending along the white fibres, and, on the grey summit being attained, developing changes in its condition which minister to the intelligence. Ideas arise. If we reflect upon the processes that go on within our own minds, there is no difficulty in distinguishing between a sensation and an idea, or in marking the sequential origin of the latter. How often do we find that, when the full consciousness of sensation is obtained, the idea suggested by it does not follow until many seconds, or even minutes, afterwards. For example, you hear the utterance of certain words, as sounds ; their signification does not strike you ; no effort of attention is made ; yet suddenly the sense breaks upon your intelligence. The correlated physiological phenomena may thus be stated. The auditory ganglia take up the sentient impression at once ; its passage onwards to the seat of thought is delayed : presently, however, its natural course is freed, as if from some hindrance ; and it attains the hemispherical ganglia, forming or awakening ideas in the mind.

Cranioscopic facts of a very obvious character render it probable that the anterior portion of these ganglia subserves, in an especial manner, the intellectual operations ; that the upper region is associated very much with thoughts that are allied with the higher sentiments ; and that the posterior division is connected mainly with ideas that refer themselves to the inferior affections and propensities of our nature. The doctrine of separate organs, however, for particular faculties of the mind, can hardly, in the present state of knowledge, be regarded as scientific truth.

The changes which, as sensations, are accomplished in the encephalon, develope ideas ; and these latter exert back again upon the organism a dynamic influence which has afforded to physiologists abundant material for curious and ingenious theories. The various bearings of this subject were beautifully worked out by Dr. Laycock, some years ago, in a memoir on the Reflex Functions of the Brain, which was published in the *British and Foreign Medical Review* (vol. xix). In this memoir, Dr. Laycock discusses the hydrophobic gasp, and, after speaking of its induction by attempts to drink, traces the influence of mere idea in bringing about a like result. "The cerebral nerves," says he, "being analogous to the posterior spinal nerves, and the encephalic ganglia analogous to the spinal ganglia, the

spectrum of the cup of water will traverse the optic nerves, and enter the analogue of the posterior grey matter in the brain, causing changes (ideagenous changes) corresponding to the idea of water ; thence the series of excited changes will pass over to the analogue of the anterior grey matter, exciting another series (kinetic changes), by which the necessary groups of muscles are combined in action." The whole subject has also been admirably elucidated by Dr. Carpenter, in the last edition of his *Human Physiology*.

From the dominance of particular ideas, movements very often become excited when neither sensation nor emotion exerts any very appreciable influence, and when volition apparently exerts none at all. The movements in question seem to be quite as automatic—*reflex* as it were—as those which spring from impressions made upon the spinal, sensory, or emotive ganglia. In the transition state between sleeping and waking, there is great fertility of incongruous thought—disorderly groups of ideas, receiving no governance whatever from the will ; yet, in these circumstances, muscular movements and other phenomena will frequently take place, respondent purely to the dominant idea. An attractive object is before the imagination, and a snatch is made at it. Here there is no selection among motives—no will ; the act is altogether impulsive, prompted by the simple idea. In certain irregular kinds of sleep, and in somnambulism, spontaneously arising or induced by artificial processes, the mind can at times be literally *played upon*, so as to educe actions and movements contrived beforehand ; these being suggested by communication of the correspondent idea, which becomes reflected in the outward conduct. Mr. Braid, in his hypnotic demonstrations, exhibits these phenomena in a very remarkable manner. He tells the sleeper, or sleep-waker, that he must raise from the floor some article before him ; that, however, its weight may defeat him ; the subject of the experiment becomes ruled by the idea that he has to elevate some very ponderous substance ; but it is a light pocket-handkerchief, probably. In such circumstances, I have seen muscular effort exerted in vain. It is intimated, in the hearing of the hypnotised person, that he has been insulted ; the head becomes elevated in disdain. It is whispered that you are about to excite his benevolence, and he shows himself liberal in gifts ; and so on. These things constitute illustrations of Dr. Laycock's reflex functions of the brain ; and Dr. Carpenter, who appears to have worked out this matter very thoroughly, designates the phenomena *ideo-motor*. *Ideo-dynamic* would probably

constitute a phraseology more appropriate, as applicable to a wider range of phenomena.

The dynamic influence which peculiar ideas and trains of thought exert, under circumstances in which volitional agency is imperfect or altogether in abeyance, is curiously exhibited in the origin and progress of numerous mental maladies ; and, in instances wherein there may be no actual insanity, the singular effects which at times result, as ideodynamic phenomena, have, in their significance, important practical relations. On these accounts, I will furnish some still more striking illustrations of the influence mentioned.

A gentleman some years ago consulted me for sleepless nights. I formed the opinion that his ailment was attributable to fault in the stomach, and prescribed for him some bitter with an antacid. I thought it advisable, however, to commence with a free action of the bowels ; and, with this view, prescribed also eight grains of the compound extract of colocynth and two of calomel, made into pills, directed to be taken at bed-time. When I again saw the patient, he told me the pills had given him an excellent night, for that he had slept beautifully. "But," I said, "did they not purge you ? They were intended to do so." "Why," he said, "as I had come to consult you for sleepless nights, and as the pills were to be taken at bed-time, I thought they were to make me sleep, and I did sleep ; I was not purged at all." Now, instances of imaginary medicines producing the expected effect are common enough ; doubtless, this is a circumstance to be considered in estimating the follies of homœopathy, and other such delusions of the hour ; but here was a case in which, further, the ordinary action of powerful medicines was hindered by the dominance of an expectant idea.

The following case, having a similar significance, is quoted from Pechlin by Dr. Crichton, in his work on *Mental Derangement*, published more than half a century ago :—
"There was a student of my acquaintance at Leyden, who, either because I was too young, or because he wished to save his money, did not consult me, but took care of his own health. He had probably heard medical men say that purgatives were the best kind of remedies, and that pills were the best form for giving them. As he had been told that Fernelius was an author of great reputation, he borrowed him of me. I sent it to him. He looked in the index for the word pill ; and, as he imagined that all pills were purges, he took the first as the best. These were the pil. cynoglossi, the dose one scruple, which he swallowed ;

and, after drinking two or three glasses of warm beer, waited the effect ; and lo ! it took place agreeably to the imagination, and he was thus purged by opium, hyoscyamus, crocus, and other anodynes and astringents."

The influence, under some circumstances, of particular directions of thought, in determining convulsions, especially in the female constitution, is familiar to all practitioners who have to treat hysterical and other such affections. On this account, detailed examples in illustration would be superfluous. "The effect," says Romberg, "of the imagination on seeing spasmodic movements, and even the mere recollection of them, may give rise to convulsions."

It is curious to witness the absorbing effects of dominant ideas in several of the forms of insanity. Common sensation sometimes appears to be temporarily paralysed. At this time, I have a female patient under my care, who, when deeply engrossed with her maniacal wanderings, appears to be quite insensible to pain. She will inflict upon herself bodily injury, as if from pure caprice ; and display the most senseless indifference." "I have applied," says Esquirol, "blisters, setons, moxas, the actual cautery, to individuals strongly inclined to suicide, and to other melancholic patients, for the purpose of trying their sensibility : I have produced no pain ; and some, after recovery, have assured me that they experienced no suffering whatever from these applications."*

The phenomena of mesmeric and natural somnambulism exhibit a parallelism with this state of things. With idiots, in whom ideas have such little force, mesmeric effects cannot be produced. At any rate, Dr. Guggenbühl, so philanthropically distinguished for his successful efforts in the improvement of cretins, has tried mesmerism ; but, within his experience, not one has even been put to sleep—a circumstance of itself suggesting that many of the phenomena of mesmerism result from the dynamism of dominant ideas.

The sudden and energetic communication of some striking thought to the mind exerts very singular effects, occasionally in suspending the power of particular muscles, and sometimes in the temporary abolition of consciousness. The Abbé Faria, celebrated in mesmeric history, is said to have put whole rows of persons into an unconscious state, through the vigour and determination with which he bade them "sleep" ! A remarkable case is cited by Crichton † from the *Psychological Magazine*, a periodical publication of the

* Des Maladies Mentales.

† Op. citat.

last century—a case which shows the paralysing influence of an expectant thought communicated as *shock*. “In Kleische, a small village in Germany, belonging to Mr. V. T., a maid-servant of that gentleman’s family was sent a short league from home, to buy some meat. She executed her orders correctly, and, as she was returning in the evening, she thought she suddenly heard a great noise behind her, like the noise of many waggons. Upon turning round, she observed a little grey man, not bigger than a child, who commanded her to go along with him. She did not, however, return any answer, but continued to walk on. The little figure accompanied her, and frequently urged her to go along with him. Upon reaching the outer gate of her master’s residence, she was met by the coachman, who asked her where she had been, to which she returned a very distinct answer. He did not remark the little man, but she still continued to do so. As she was passing the bridge, he summoned her for the last time, and, upon her refusing to answer him, he told her, with a menacing look, that she should be four days blind and dumb; and having said so, he disappeared.

“The girl hastened to her apartment, and threw herself on the bed, unable to open her eyes, or to pronounce a word. She appeared to understand all that was said, but could not make any answer to the questions which were proposed to her, except by signs. Everything was tried for her recovery by the family with whom she lived, but all was in vain. She was incapable of swallowing the medicines which were ordered for her. At last, on the expiration of the fourth day, she arose in tolerably good health, and narrated what had happened to her.”

An anecdote, which illustrates the same psychological principle as that illustrated by the foregoing narrative, has been communicated to me by my friend and colleague, Dr. Whitehead, in these terms:—“The following is an account of the incident which happened to my old friend Mons. Boutibonne, and which I promised to give you in writing. Mons. B., a man of literary attainments, a native of Paris, served in Napoleon’s army, and was present at a number of engagements during the early part of the present century. At the battle of Wagram, which resulted in a treaty of peace with Austria in November 1809, Mons. B. was actively engaged during the whole of the fray, which lasted, if I rightly remember, from soon after midday until dark. The ranks around him had been terribly thinned by the enemy’s shot, so that his position at sunset was nearly isolated; and,

while in the act of reloading his musket, he was shot down by a cannon-ball. The impression produced upon his mind was, that the ball had passed, from left to right, through his legs below the knees, separating them from the thighs, as he suddenly sank down, shortened as he believed to the extent of about a foot in measurement; the trunk of the body falling backwards on the ground, and the senses being completely paralysed by the shock. In this posture he lay motionless during the remainder of the night, not daring to move a muscle for fear of fatal consequences. He experienced no severe suffering; but this immunity from pain he attributed to the stunning effect produced upon the brain and nervous system. 'My wounded companions,' said he, 'lay groaning in agony on every side; but I uttered not a word, nor ventured to move, lest the torn vessels should be roused into action, and produce fatal hæmorrhage; for I had been made acquainted with the fact that blood-vessels wounded in this way did not usually bleed profusely until reaction took place. At early dawn on the following morning, I was aroused from a troubled slumber by one of the medical staff, who came round to succour the wounded. "What's the matter with you, my good fellow"? (Fr. Qu'a-t-il mon camarade?) said he. "Ah! touchez-moi doucement, je vous prie," I replied, "un coup de canon m'a emporté les jambes." He proceeded at once to examine my legs and thighs; and giving me a good shake, with a *ris de joie*, he exclaimed, "Faites-vous lever d'abord, vous n'avez rien de mal." Whereupon I sprung up in utter astonishment, and stood firmly on the legs which I believed had been lost to me for ever. I felt more thankful than I had ever done in the whole course of my life before. I had not a wound about me. I had indeed been shot down by an immense cannon-ball; but, instead of passing through the legs, as I firmly believed it to have done, the ball had passed under my feet, and had ploughed away a cavity in the earth beneath, at least a foot in depth, into which my feet suddenly sank, giving me the idea that I had been thus shortened by the separation of my legs. Voilà ce que se fait-il le pouvoir d'imagination.'"

But not only will a certain suspension of consciousness have place, and also of the energy of particular muscles, under the dynamic influence of ideas, but, moreover, in cases in which there is paralysis of function, an attentive and expectant thought will lessen for a time the morbid incompetency. I feel confident that temporary improvement in the hearing, which I have had occasion to witness, and

frequently to hear of, in deaf persons subjected to mesmeric and other such unwonted processes of cure, has resulted altogether from the idea. Romberg relates the case of a patient whose leg and foot had become insensible, and in whom voluntary motion in those parts was all but abolished; he states, however, that, even in the absence of all feeling, "the movement of the toes was facilitated by directing attention to them;"* and within a like category must rank those well-known instances in which local action becomes stimulated or depraved by the bestowal of excessive and anxious attention to particular organs or structures.

Another and habitual effect of ideas consists in the production of variations in the *cænæsthesis*, or general sensibility; thus giving rise to sentiment, affection, and passion. What indeed are the emotions but those states of consciousness which result from the reciprocal action of thought and sensibility? Particular ideas and sets of ideas operate upon this latter—upon the corporeal *self-feeling*—and accomplish peculiar changes therein; and the impressions so received react back again upon corresponding trains of thought. If, as I have supposed, the so-called optic thalami and corpora striata constitute the encephalic centres of emotion, we must, in these processes, regard them as acted from above—from the hemispherical ganglia—through the conducting agency of intercommunicating white fibres; just as, in emotion from more physical states, the same centres are supposed to be acted upon from below, through nervous filaments distributed to the organs and structures very generally. This hypothesis, says the learned and able author of *A Critical History of Modern Speculative Philosophy*, "would harmonize extremely well with the whole observed development of our knowledge, which, commencing with a physical impulse, appears next in the form of an incipient mental sensibility, and then expands into distinct notions or ideas; which ideas can then, in their turn, react upon the emotions. The position of the above mentioned ganglia at the base of the hemispheres corresponds exactly with the supposed function. They lie midway between the sensory ganglia on the one side and the cerebral hemispheres on the other; and have fibres which communicate downwards to the one and upwards to the other."†

The inward feelings called forth by the agency of thought may be pleasurable or painful; but a statement that the emotions are constituted of the pleasure or the pain resulting

* Op. citat.

† Morell's "Analysis of the Intellectual Powers."

from ideas does not exhaust the description. The late Mr. James Mill, the Rev. Sydney Smith, and some other psychologists, however, seem to reduce the emotional states to so very simple a definition. Benevolence, in this view of the case, comes to be regarded as the pleasure experienced in contemplation of the happiness of others ; and fear, again, as the pain that flows from anticipation of evil ; an analysis being attainable in the same way with all the emotions—passions, affections, and sentiments, alike.

Now, I think, upon reflection, that we must admit the specifically distinct character of our varying states of consciousness, as recognised in hope, fear, grief, pride, vanity, love, and other such inward experiences. We *feel* in a characteristic manner under these several circumstances, quite irrespective of the pleasure or the pain that attends them. Fear is fear, and need not be exclusively painful or pleasurable ; love is love, and is only pleasurable under appropriate conditions ; grief may be a “silent luxury,” as well as a poignant suffering. The psychical states of love, hatred, desire, aversion, joy, sadness, hope, despair, fear, audacity, courage, and so on, are modifications of the emotional sensibility provoked by thought, but separable from thought ; such modifications being distinguishable amongst each other, regarded simply as feeling.

My meaning will be somewhat plainer if I cite the analogies afforded by external sensation. Hot and cold, hard and soft, moist and dry, as sensations, are distinguishable conscious experiences, called forth by the qualities of objects, but in themselves subjective states, pleasurable, painful, or neutral, as the case may be. The sense of taste furnishes probably the most complete and readily seized analogy. *Sweetness* is ordinarily pleasurable ; to some, however, it is painful ; and to others it is neither one nor the other. Occasionally, it is pleasurable, painful, and neutral, at different epochs of life ; but at all times, and under all circumstances, sweetness is sweetness.

Gustatory impressions excited by sapid particles are sources both of pleasure and pain ; they have always a distinct character about them ; and the sense of taste would be very imperfectly described, in calling it the pleasure or the pain procured by contact of the tongue with sapid substances.

In a somewhat analogous manner I regard the emotions, in their several states of sentiment, affection, and passion, as particular conditions of the *cœnæsthesis*, determined usually by the presence of correspondent ideas, but capable, to some

extent, of being experienced in their absence. If a dog bark loudly and unexpectedly, I startle, and immediately experience an *emotion* of fear distinctly prior to the *idea* of danger.

Who, that has seen much of nervous and mental maladies, has not had frequent occasion to witness emotional states of all kinds, without the presence of the ideas commonly inducing them? Hopefulness, joy, grief, and timidity, are perpetually encountered under these circumstances. "Some melancholic person," says Esquirol, "are frightened at everything, and their life is consumed in constantly recurring anguish; whilst others are terrified by a vague feeling which has no motive. '*I am afraid*,' say these patients, '*I am afraid*.' But of what? '*I don't know*, but *I am afraid*.'"^{*}

It is within the experience of almost every one to have felt joy, sorrow, and anxiety, as the result of a dream, the ideas connected with which have entirely passed from the mind.

However speculative to many persons the physiology of the emotions here set forth may appear, it assists in the explanation of many pathological as well as physiological phenomena. When we regard the great ganglionic centres placed at the base of the hemispheres as an intermediate sensorium between purely mental states on the one side, and the consciousness of physical conditions on the other, it becomes intelligible that disordered bodily health should in most instances painfully impress the emotive sensibility; and that the influence, in ascending, as it were, should act upon the development of thought, giving rise to anxious and painful ideas. Or, to trace the process in reverse order: intelligence arrives suddenly of the death of some one beloved; the additory ganglia, through the appropriate nerves, receive the sounds significant of the fact; the physiological change thus brought about has its influence conveyed onwards, and it attains the hemispherical ganglia; hereupon apprehension of the circumstances ensues, and the ideas developed work downwards upon the emotional centres, and violent weeping takes place as the physical expression of grief; and disorder of the alimentary canal, or even total derangement of the health, may follow as the consequence.

Particular feelings affect the bodily functions in methods suggesting varying but special relations between individual organs and the emotive centres. "Fear," says Crichton, "is apt to occasion a diarrhœa and incontinence of urine;

^{*} Des Maladies Mentales.

anger affects the functions of the liver ; grief disorders the stomach, and affects the lachrymal gland ; sudden terror, when without hope, produces an almost complete palsy ; and hope itself, when the attainment of the object is near, affects the organs of respiration, and causes a quick and powerful distribution of blood throughout the whole body.”*

At first sight, there may seem to be an incompatibility between readily observed cranioscopic facts and the doctrine which places the region of thought in the hemispherical ganglia at large, rather than in the anterior division exclusively. And, indeed, to those who have never had faith in the details of phrenology, some peculiar connexion of the forehead with the intellect must appear to be highly probable. If, however, we examine this matter a little more closely, it will be obvious that, to whatever extent it may be thought necessary from the state of facts to admit an organology, as proposed by Gall, such organology would be quite reconcileable with the speculations advanced in this lecture.

In any division of the mental faculties that we may adopt, be it that of the phrenologists, or that of other psychologists, we must recognise in each faculty a twofold relation, an *ideal* and an *emotional* one. I will select for the illustration three phrenological faculties, the organs of which are among those represented as best established ; I will take eventuality as an “intellectual power,” veneration as a “moral sentiment,” and destructiveness as an “animal propensity.”

Now, eventuality, according to phrenological teaching, exercises itself with changing phenomena—with events ; it procures the information, and reproduces it in memory. This, then, may be deemed its *ideal* function, accomplished through the organic instrumentality of vesicular neurine which invests the cerebral convolution placed behind a certain portion of the frontal bone. But, pending this exercise, there is modification of the cœnæsthesia, in the feeling of curiosity, gratified, or simply excited, or provoking to action, as the case may be. And this is the *emotional* function, organically active, we will assume, in that part of the corpus striatum which is in fibrous communication with the vesicular neurine before mentioned.

As regards veneration, there are persons of a reverent and devout tendency, who show it rather in the direction of their spontaneous and instinctive thinking, as it were, than in any great amount of devotional sensibility. The ideas of

* Op. citat.

some individuals are always upon antiquity, upon great men, and upon the religious objects of reverence ; and that, too, in cases in which there is but little manifestation of feeling. Here we have the ideal display of veneration. At other times, we see the excesses of devotional feeling, without much thought in regard to its objects ; it is almost altogether emotion. In going to the anatomy, we know that vesicular neurine is at the central summit of the brain, communicating with similar matter at the base.

Destructiveness supplies a very obvious illustration of my meaning. There is cruelty as thought, and wrath as feeling ; when deliberate acts of poisoning and of incendiarism are perpetrated, when defenceless and helpless creatures are gratuitously tortured, destructiveness is mainly ideal, as it certainly is cold-blooded ; but when there is furious passion—when there is perturbation of the cœnœsthesia in deeds of violence—it is emotion. Anatomy, of course, gives the same explanation as in the previous illustrations.

But phrenologists commonly assume that, apart from the intellect, the faculties each resolve themselves into kinds of feeling, passive in complacency and in dissatisfaction, and active in impulse ; the share which ideas have in their precise manifestations being attributed to co-operation of the intellect.

Now, it is certain that ordinary thinking goes on spontaneously very much ; that there is an evolution of ideas habitually in play, which has very appropriately been designated the mind's automatic working. It has been so designated because, in these circumstances, there is no volitional co-ordination of thought, as in direct and active employment of the intelligence. This mental attribute has been denominated *imagination*, not as signifying the imagination exclusively which is poetic or inventive, but as that which constitutes the internal spring of all psychical imagery—of things imaged to the mind. Gall himself recognises this general faculty of the mind in the following passages:—

“I call imagination the action of every faculty whatever that has place independently of the external world. The imagination is the creative power of each fundamental faculty. The imagination of the sense of places creates landscapes. The imagination of the sense of tones creates music. The imagination of the sense of numbers creates problems. The mechanical imagination creates machines.

“This explains how the same man may have a prompt and sure judgment relative to some subjects, and be almost imbecile in regard to others ; how he may have a most lively

and fertile imagination for certain matters, and be frozen and sterile for others.”*

But, lastly, what is to be said of the will—that attribute of humanity which supplies the basis of moral responsibility, and the weakening or destruction of which constitutes so important a feature in psychological pathology? Certainly, the will can be regarded neither as a faculty apart from other states of mind, nor as mixed up particularly with any distinct and special ganglionic structure. In any concise account of it, I deem it impossible to surpass the definition of Mr. Morell: “An act of the will,” says this eminent metaphysician, “embodies the effort of the whole man, implying, at the same time, intelligence, feeling, and force; physiologically speaking, this state of mind will stand in correlation with the total affection of the nervous system. . . . We regard it as an expression of the totality of our organic power, the whole governing the parts, and directing to the fulfilment of one purpose.”†

According to the account, then, which I have given of the vital operations, in the fulfilment of which the brain and nervous system mainly participate, reflex movements without consciousness issue from the grey matter of the spinal cord, and from the sympathetic ganglia; consensual actions flow from the distributive influence of the sensory ganglia; ideodynamic phenomena result, primarily, from limited action of the hemispherical ganglia; and those which are purely emotional come probably from the optic thalami and corpora striata. Voluntary acts proceed from the MAN.

I must allow—what, indeed, has already been conceded—that in what I have advanced there is a great deal of speculation. I submit, however, that in any attempted correlation of psychology with physiology, it is impossible, in the present state of knowledge, to avoid it; and, further, that for the attainment of clear and connected views of psychological medicine, it is good and useful to construct rational hypotheses, in default of established and valid theories. Hypotheses, of course, must not have their value or their office mis-estimated; they cannot rightly form a rest, like an axiom; he who employs them must always be ready to modify or to give them up, when additional evidence appears to demand some such proceeding. Meanwhile, they serve to “colligate facts,” and to fix the attention more searchingly upon phenomena. “There is a period in knowledge,” says Crichton, “when hypotheses must be indulged in, if we mean

* Sur les Fonctions du Cerveau.

† Op. citat.

to make any progress. It is that period when the facts are too numerous to be recollected without general principles, and yet where the facts are too few to constitute a valid theory."*

I would guard such of my hearers as are inexperienced in discussions of this kind, against the impression that science shows the soul, the conscious principle within us, to be susceptible of any true, actual division. If there be one characteristic which more than another distinguishes the conscious EGO from mere body, it is, I conceive, its absolute unity. Have we not the same assurance from pure consciousness, that the *me* which thinks is not composed of parts, as we have from sense-consciousness that matter is an aggregate of atoms?

Distinctness in the organic instruments implies no corresponding divisibility in the conscious principle which they subserve. To give expression upon this occasion to the abstract views which I entertain myself upon this subject, I would say that, in all psychical phenomena, the whole mind acts. Mental faculties are *states* of consciousness—phases only of the one undivided and indivisible mind. It is the whole mind which hears and sees; it is the same entire mind which receives ideas, and recalls them in memory; it is the one thinking entity that loves, fears, and hopes; it is still the same unity, the soul, that performs the highest intellectual operations, in abstracting, combining ideas, reasoning, and judging. Finally, and comprehensively, it is the immaterial spirit which takes cognisance of itself, which controls its own states, and which WILLS.

PHRENOLOGY FOR CHILDREN.

The Semi-intellectual faculties consist of the following group of organs:—Constructiveness, Ideality, Sublimity, Imitation, and Mirthfulness.

CONSTRUCTIVENESS.

(a) What is the definition of this faculty?—(b) What is its location?—(c) What is its use?—(d) How do boys and girls show it?—(e) How do different nations manifest it?—(f) How do the different faculties affect it?—(g) In what way do animals show it?

(a) The definition of this faculty is ingenuity, contrivance, desire to use tools, and invent machinery.

* Op. citat.

(*b*) It is located in front of Acquisitiveness, on each side of the head.

(*c*) The use of Constructiveness enables us to seek out new plans, to use up old materials in ingenious ways, to fit parts together. It gives versatility of talent in business, in art, in mechanics, in poetry, literature, music, and scientific research.

(*d*) You boys show it by whitling bits of wood into ornamental articles, models, or pieces of furniture. You are ingenious, not only in the making of things, but in the applying of principles, as in electricity, gravitation, and chemistry. Many boys at school will draw and caricature the sharp outlines of their master's features and attitudes. Almost every boy with this faculty large makes a boat or an engine, and cherishes ideas about becoming the captain of the one or the driver of the other. You girls show your ingenuity in cutting out and putting together all kinds of garments for your dolls, in various styles and with various materials; you are also ingenious with your bits of coloured paper, your squares of silk, and balls of wool. You are also clever with your pencils in sketching, and with your pens in story writing.

(*e*) Different nations show this faculty according to their various necessities. The Laplanders and Esquimaux show it in the way they supply their daily wants, obtain their food and clothing, and construct their abodes. The Indians, who concern themselves mainly with fishing, fighting, and hunting, chiefly use it in making suitable implements of war, boats or canoes, and huts or wigwams. They would have to alter their mode of living considerably to live and eat like the white man, or to accustom themselves to soft easy chairs, spring beds, and pile carpets, all of which the ingenuity of the white man has devised. The Swiss show their ingenuity in carving all kinds of ornaments out of pretty wood and in erecting picturesque houses. They also have a very ingenious way of carrying their babies by strapping them on their backs; a fashion exceedingly useful in their mountainous country. The Chinese and Japanese show their ingenuity in many kinds of fancy basket work, bright coloured embroidery, and painted screens. The Italians show this faculty in their wonderful conceptions in paintings and sculpture, and their beautiful palaces and churches. The Americans show a remarkable degree of this faculty, as is proved by their numerous patents and inventions of all kinds, for the saving of labour and the increasing of personal convenience. Now, boys and

girls, as we have shown you how several nations use their Constructives, you must study how the English, the French, and Germans show it.

(*f*) All the other faculties more or less are affected by this one. With large Destructiveness and Combateness one is inclined to build and construct for self-preservation, and with Inhabitiveness for one's country. With Ideality, Sublimity, and Imitation, taste and harmony are combined with skill, through the medium of paints and brushes, needles and cottons, materials and tools, and pen and ink. With the moral group large, Constructiveness would desire to build places of worship. With Constructiveness, Friendship, and Benevolence large, and smaller Acquisitiveness, a person would show ingenuity in making everything that others wanted, would give away everything he made to gratify his generous impulses. So we might illustrate each group.

(*g*) To gratify your curiosity whether animals show Constructiveness, you have only to examine the width of their heads, just back of their foreheads, and you will find that some animals are very particular where they build their place of abode; while others are not. The lion and tiger roam about and make their home anywhere; while the beaver constructs his home in a particular spot. Just so with birds; they build with their bits of straw year after year in the same trees.

IDEALITY.

(*a*) What is the definition of this faculty?—(*b*) What is its location?—(*c*) What is its tendency?—(*d*) How can you cultivate it?—(*e*) Why is it necessary to restrain it when excessive?

(*a*) The definition of this faculty—a love of art, oratory, and literature; refinement, polish, a love of improvement and beauty in nature, and a desire to magnify things.

(*b*) It is located directly above Constructiveness, and between Sublimity and Mirthfulness.

(*c*) The tendency of this faculty is to give children a delight in things that are beautiful. All nature is alive with things to gratify this faculty. I am going to ask you to make a list of all you admire most in what you see around you, and then I shall be sure you know what this faculty expresses. Think for a moment how gloomy and dismal this world would look if there were no stars in the sky; no flowers in the woods and gardens; no sweet songsters in the parks. This faculty helps you to keep in check your angry passions; it elevates your thoughts into a higher atmosphere;

it gives you a preference for those things that are cultured and refined; hence you find this quality almost wanting in the savage, who is the reverse to gentle and refined.

(*d*) Children, you can cultivate this love for the beautiful by associating with those things that are excellent, and by avoiding things and companions low or vulgar. Cultivate a taste for poetry, be more careful about your personal attire. For although the solid and useful are necessary in practical life, yet you would be void of sentiment had you not the stimulating faculty of Ideality to spur you on to greater self-perfection. One way to cultivate this faculty which has been suggested, is for you little ones to have squares of ground in your fathers' gardens, and see how prettily you can fill them with flowers from seeds. Cultivate flowers also in the house.

(*e*) When very large, you show great imagination; and many of you write poetry and stories about all sorts of unrealities. In some of you it is so strong that you sit and dream with your eyes wide open, looking into a bright, glowing fire, or before an open window in midsummer. You become so fastidious that nothing common will suit you. You form your ideals about everything and everybody. It is not difficult for you little girls to imagine that each of your dollies has a different character, and must be treated accordingly. We must, therefore, guard against building too many air-castles; at the same time be ready to accept improvement in every form.

SUBLIMITY.

(*a*) What is the definition of this faculty?—(*b*) What is its locality?—(*c*) What is its language of expression?—(*d*) Do children show it?

(*a*) The definition of this faculty is a sense of the sublime, grand, romantic in nature and art.

(*b*) It is located between Ideality and Cautiousness, and just above Acquisitiveness.

(*c*) It gives expression to exclamations of delight whenever surrounded by the grand and vast. Ideality had a particular charm for the simply beautiful; but this faculty appreciates more especially the grand, the terrific, the vast, the sublime in everything, not only in nature but in machinery, art, and oratory. Ideality is content with a picture that is very highly finished and beautifully coloured; while Sublimity says: "The picture must be grand to please me. I don't care so much about its finish, but it must represent rugged precipices, burning volcanoes, raging billows, and stormy sky." The same with a speaker, Ideality delights in a refined and polished orator; while Sublimity appreciates

only those who rise above the level of simple polish, and prefers eloquence of a grander stamp ; those whose language is coined from grandest forms of speech. Some people have no Sublimity and feel dreadfully terrified by the accounts of their friends who live in continual dangers from falling snows and living volcanoes. These people do not know that their friends possess large Sublimity.

(d) Children show this love of the uncommon. They ask you to tell them extravagant stories, and when telling one themselves they generally stretch the facts beyond the bounds of reason ; they also delight to walk near the precipices and on narrow planks of wood, and go to see all kinds of grand wildness, and, with small Caution, are often reckless and cause their parents great uneasiness on their behalf. They enjoy seeing the largest kinds of machinery, and will spend days examining it. Children with large Sublimity see through larger eyes than any other children.

(Conclusion next month.)

MIND.

THE early years of life are necessarily acquisitive. The child must learn the names of the many things in its little world, as the house with its many parts, as the floor, the fire, stairs, doors, windows ; and then the names of the articles of furniture and table-ware, as chairs, beds, sofas, plates, cups, knives, and forks ; and the different articles of food and drink, as bread, meats, fruits, water, milk, coffee and tea. And then, just outside of the house are the yard and the garden and the field ; or the street and the sidewalk ; and beyond these the many objects in nature, as grasses and plants and trees and birds and animals ; and beyond these the earth, with its mountains and rivers and lakes and seas, and the sun and the moon and the sky and the stars above.

This word-knowledge must go on to colour, and form, and size, and such qualities as hard, soft, light, heavy, bitter, sweet, hot, and cold ; and then there must be words to express not only qualities, but actions ; and the child says, the bird flies, the animal walks or runs, the fish swims, and men and women walk and laugh and talk and cry and sing, and trees grow and flowers bloom. And we can hardly estimate the vast amount of effort required to learn all these things. Possibly the child has learned more words as names and actions before the age of twelve, than are learned in all the after years. But everything is new to the

child ; it is constantly in this great school, the attention is fixed upon the lessons, and the effort to learn does not seem to be great or taxing, but rather the pleasurable gratification of an intense curiosity.

But all this is only word-knowledge. The real knowledge of things is yet, if ever, to come. Some are fascinated by language, and delighted to know the names by which things are known in other tongues. But it is easily possible to know the name of a horse in Hebrew, and Greek, and Latin, and German, and French, and not know anything more as to what the animal is than when one knew only the English name, horse. And so one may go on learning words till he has mastered the terms of science and philosophy and theology, and not know much about the things themselves. A clear transition of perception and realization in thought may be usually noted when one passes from the study of words to the study of things ; and when he gets beyond the books, and finds that the real anatomy is in bodies and the real geology and astronomy are in the earth and the stars.

That is the period of reflection, when thought moves on to things, and asks not alone for the names by which they are known, but asks what they are in themselves, and why they are and how they are? And in this real world of study, names and terms are not final, but serve only as convenient designations of the things to be known. And when we thus approach our present subject, we find that many words have served as names and resting-places of thought, but that the things in themselves have yet to be gone over and more carefully examined. Thus we commonly and conveniently speak of matter and mind as the names by which two worlds are known. And so long as we are content with this, and do not care to go beyond the names and study the things to which they apply, our task is easy. The child has learned this.

But the peculiarity of thought in our time is, that it is not satisfied with the superficial, but wants to penetrate the inner realities, and to know what things are in themselves. Not content with the common definitions of matter, that it is that which is tangible and classified as solids, and liquids, and gases, we ask what these are? And chemistry has gone on and told us of certain elementary substances, and how, in various proportions, the oxygen and the hydrogen or nitrogen combine in water and air. And in all this we have learned much ; but the real thing of which we are in pursuit lies in the unknown. For what are oxygen

and hydrogen but names by which we designate certain substances, of whose real nature we are still ignorant? We have learned much of the order of things, and speak of natural laws as the law of gravity; but what gravity is, and why it is, we do not know.

And now another question arises: What is that strange something by which we say that we learn and know? We call it mind; but what is mind! Psychologists have classified its powers as the acquisitive, the conservative, the presentative, and the representative; the mind learns and remembers, and reasons, and imagines. These are some of its general movements, or powers, or faculties; the things that it does. But saying these things does not tell how they are done, and much less what it is that does them.

For practical purposes it may not be necessary to ask these deeper questions; and it may be sufficient to say in popular language that matter is one thing and mind another; and to draw a line between them and say that the things that have weight and extension and hardness are material; and that which thinks and feels and reasons is immaterial. But what do we mean by such terms? Matter is known to us, not only as having form and weight—as gross and tangible; matter exists in the finer forms of the imponderable; and as a subtle ether, and as life; mosses and grasses and plants and trees live; life has travelled all the way from the vegetable and the radiate and the mollusk and the articulate to the vertebrate; from this to man, with erect form and finer features—eyes that weep and lips that laugh. Life takes on beauty in the vegetable and feeling in animal world; it rises to instinct in the bird and the beast; and whether we call it mind or instinct, the higher animals are capable of learning and remembering, and they seem also to reason; and certainly they have the sentiments of beauty and love.

Now, is all this but a finer form of matter—of the material; or does it belong to that something else that we have called Mind? And if so, where are we to draw the line? And what is that something that we call the immaterial? It must be something, for we have said that it does certain things—learns, and remembers, and wills; and that which does something, must itself be something. If in trying to find a place for Mind, you go to an immateriality that is a nothing, you have simply thought yourself out of thought, and into nonentity. But Mind is itself, a something; not the gross something that we call stone or iron, or the finer something that we call plant or tree; and it is more than what we call instinct in animals—for it does more, and hence

must be more—but still Mind must be thought of as something.

And if any one choose to call it matter—to so extend the definition of the material as to make it cover all that in popular thought has been called the immaterial, there is nothing lost. We have only enlarged the meaning of one term till it equalled the contents of two terms. If matter can learn and reason and remember ; if it can love and fear and hope ; if it can perceive the sense of right, and duty, and the Divine ; if it can produce a Bacon, a Fenelon, a Christ ; if it can establish governments and churches and a religion on such a little planet as ours, why not the higher ideals of which we think as possible in other worlds ? And why not rise to a God, at last ?

Mind, then, is a fact, by whatever name we call it. We know that we are ; that we learn and reason and remember and imagine ; that we will and act ; that we perceive right and duty, and feel the approval or disapproval of conscience. And, leaving the debate of words, and using them only to designate things, the effort of "MIND IN NATURE" will be to deal with the world of things. If these things are called nature, or matter, or Mind, or God, still the end has not yet been reached. There is more yet to be learned, and known, and used. Consciousness tells us that we are ; and in so far what we are—for it is only in relation to the things that consciousness affirms that we know that are—but beyond this, as to the essence of Mind, we may not go.

But there is a partially-discovered world of what we may know, and may do, lying all about us. In the study of this, not only may new facts arise, but a new or higher sense of power of mind to know, may be unfolded. It is certainly not wise to assume that the known is the limit of the knowable ; and especially when we are on a boundary line of so much that is but partially known, and that is in itself a hint or a prophecy of what lies beyond. Dreams, visions, impressions, trance, telepathy ; the possible intercourse between the living and those we call dead ; the power of mind to impress mind helpfully or hurtfully in curing or producing sickness ; in casting out evil, or leading to evil ; and especially the relations of Mind to the Divine, and the influx of the Divine, are all subjects of a near and present interest. In dealing with them we are dealing with facts ; or, if they be not facts, be nothing—only mental illusions, hallucinations—it may be a greater study, to find out how that which is nothing, continues to haunt this boundary line ; and not being, still appears to be.—*Mind in Nature.*

THE OLD CORNER SHOP.
A STORY OF VERY POOR HUMANITY.
BY A NEW WRITER.

CHAPTER III.
KEEPING THE SHOP GOING.

On the night of Jim Armit's first visit, while he and Murietta were at chapel, Phil and Raffael, having heard the story of the stolen sausages, resolved to have another try to solve the mystery; but the attempt failed, like many before it. That night we received another frightening by the ghost; indeed, it was one of the worst nights we had had; and when bed-time came round again Raffael would not take off his clothes, but cast himself on the bed with a rug over him, ready either for attack or flight, in case the enemy should make a demonstration; but the night proved to be tranquility itself. Our ghost was the most provoking of enemies.

The next day Raffael met Mrs. Ramsbottom in the street, and she told him if he would call at the house she would give him something for mother. She had doubtless heard by this time that the shop was doing ill; otherwise it is hard to account for her doing the act she did. The Ramsbottoms lived at a place called Newland, where they had a small farm. It was a good walk, and so Raff started early, thinking to be back for dinner. But dinner-time came, and then tea-time, and no Raff; mother was rather pleased than otherwise, imagining that the old lady had invited him to stay to dinner, in order that she might enjoy a conversation with him, and perhaps revel in the divine name in a multitude of tongues. We had finished tea, and mother and father were beginning to get anxious, when Raff arrived, staggering in under a sack of potatoes. The poor fellow dropped his load in the middle of the kitchen, and threw himself on the sofa, dead beaten.

Father and mother were indignant that our poverty should have been made the excuse for putting so cruel an indignity on the poor lad, and it would have taken little to have induced father to throw the potatoes into the street; but better thoughts prevailed. No one in the house, however, would touch them, and so they were given away to some poor families in the neighbourhood.

Raff was so done up with his trudge that we did not get at the whole truth until the morrow. Then we learned that Mrs. Ramsbottom had questioned him very closely about the condition of things at home, and had evinced special interest in his account of the ghost. It was the first she had heard about it, and while she said it was 'stuff-and-nonsense' to talk about houses being haunted, she listened with attention to Raffael's learned discourse upon good and bad demons, evil and beneficent genii, etc., and in the end she decided that she would come one night and investigate the supposed ghost herself, when she had no doubt she would either unravel the mystery or put the ghost to flight.

Having given brother a message to bring home to that effect, the great-minded woman bestowed a couple of apples upon him to eat by the way, and then directed him to go to the gardener, who would give him some potatoes to bring home. As he left the house the pony stretched its neck over the gate, and the little gig stood with its shafts in the air, while the stableman leaned against the wall and whistled 'Susannah,' for lack of anything better to do; and as he struggled along under his back-breaking load, poor Raff wondered why Mrs. Ramsbottom could not have enhanced the value of her charity by sending the potatoes in the gig. But the leisured never think the toil-worn have toil enough; they must pay for everything by cruel labour, or the gift would spoil them. After going a quarter of a mile Raff was obliged to lighten his load by emptying some of the tubers under a hedge, where he could find them again; then before he had made another half-mile he had to resort to the same expedient; and so again and again, until he arrived with scarcely a third of what he started with. Phil joked him for breaking his back by carrying the things so far. Raff replied: "I know I was stupid; but I thought father might perhaps be disappointed about getting money again, and that, as I knew there was little or nothing in the house, you might be glad of a roasted potato for supper."

As Raff said this a couple of tears stole down his cheeks; seeing which Phil threw himself upon his neck and apologised for hurting his feelings.

"You did not mean it," said Raff, "and I am stupid because I am so tired; so I will go to bed."

Raff was a butt for all our jokes, and he took them very patiently. Father sometimes thought he submitted to them too tamely, and encouraged him to pay us back in our own coin; which he sometimes helped him to render us. Father was like Mr. Thompson, very fond of a harmless joke and a hearty laugh; but once I remember his being very angry with us for a jest we put upon poor Raffael. He had sent him to a village some four or five miles distant to deliver a picture that had been ordered, and he reached home just as we other children were about to prepare tea, father and mother both being out. He was very tired, and fell asleep in the arm-chair before the fire. When we were about to sit down Murietta shook him and told him tea was ready; but he was so soundly asleep that the shaking had no effect. So we went to work ourselves, and presently all the tea and toast were gone, and Raff still sleeping. Then said Phil: "Let us clear everything off the table, and when he wakes we will pretend that he has had his tea." We all jumped to execute the joke; but sister, thinking to improve upon it, took a bit of butter and smeared his mouth and lips, and even the tip of his nose, with it, deeming for a certainty that, with such signs to the contrary, he could not dispute having had his share of the toast.

When he presently awoke, he looked about inquiringly and asked if tea would not soon be ready. "Ready!" cried Mury, "why,

you have just had your tea, and it's all cleared away now. You must be dreaming!"

"I don't feel as if I had had any tea," said Raff, putting his hand to his waistband.

"Well, what can you have done with it, then?" cried Mury.

"If you have any doubts about it look at yourself in the glass," said Phil. "Why, you have buttered yourself up to the very nose."

"Well," said Raff, wiping his mouth with his hand, "I suppose I must have had it; but I declare I remember nothing about it; I am still as hungry as a hunter. Never mind, I will go to bed. He who sleeps dines."

Murietta ran to the cupboard to fetch another loaf, but found there was not one, and so, as there was no money in the house, we had to let Raff go to bed supperless. When father and mother returned, and we informed them of what had happened, father was very indignant, and told us that though he was no enemy to harmless fun, yet he would on no account have us get in the habit of doing others a hurt, even in the way of jest.

It was a night or two after Raffael's adventure with the potatoes that Mrs. R. arrived to carry out her promise to exorcise the ghost. Her maid accompanied her with a large basket. Eliza having been dismissed, Sir Tyke Winchap's niece discoursed with father and mother for some time on divers subjects, and then, when it was time for all to go to bed, she desired to be shown to her room. It had been previously arranged that she was to occupy our little drawing-room, which was over the shop. Everything possible had been done by father and mother to enable her to pass the night in comfort; but Phil and Mury had also put their heads together, unknown to any one else, and had hatched a little plot with a view to paying out the old lady for her cruel treatment of Raff.

No one surely ever watched for a ghost better fortified against a surprise than Mrs. R. was. In the first place, a rousing fire was built up in the grate; then she brought out a lot of candles from her basket and set them lighted about the room; then a dark flask-bottle was produced, and a glass, with sugar, lemon, etc., while on the side-table were placed a good-sized pork pie and some dainty confections; the kettle was set on the hob, and was presently singing cheerily; while the high-backed easy-chair was brought up to the fireside, with a hassock in front of it. Then the old lady changed her dress for a rich dressing-gown, and replaced her brilliant cap with a no less gaudy *bonnet-de-nuit*. I had almost forgotten to schedule a Bible and hymn-book as among the battery of defence arrayed on the table in front of the doughty Amazon.

Having joined in a hymn, and said a prayer, Mrs. Ramsbottom bade us all good-night, and was then left to her own thoughts and devices. For a time the house was as still as a graveyard. We could hear the clock tick, and that was all. When I say 'we,' I mean sister and I; for Mury was so restless that she kept me from sleeping. Finally, she confessed that Phil and she had arranged

a plan to pay the 'Popess' out ; she was sorry they had done it now, and would have undone it if she could, but she was afraid. I urged her by all means to stop it if she could, but she said she could not without Phil, and she was sure he would not consent. Then I suggested that we should go and tell father ; and, after a short period of hesitation, she decided to do so. We had got out of bed, and approached the door, when suddenly a great uproar arose, that for a moment rooted us to the spot, and then made us skip back into bed as quickly as we could. At first it was like a rushing noise, followed by an explosion ; then there was a great spitting and howling, mingled with screams, the overturning of furniture, the breaking of glass, etc. ; and the next thing we heard was the throwing open of the drawing-room door, and the thud of a heavy body on the floor outside our door, followed by the scuttling of something down stairs. We heard father and mother come out of their room, then Phil and Raffael out of theirs, before we ventured to open our door. Mrs. R. was then sitting up, staring about her, with her eyes almost starting out of her head, her fine cap awry, and her hair all dishevelled. In the drawing-room, into which father and mother presently got her to return, we saw the table overturned and the bottle and glass broken, the kettle on the floor, and a mass of soot spread about the hearthrug. I noticed Phil and Mury exchange one or two meaning glances ; but no one else observed them, and I believe their part in that night's business was never known by any one except myself. It taught Mury a lesson she never forgot, and I believe if it had not been for Mrs. R.'s cold, austere nature sister would have gone to her before she left the house, confessed her part in the affair, and asked her forgiveness. Not so Phil ; he gloried in it, and the unregenerate young heathen stole upstairs with me during the day to the garret and explained the nature of the machinery by which he had convinced the Popess that our ghost was no myth.

The chimney that served the drawing-room came through the garret, and a couple of bricks having been removed from one side of it, and the hole stuffed up with straw, Phil managed to enlarge it, and to insert in it a small box, both ends of which he made removable. The one that opened into the chimney he fixed in its place by means of a piece of wood stretched from the box to the other side of the chimney. From this piece of wood he suspended a bit of string that reached to within a few feet of the drawing-room fireplace ; to the end of the string was attached a fuse, and the whole length of it was covered with gunpowder ; while fastened to the piece of wood itself was a charge of powder large enough to force the wood out of its place, and so to let the end of the box fall off ; only, precaution was taken, by means of a thong, to prevent the box-end from falling down the chimney. When it is added that Phil got a neighbour's cat and put it in the box, and then secured the outward end, the machinery of his revenge will be sufficiently patent.

It was always a matter of wonder to us who were in the secret

that father never took it into his head to investigate the affair. Perhaps it was because Mrs. R.'s description of what took place was so confused, that he thought she had simply heard noises similar to those with which we had become familiar.

Meanwhile matters grew worse and worse at the Caliph's Head. Pride kept father and mother from complaining or making known our dismal plight; but it was now no longer possible to hide the state of affairs. The shop was nearly bare of stock, and chance customers that dropped in had to be sent empty away. There was still a show of serving regular customers—the credit ones, that is. But, oh, the expedients that had to be resorted to in order to hide the dismal reality! I have already narrated the incident of Raff and the sugar. This was only one of a dozen similar episodes I could relate. For several weeks this sort of farce was kept up, in the hope that the impossible would happen—namely, creditors relent, and allow us to restock the shop and make a fresh effort for success. The bit of money father earned by his art, or his teaching, was spent buying goods retail to sell again at the same price for credit—unlimited credit. He would come home with a few pounds of sugar, a few ounces of tea, some coffee, or other articles, because he knew Mrs. This or That would be wanting one or another, and so the greater part of his small pittance would go to swell the amount of the bad debts on our books. I smile now when I think of that time; but my lucubrations generally end with tears.

And now a worse thing happened. But first of all I must tell how unfortunately Phil's mischief turned out. The evening after her exorcising of the ghost, Mrs. Ramsbottom paid us another visit, and while we children and Jim (for he was with us that evening) amused ourselves in the kitchen, she and father and mother were closeted together in the parlour. Their confab was evidently satisfactory, and our good parents came out with, of late, unwonted smiles on their kindly faces; Mrs. Ramsbottom, too, looked gratified. The fact is she was greatly pleased at her success with the ghost, and having, as she thought, done us one good turn, she came to do another, or a series of others. Having inquired of father the state of his affairs, she gently chid him for not having disclosed it to them before, and finished by promising to get her husband to do something on our behalf, and to interest Sir Tyke, her uncle, too. The latter, she was sure, she could get to order some pictures. This happened on a Friday, father and mother's lucky day.

After Mrs. R. had gone we had a merry time of it. It seemed at last that things were going to take a turn for the better.

The next day Grabbit, the money-lender, came down upon father for instant payment of the money due. Father tried hard to induce the hard old curmudgeon to give him a little more time; but he would not hear of such a thing. He then went to Uncle Smooth-drop, and asked him for a small loan; but it was very unfortunate that uncle's money was just then all tied up; uncle was sorrow itself that the fact was so, but it could not be helped: money has a

knack of getting tied up at such junctures. Father said uncle looked quite distressed at being obliged to give him this refusal; and I quite believe it: Smoothdrop was the most feeling man I ever knew—for his pocket.

However, uncle on this occasion endeavoured to make some sort of amends; for guessing that it might be Ramadan at home, he invited father to bring us all to dinner on the morrow, which was Sunday. Father at first declined; but on being pressed, he accepted, remembering, with a pang, he told us, the hearty appetites of his sons and daughters, and that at the home dinner-table the groans might not come from the board, but from those about it. He said this with a smile, and a sly glance at us children. Then he added, patting Murietta, who sat next him, on the shoulder: "No, children, I don't fear that; no one could take their fast-days with better grace than you do, although it has been rare of late that we could say grace after *meat*." And as he said this an almost impalpable dew gathered over his eyes. Ah, dear father! he had all a man's wit, with a woman's tenderness and tears. Then Phil flashed out one of his jokes, which made us all laugh. He said: "Our Fridays are sown so thick now that some day we shall reap nothing but Sundays." Our Sundays were very pleasant when Mrs. Ramsbottom did not come, with her catechism and her talk of the Winchaps.

Mother wanted to send to Uncle Smoothdrop and say we could not possibly go, because, as she said, neither she nor Murietta and I had anything to put on.

"In that case," said father, "it is improper for you to be about."

"But really, John," said mother, "my old dress is hardly decent to wear at home, let alone going out; and neither Murietta nor Joan has a menseful thing to wear."

However, the dress difficulties were overcome, and we all duly appeared at uncle's Sunday table, which, to give him his due, was most bounteously provided. And scarcely was dinner out of the way ere tea was announced. It was long since we had eaten so generously, and we were little in form to sit down to a fresh meal; but Smoothdrop and Aunt Matilda ate as though they had not tasted for a month. After tea uncle invited us to go to chapel with them; he was going to preach, and he promised us a treat. It took aunt a long time to dress, but she was finally ready. She was piled up to the crown with finery, and fairly dazzled the Little Bethelites. As soon as Smoothdrop ascended the pulpit his wife closed her eyes and went to sleep, and not all his fervent eloquence availed to wake her. The sermon was on the blessedness of the poor, and, to do father and mother justice, they thought the discourse very edifying. Phil thought the blessedness of poverty ceased at two hundred pounds a year. Raff was ready with several instances of persons who had lived very happily in great poverty; in each case they were miraculously or otherwise providentially provided for. "Oh," said Phil, "anybody can live and be happy in poverty—all found."

Phil, it will have been perceived, had a very irreverent streak in him, and he was inclined to be amused with the whole concern—the funny little chapel, plain and unadorned, with its narrow, box-like pews, and its sad-visaged worshippers, all in black, with a pervading smell of camphor and peppermint; the which, he roguishly suggested to Raffael, might possibly be the odour of sanctity.

That Sunday was another of what Phil and I called our landmarks. We had scarcely reached home at night ere we had a visit from Mr. Dimsdale, one of the Brethren, who had come to report a strange occurrence. It appears that Mrs. Ramsbottom's ghost-laying escapade had somehow got wind—how, we never exactly knew, unless it were through Jim—and had reached the ears of some of the Pure Scripture Christians at the evening meeting; therefore, one of the Brethren, named Steers, had risen, as their custom was, and asked for the 'grateful acknowledgments' of the brothers and sisters for the merciful deliverance of Sister Ramsbottom from the peril of bad spirits. No sooner had the innocent Steers got the words 'bad spirits' out of his mouth than Mrs. R. flounced up from her seat with kindling eyes, and seemed ready to 'go for' the unlucky brother. Mr. Ramsbottom, however, gently pulled his better half down into her seat, and restrained her until the meeting closed; when she broke from her husband and went over to where Steers stood, and angrily asked what he meant. Again Mr. Ramsbottom interfered, and succeeded in hushing the matter up. But Mr. Dimsdale averred that he heard father's name used, and he feared trouble would come of the affair.

On Monday morning a bailiff was put in possession by Grabbit. He was a great, heavy man, who planted himself in father's arm-chair, and got up for nobody. Mother, I think, was ready to spill him, because father, sitting on another chair, was so out of his element that he could not eat his meals. But the old fellow otherwise tried to make himself agreeable; telling us about the different houses he had been in, how the people had treated him, who had been sold up, and who providentially assisted. He smoked most of the time, and drank. He was satisfied with the smallest of small beer, but the quantity he put out of sight was the reverse of small. So far as I remember, I have never seen a bailiff since this one tobacco-smoked our kitchen; nor do I desire to; his image, and the idea I got of his inner being, will suffice me for my time. For his portrait Phil's description is sufficient: he called him 'the frog.' He had a small head, covered with unkempt hair, a large face, no neck, and his immense corporation was covered by a dirty yellowish vest, over which he wore a faded green coat. As for the rest of him, he was a kind of ghoulish figure who presided over the dispersal of humble household gods; he had spent his life amid scenes of distress, want, tears, and the grinding of the poor, and he saw it all unmoved, and talked with a certain amount of pride of how he had always carried out his orders and never been 'bested' by anybody. I can well understand that if left to himself to soak and

smoke he would be quiet and contented, but if interfered with or crossed in any way he could be brutal to a degree. We were seated at breakfast when the bailiff arrived; but, though we had barely begun, all the rest that was eaten at that meal went down the old Frog's throat. After a hasty consultation with mother, father decided to go and see Mr. Ramsbottom; but while he was brushing his Sunday hat, preparatory to departure, a letter came. It was from Mrs. R. I never saw the letter; but I always understood that it was a most violent epistle, and charged father with maliciously putting it abroad that she had got tipsy on the night of ghost-laying, and had pretended that a ghost had upset the table and the kettle when she had done it herself in her drunken fright. Father, I need hardly say, was incapable of such a meanness. That she was a little the worse for drink when picked up on the landing we all noticed; but that it was ever mentioned outside our family circle I do not believe. The letter concluded by saying that father need look for no assistance from herself or her husband.

Poor father! Struck down again! I saw a dark look come on his brow, and he started to leave the house, but mother stopped him at the door. Somewhat later he went out, and I believe called on several of his friends; but in vain. In the evening he took a pen and wrote a reply to Mrs. Ramsbottom. It was as follows: "Dear Madam,—I read your letter of this morning with the greatest pain and astonishment. It does me a grievous wrong. You will, I am sure, see this and regret it when you have had time to reflect. Meanwhile, I remain, yours obediently, John Sturdy."

That done and dispatched, father sat down and chatted with the bailiff; he never thought any man's experience beneath his consideration, and I have no doubt found the old fellow's talk instructive, though he was extremely ignorant and bumptious after his kind. However, after his experience with us, the Frog could no longer boast of never having been 'bested.'

Our tutelary spirit or ghost was too much for him. No inventory that he had ever known had been charged with such an item; and we all gave the ghost credit for acting in our behalf, because for some time it had hardly disturbed us at all. Perhaps we had got somewhat used to it and its unearthly noises, as human beings seem capable of becoming used to all climates and all miseries, and so slept through what at first only terrified us and set our nerves on end. But we thought at the time that the spirit of the dead painter was passing through one of its calmer moods. Anyway, there was the fact: for a week or more we had heard very little of it. But the very first night that the bailiff was in the house the place was like a pandemonium again. We had experienced nothing worse. We did not go to bed that night until late, because we had to wait on his lordship; but finally he was left snoring upon the sofa, since he would not accept a bed, and we retired, feeling that we would on the whole have preferred the ghost's wailings, as being more homely, to this man's nasal organings.

In the middle of the night we were all awoke by such a stamping and shouting as never was heard. Murietta clasped me in her arms in affright, and we shuddered together for company. When we had had time to collect our terrified senses we could distinctly make out the voice of the bailiff shouting like one possessed, and then we heard father go to him and try to quieten him; but he only cried out the more: "Let me out! let me out! I won't stay any longer; the place is full of devils!"

Mury and I were so terrified that we slipped on some clothes and ran on to the landing, where the others had already congregated. From what we could gather from Froggy's talk, he had been awakened by the ghost, and bewildered and out of his wits with terror, he had made a rush upstairs, and lost himself amid the labyrinth of passages. Nothing would pacify him; he must be gone from such a demon-haunted house. So father was obliged to open the front door and let him out. We watched him from the window, and we could not help laughing to see the fat old fellow run down the street as though pursued by fiends.

But the matter threatened to be serious; for early in the morning the bailiff returned with Grabbit, to whom he had told his story; from which the latter inferred that we had laid a plot to frighten him, and so drive him out of the house. Father protested his innocence, and told him how the place was haunted; but Grabbit replied with a sneer: "Go and tell that to my grandmother; I don't believe in such things a ha'p'orth; I believe in hard cash (rattling the change in his pocket), and if you don't pay I'll sell every stick in the place." And a great deal more to the same effect.

Just at this moment who should make his appearance but Mr. Corvisant and his red box. He entered the shop with a cannister of sweets under his arm, his hat, as usual, on the back of his head, and the ends of his muffler dangling before him; he heard Grabbit's abuse, and guessed too well what was the trouble; drawing father aside, therefore, he conversed with him for a minute or two, and then—would you believe it?—the comical-looking little fellow brought out a leather bag and handed to father in bright sovereigns the amount that was due to Grabbit—the funny, laughable, great-hearted little hero!

In a few minutes we had the satisfaction of seeing the miserable money-lender and Froggy disappear down the street together. Father wrote out an acknowledgment for the money and handed it to Corvisant, saying he did not know when he should be able to repay him, but that, God sparing his life, he would honour the debt.

"I know that," said the sweetstuff manufacturer, "or I should not have advanced it. But, look here; if I should die before you are able to repay it, mind you," he said, patting the writer on the head—"mind you give the money to this little maiden on her wedding-day."

Ah! I have known numbers of fine ladies and gentlemen since those days, many of them good and estimable people in their way

too; but for true generosity, sympathy, and loving-kindness, I have seen nothing to equal what I found in the poor, among whom it was my fate to be thrown in my early days. Rude of speech, rough of manners, uncouth often to a degree; but, oh, what gentleness and delicacy of feeling many of them exhibited! It has often been my lot to hear these doers of the hard, rough work of the world blamed for their faults and vices, and my cheek has burned, and my eye moistened, as I have spoken up for them—praised them for their patience, for their heroism, for their many virtues. Taking into account their circumstances and their temptations, where have they their equals? And among them all was there ever a nobler than Corvisant?

(*To be continued.*)

Book Notice.

The Will Power: Its Range in Action. By J. Milner Fothergill, M.D. (HODDER and STOUGHTON). Poets and philosophers have speculated on the force of human will in mundane affairs; doctors have recognised its powerful influence in the crisis of disease, and the subject has ever been an enticing study in the domain of metaphysics. But few have taken it up with the single earnestness of Dr. Fothergill, who seeks to secure practical results by enforcing the plain lessons of experience in clear and unmistakable language. Every youth just planting his foot upon the ladder of life; young men struggling to find an opening for their labour, and especially those friendless ones who have to trust to 'self-help' in so great a degree, may derive encouragement from the truthful and impressive view here presented of the 'will-power.' The material brain and muscle are strengthened by use, and the more subtle attribute of will in like manner is distinguished by growth. "The man who succeeds in climbing step by step finds his will-power expanding with his energies, with the demands upon him" says the author; adding, with marked significance, "if not, his limit is sooner or later reached." It is in no sense suggested that will is everything, but its cultivation will unquestionably enable all to make the most of their powers and opportunities, so that each one may be able to say with Jean Paul Richter: "I have made as much out of myself as could be made out of the stuff, and no man should require more." So far as success is concerned, the true secret consists in putting one's whole energies into work; for, as Dr. Fothergill says, "No man has ever attained real eminence who did not toil; and for sustained toil a resolute will is essential." The arguments are well sustained throughout, but a quotation from Addison at page 55 will shock every admirer of that polished writer.

Facts and Gossip.

THE *Pall Mall Gazette* (December 1st) says: "Among new methods for simplifying the unwieldy processes of the law, none is more noteworthy and suggestive than the science of chiromancy, which appears to be becoming fashionable in police-courts. It was applied with striking success in two cases yesterday. In one of these the prisoner, who was charged with begging, pleaded that he had done hard work, but was now unable to get any; the gaoler then examined his hands, declared they showed signs of hard work, and the man was let off with a nominal punishment. In the other case, the accused said he was a carpenter, but was out of work. The examination of his hands showed that he had done no carpentering work lately, and he was accordingly sentenced to the full penalty for his offence. Thus by the exercise of a highly useful but little-studied art the truth is at once arrived at, and the trouble and expense of calling witnesses are saved. Chiromancy, moreover, evidently only marks the beginning of a new state of things, and we may fairly expect a time when every gaoler will be a skilled phrenologist, and be provided by the Government with a copy of Lavater's works, as no less indispensable to his calling than his bunch of keys."

PROFESSOR HUXLEY'S farewell address as President of the Royal Society was such as he, perhaps, alone amongst English men of science was competent to pronounce. He indicated very briefly a few of the chief achievements of the interpreters of nature within the limits of his own life. Within his memory, he reminds us, men could travel no faster than in the days of Achilles or of Ramses Maimun. Within his memory the arts of war and peace have been revolutionized by arms of precision and the electric telegraph. The single discovery of the function of parasites in the animal economy has rebuilt the theory and practice of medicine from the foundation to the roof. But, vast as are the practical boons already garnered for mankind, they seem poor and trifling to the boundless harvest science promises to yield. In the fertile doctrines of evolution and the conservation of energy Professor Huxley bids us see the assured and certain prospect of a new and immeasurable advancement of learning. The genuine student of science is awed by the immensity of his reward. The prolific labours of his fellows threaten to crush his powers with the multitude of their discoveries. No single mind can in these days hope to master any considerable branch of human learning. The thinker must content himself with specializing on some one minute department of knowledge, and guard against the narrowness of the specialist by broad and general scientific culture.

MANY facts are on record showing curious morbid tendencies running in families. Darwin relates a case of a woman who died of apoplexy at the age of sixty-three. Her two daughters succumbed to the same disease. One of these had a family of twelve children,

who all died of tubercular meningitis. Esquirol records a case of father, son, and grandson, all becoming insane at the age of fifty. Sir Henry Holland records cases of three brothers who had hemiplegia at the same age; of three sisters who each became epileptic at the age of twenty-four; of three cases of diabetes in brothers under the age of ten, and a number of parallel instances. The important deductions which the medical practitioner must draw from such facts hardly require to be shown at length. One caution must be added in conclusion. Heredity is a tendency, not an unalterable fate. The strongest family tendency, say to phthisis, can often, under favourable circumstances, be averted; but only on condition that it is early recognised and vigorously combated by all the means at our disposal. By the early recognition of morbid tendencies in families, and the resolute adoption of preventive measures, the medical practitioner will enormously benefit his patients, and win for medicine another claim upon the respect and gratitude of mankind.—*British Medical Journal*.

Health (whose editor is inimical to phrenology) says: "The forehead lobes of the brain are those which by common consent are now regarded as ministering to the highest duties of the organ of Mind, and as, in fact, being the seat of those faculties we are accustomed to term 'intellectual' in their nature. The general result of these researches is to confirm the teachings of physiology and of comparative anatomy as well. The lower we descend in man, and in lower animal life as well, the greater preponderance do we find given to the face, while the frontal lobes of the brain are conversely the worst developed. The researches of Dr. Bajenoff prove this inference to be correct. Among savages, civilised and uncivilised alike, he finds the face and hinder parts of the skull to be the best developed parts. In distinguished men, the frontal parts excel in the order of skull-development, and necessarily of brain-development also."

AN interesting article on size of brain has been published in the last number of the *Revue d'Anthropologie*, by Dr. Adolphe Bloch. He studies the question from two points of view, dealing, in the first part of his paper, with anatomical observation; while, in the second part, he describes the different conditions inherent in the individual, or independent of him, which regulate the development of the intelligence. The conclusions he arrives at are as follows. 1. There is no absolute relation between the intelligence and the volume of the brain, since very intelligent individuals may have small brains; while, on the other hand, very ordinary persons may have large brains, as is well known. In certain races of low intellect, cases are to be met with where the brain or cranial capacity is relatively of considerable size. 2. The causes which lead to the brain being of larger or smaller size are numerous, since the volume of the encephalon may be in proportion to the stature

or to the weight of the body, or to the muscular power of the individual. Finally, the brain proper may become voluminous in a race or individual proportionately with the degree of intellectual activity. 3. The most important factor in determining the degree of intelligence of the individual is the quality of the cerebral cells. That quality is constituted by the weaker or stronger impressionability or excitability of the cerebral cells, they being considered the substratum of the intelligence. That impressionability of the cells may be native or acquired. The former is the mark of a superior intelligence; the latter can be produced by continued work; it can also be produced by certain neuroses. 4. In a race, there are influences not dependent upon the individual, but acting upon the whole race, which contribute towards the improvement of the intelligence and the selection of remarkable men. The nature and the degree of intelligence also vary according to race, but nowhere does the volume alone of the brain constitute the principal factor of the intelligence. The conclusions of Dr. Bloch have been taken in some places as being inimical to phrenology. But, as a matter of fact, they are favourable to the contentions of the phrenologist rather than otherwise. Anyway, what we want is intelligent investigation and criticism—not prejudice.

IN a conversation with an American gentleman, Mr. Huxley, once, on the occasion of his visit to the States, said: "Nothing in this life, to me, is sadder than the fact that a man, watching the development of his children, is doomed to see his own peculiarities, his own faults—the things which he condemns in himself—cropping out in them. They may have his good traits, too. But nothing that he can do will prevent those old faults from coming out in them. That illustrates the immutability of law. Children inherit certain traits and capabilities. They must go on and develop them. There is nothing more. They are bounded by the elements which are born in them." American: "A particular man receives a blow on the head, you see. Now perhaps he thinks he recovers from that blow: he is apparently perfectly well; but the effect of the blow continues. A son is born to the man. What has become of the energy expended in that blow upon the man's head? It is bound to continue. You cannot get rid of that. The persistence of force makes it inevitable. Perhaps the man's son gets along all right, and perhaps he doesn't. But suppose that the son, or the son's son, turns out to be a forger, or a criminal of some sort—possibly a murderer. How do we know that this is not the result of the original blow on the head, producing a slight accidental impression on the brain, the force of which takes the form of moral perversion in the offspring?" Huxley: "That illustrates what I was referring to—the persistence of cause and effect, and the terrible sadness of it."

REALLY, if the intelligence of animals continues to develop itself in the way it has—according to various accounts—done latterly,

there will, in course of time, be a prospect of the human biped appearing at a disadvantage when compared with certain sagacious quadrupeds. One hears of dogs that can be taught to pronounce words ; of cats—like the cat of Prince Krapotkine—which thoroughly enter into a game of hide and seek with their master ; and of rational rabbits, such as that whose conduct is related in the “*Revue Scientifique*,” by M. Laborde. It was bought for purposes of experiment at the Physiological Laboratory in Paris, and after it had been operated upon was allowed to run about the laboratory, when recovered from the effects of the operation. It became deeply attached to M. Laborde, going to the head of the stairs to meet him of a morning, and demonstrating, in a remarkable manner, its affection. Whenever an operation is going forward, the rabbit will sit on the table watching, with every appearance of interest, the proceedings. Its chief delight, however, is in microscopical examination. So soon as M. Laborde puts his eye to the microscope the rabbit perches on his shoulder, diligently endeavouring to take a look through the instrument. For dogs in the laboratory it evinces a marked friendship, provided they are frequenters of the place ; but if a strange dog arrives the rabbit will turn out the intruder, and keep up the chase until the street is reached.

YOUR memory is bad, perhaps, but I can tell you secrets that will cure the worst memory. One—to read a subject when strongly interested. The other is to not only read, but think. When you have read a paragraph or a page stop, close the book, and try to remember the ideas on that page, and not only recall them vaguely in your mind, but put them into words and speak them out. Faithfully follow these two rules and you have the golden keys of knowledge. Besides inattentive reading, there are other things injurious to memory. One is the habit of skimming over newspapers, all in a confused jumble, never to be thought of again, thus diligently cultivating a habit of careless reading hard to break. Another is the reading of trashy novels. Nothing is so fatal to reading with profit as the habit of running through story after story and forgetting them as soon as read. I know a gray-haired woman, a life-long lover of books, who sadly declares that her mind has been ruined by such reading.

COMMON sense is a variable product, and that which goes by the name in this age is a very much improved article. It represents not exactly the knowledge of the age, nor its science and skill, but its experience. Knowledge becomes to an extent an inheritance in the form of tact or fitness or virtue. The children know intuitively what their ancestors learned by hard study. This is their common sense. The age of logic is largely over ; I mean the logic which by Napoleonic tactics of words advances on you, and by premises, by minors and majors, undertakes to overthrow you. The short cut cuts the Gordian knot and appeals to your common sense.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE.—ED. P.M.]

M. L. C.—You have a favourable temperament for health, happiness, and long life. There appears to be no physical impediment to your success in life. You are not only well qualified to be happy yourself, but to make others so ; for you have a genial spirit, and are full of magnetism, which enables you to exert a healthy influence over others. You have favourable qualities for acquiring knowledge, either by books or contact with the physical world. You are wide-awake to what is going on around you, and you have an intuitive, analogical cast of intellect. Your head is high, which indicates an elevated tone of mind. You are decidedly ambitious, anxious to be popular among your friends, and to excel in your undertakings ; are mild and amiable in disposition, decidedly affectionate and loving, and with a right kind of partner will make one of the best of wives and mothers. If you do not marry you should devote yourself to labours of love and usefulness.

J. L. (South Kensington).—Your photograph indicates a high state of mental action. You are seldom quiet or at ease ; are in your element when you have much to do and many responsibilities. You have been over-strained in the action of your nerves. You need to take life more quietly. You have naturally superior talents, and with favourable circumstances would be able to exert a distinct influence, and accomplish much. You have the qualities to be neat, and to systematize your business. You also have intellectual curiosity, and a good memory of faces and forms, and could work by the eye as an artist, cut and make garments, &c. You are full of sympathy for others, and yet possess great energy and force of mind. You have a tenacity of will and perseverance that carries you beyond your strength. In speech you are more forcible than copious, for you are energetic in your style of talking. You have good judgment, as applied to things and their qualities and uses ; can turn off business with dispatch. You are susceptible of strong attachments.

G. A. R. (Shoreham).—You are a child of nature ; also a student of nature ; are one of the free-and-easy kind, and there is very little of the artificial in your nature. You prefer to wait for the tide to come in before you start ; are disposed to take everything in as natural and easy a manner as possible, and never magnify difficulties or dangers. You feel equal to your task ; are full of joy and

hope, and have a favourable degree of self-satisfaction, and great firmness in times of danger. You are not wanting in energy and force, yet are good-natured. You would rather do good than not. You prefer to have others under obligation to you rather than be yourself under obligation to others. You are remarkable for your powers of observation; have a scientific, literary turn of mind, and could make a good farmer, doctor, chemist, or architect. With practice would make a good writer. Your influence is genial; you will make lots of friends, and have but few enemies. You should cultivate your talents for public speaking, or as a lecturer on scientific subjects.

MAC (Canada).—Your organization is quite marked, having a long neck, and high, and a narrow brain, with rather too much susceptibility, and scarcely enough muscular strength, iron in your blood, and tenacity of pluck. You must learn to husband your resources, avoid all unnecessary expenditures of vitality, eat plain, simple food, avoid dissipation of every kind, and live a regular, uniform life; the result will be health, happiness, and usefulness. You have a favourable intellectual and moral brain. If you will take a little extra pains, and cultivate your powers, you can excel in anything you give your close attention to. Your natural standard of character is high, and you must work up to it as fast as you can, leave every folly behind, and press forward toward perfection; take every responsibility upon you that comes in your way, within the reach of your capital, and test yourself in every way possible, for you have gifts of intellect worthy of culture. You had better marry as soon as it is convenient; get a wife with dark hair, a good muscular system, rather broad head, and one decidedly energetic, worldly-wise, domestic, and loving.

D. K.—You have all the indications of fair proportions of body, brain, and mind, which indicate health, and a fair balance of power, in proportion as you cultivate and use your powers equally. You are not eccentric, peculiar, or one-sided, but are straightforward and consistent. You enjoy yourself, and are more uniformly happy than nineteen out of twenty, and are at peace with yourself and those around. You have a full share of energy, resolution, and force of mind, and will not stop at trifles when there is a big job on hand. You have the elements of economy, and are disposed to look ahead and to avoid difficulties. You have a high-toned mind, and are quite ambitious to do something meritorious; are particularly conscientious, and anxious to do right, and are firm and strong in your general principles. You are respectful, mindful of superiors, decidedly hopeful and enterprising, strongly inclined to the spiritual, a little romantic, quite enthusiastic, and not a little versatile in manner. You have an available, practical intellect, and capacity to study science; are naturally orderly, musical, quite intuitive in your talents, and are naturally fitted for a teacher, or for missionary work.

THE Phrenological Magazine.

FEBRUARY, 1886

PROFESSOR HUXLEY.



PROFESSOR HUXLEY has a high degree of balance of power, for he is favourably developed both in body and mind, and is so highly organized as to be very impressible to all that is going on around him. He possesses great tenacity of constitution and power to hold on to life, as well as great vigour and



elasticity of mind. His energy of both body and mind is quite above the average, and gives a surplus of industry; if he were to exercise his body and brain equally, they would wear out together, because they are about equally strong; but to use the one at the expense of the other would throw him off the balance.

By culture, his mental temperament has become predominant ; but by nature he had a high degree of both temperaments, the vital and the motive ; and in his youth he must have been very fond of physical exercise. His highly cultivated mental temperament favours clearness and quickness of perception ; his rather large volume of brain gives grasp and comprehensiveness of mind ; his strong neck and heavy base to the brain give him great force of character and untiring industry : few men have more spirit and industry. The tone and quality of his organization indicate an elevated tone of mind and a high standard of action, which would be a powerful stimulus to his ambition. Cautiousness being large, would aid greatly to regulate his executive power. His high head indicates a strong positive character, great decision, perseverance and tenacity of purpose ; his moral brain is strongly represented, especially Conscientiousness and Benevolence, which give integrity and a strong sympathetic nature. He has a sharp perceptive intellect, and is a close observer, and sees intelligently. Order is prominently developed, and with his calculation, gives him great power to arrange, systematize, estimate, and organize ; the two aid greatly in regulating the action of his intellect in trying experiments, and in carrying through critical investigations. The central portion of his forehead is very fully developed and has a marked influence in all his mental operations ; he is not only very minute in his observations, but is particularly apt in making comparisons, in drawing inferences, and in seeing the application of truths. One of the largest organs in his head is Human Nature, or Intuition, between Comparison and Benevolence ; it is seldom seen so largely represented. It gives intuitive perception of truth, and aids one to arrive at an inference without a long process of reasoning. It enables him to come directly to a conclusion and to decide on the spur of the moment ; he quickly perceives the difference between error and truth, and between what is false and true. It aids him to look forward and to foresee and predict results and coming events long before he could come to the same result by a process of reasoning. It would dispose him to talk and write in a direct style, and come upon the subject matter at once without any preliminary remarks. He is always in earnest, and means what he says, without multiplying words on his subject. He is not satisfied until he has reduced everything to the lowest denomination and relieved it of all surplus matter possible. He is anxious to have every principle and fact stand out in bold relief. He has a marked, distinct, and individual organization, and could not help

making his mark and standing out boldly in whatever pursuit in life he might follow. He could not be other than active, clear-headed, executive, positive, persevering, systematic, critical, discriminating, and intuitive in his mental operations.

To sum up, the Professor is a great observer, has a wonderful memory of what he has seen, and is a bold generaliser. In his reasoning intellect he is strongly analytical; but he is also constructive; he builds up as well as pulls to pieces. He takes nothing for granted, but, on the other hand, he overlooks nothing; in his system every fact has its weight. He is great at organization, clever in exposition, and possessed of a wider outlook than men generally. His watch-tower is a high one and has a view to "a the airts."

Thos. Hy. Huxley was born on November 4, 1825, at Ealing, Middlesex, and was for some years educated at the school in his native place, where his father was one of the masters. This preparatory course was followed by industrious private study, including German scientific literature, and medical instruction received from a brother-in-law, who was a physician. Afterwards he attended lectures at the medical school of the Charing Cross Hospital. In 1845, he took the degree of M.B. at the University of London, with honours in physiology. Having passed the requisite examination, he was appointed assistant surgeon to H.M.S. *Victor*, for service at Haslar Hospital. His next appointment was assistant surgeon to H.M.S. *Rattlesnake*, and he spent the greater part of the time from 1847 to 1850 off the eastern and northern coasts of Australia. After his return to England, Mr. Huxley published the results of his natural history studies during this cruise; the work won for him a fellowship of the Royal Society. In 1855 he was appointed Professor of Natural History at the Royal School of Mines in Jermyn-street, and, in the same year, Fullerton Professor of Physiology to the Royal Institution, and Examiner in Physiology and Comparative Anatomy to the University of London. Other appointments followed.

When, in 1860, it became Professor Huxley's duty to give one of the course of lectures to the working men in Jermyn-street, he selected for his subject "The Relation of Man to the Lower Animals." The questions arising out of this topic became the subject of warm controversy at the meeting of the British Association in that and subsequent years. A summary of the whole discussion was given in the work, entitled "Evidence as to Man's Place in Nature" (1863), and excited

great popular interest both in this country and abroad. Dr. Darwin's views on the origin of species were the subject of Huxley's lectures to the working men in 1862, which have been published under the title of "Lectures on our Knowledge of the causes of the Phenomena of Organic Nature."

In 1862 he delivered the annual address to the Geological Society, and, as President of Section D at the meeting of the British Association at Cambridge, he gave an address on the "Condition and Prospects of Biological Science."

Professor Huxley's name came prominently before the general public in connection with the London School Board, to which he was elected in 1870. He retired from the Board in 1872. He was elected Lord Rector of Aberdeen University for three years, Dec. 14, 1872, and installed Feb. 27, 1874. In 1873 he was elected Secretary of the Royal Society; he has received the honorary degree of LL.D. from the Universities of Edinburgh, Dublin, and Cambridge. In 1883 he was chosen President of the Royal Society in place of the late Mr. Spottiswoode; and in the same year he was elected by the Council of the United States National Academy as one of their foreign members. He delivered the Slade Lecture at Cambridge, June 13, 1883, the subject being "The Origin of the Existing Forms of Animal Life—Construction or Evolution?"

Professor Huxley is well known as a writer on natural science, being the author of numerous papers published in the Transactions and Journals of the Royal, the Linnean, the Geological, and the Zoological Societies, and in the Memoirs of the Geological Survey of Great Britain. In addition to the works above mentioned, he has written "Lessons in Elementary Physiology," "An Introduction to the Classification of Animals," "Lay Sermons, Addresses, and Reviews," "Manual of the Anatomy of the Vertebrated Animals," "Physiography: an Introduction to the Study of Nature," "The Crayfish: an Introduction to the Study of Biology," "Science and Culture, and other Essays," and a number of others. It need hardly be said that Professor Huxley, who has recently had to relinquish some of his public appointments on account of ill-health, stands in the very first rank of living naturalists and men of science.

BOTH beauty and ugliness are equally to be dreaded, the one as a dangerous gift, the other as a melancholy affliction: the one as the burning sun which scorches up immature fruits, the other as the cloudy, cold, bleak atmosphere which forbids the buds and blossoms of the heart to open into ripeness and beauty.—ELIZA COOK.

HEREDITY OF THE MEMORY.

CERTAINLY one of the most valuable contributions to the science of the mind is the treatise on "Heredity," by Thomas Ribot, in which all forms of inheritance are reduced to definite laws; and a flood of light is thrown on phenomena of mental heredity, which were formerly relegated to the limbo of superstitions. This author looks upon memory as "an incipient habit," in which I fully agree; and as habits are most commonly transmitted by inheritance, we should expect memories also to be transmitted in many cases. The same argument is applicable to memory which is thus applied to the intellect by the same author.

"Intellect is a function whose organ is the brain; the brain is transmissible, as is every other organ, the stomach, the lungs, and the heart; the function is transmissible with the organ; therefore intellect is transmissible with the brain." However, Ribot comes to the conclusion that "when we search history or medical treatises for facts to establish the heredity of the memory in its individual form, we meet with little success." Indeed he fails of mentioning a single case of such inheritance, and only gives instances where the power for remembering (not the memories themselves) has been transmitted. I will, therefore, contribute one example of the inheritance from parent to child of a memory of language.

E. D. is a little girl, aged fifteen months. She is bright and healthy, though rather delicate. She has blue eyes and auburn hair; but her hair was long and black at birth. Her father is a French Canadian, and has black hair and blue eyes; while her mother is an American of German descent. E. D. has inherited most of the features of her father, even some anomaly in the motions of the lips; the same shape of the nose, a peculiar way of fixing the eyes, and of joining the hands; his peculiar mode of laughing, besides pronounced tastes for half a dozen articles of diet which her father likes and her mother dislikes. Again, from the time she was six months of age, she has always turned away any toy, dolls and the like, for a book; the father being an ardent student. These are all common points of observation with which many fathers and mothers are quite familiar, and, as Ribot shows, heredity from father to daughter, or mother to son, is the most frequent; but we now arrive at the main facts of the case.

This little girl has heard but two languages spoken to her, German and English by both parents and the servant; the

first word she ever spoke was *mouman* when five months old. Her first words of assent and dissent were *oui* and *non* when eight months of age, and she does not yet know yes or ya, though she seems to have forgotten *oui*. When a year old she was presented with a poodle dog named Venus, which she called *Nanan*. About the same age she used freely the words *bon* and *pus*.

I could cite more such words, each of which she spoke occasionally and always appropriately for several weeks, but ultimately forgot. Now, these six words are French, and the very ones that her father is likely to have exclusively used when a babe. The *u* of the last word was sounded as in French, of course, and so were the nasal sounds of *non* and *Nanan*, a feat impossible for her mother to accomplish. The first and last of the words quoted should be spelled *maman* and *plus*; but the pronunciation, when spelled as above, gives the French Canadian dialect as spoken by that little girl, and their meaning is: *Mamma*, *yes*, *no*, *candy*, *good*, and *no more*. *Nanan* must have been suggested by *Venus*, but it is, all the same, one of the very first words that a French child talks.

She said *papa* when seven months of age; but that word is French as well as German and English. Her first German words, of which language she hears the most, were *haben* and *nehmen*, which she first said when eight months old; and now that she is starting to talk German a little, she says *gib mich*, instead of *haben* for *let me have*. She also firstly said *etten* for *essen*, to *eat*; but that was more probably a combination of English with German than low-German. Any one that is not already greatly prejudiced will be hereby convinced that the heredity of the memory of language is a fact, and this solves the problem, is language more easily learned by one whose ancestors spoke that language in the affirmative. For, in the above instance, the child who started talking French when less than six months old, and can hardly talk a few words of German now that she is fifteen, would certainly have learned the former language, which she thus knew from inheritance, far sooner than German or English. For those who would call my veracity in doubt, I am ready to produce two witnesses to the above facts, which all came under my observation.

A case like this is of a nature to throw some light on the formation of languages. The modern school of biology are inclined to the belief that language was primitively an imitation of sounds which conveyed as good a representation of natural sounds as picture-writing did of objects and

events. ("Tylor's Anthropology," Language.) It is most probable that our earliest ancestors could only utter a few imitative sounds, but that these being transmitted, in some degree, by inheritance, enabled each successive generation to acquire more imitative sounds until articulate language became possible. And this must have contributed the most to the evolution of language among those races, like the American, Indian, or our Aryan ancestors, who had no fixed system of writing.

The inheritance of memory has been observed in the case of birds. Witness the often recorded fact that when telegraph wires are first erected in a country, a great many birds kill themselves by flying against the wires which they do not perceive; but those birds that survive, having been witnesses of these deaths, take better care to distinguish these wires and transmit to their descendants this "incipient habit," their power of observation, so that in the course of one or two years it is extremely rare for the progeny of these birds to fly against these same wires. This might receive a different explanation, but not one more to conform with the facts. At any rate the same fact in man is no longer to be questioned. Indeed far stranger instances of inherited memories have been observed in man; though the only author that I know of who mentions the subject is Chauncey Wright (Philosophical Discussions), who says of those dreams of strange places and events that often recur to one in his sleep, with the intimation of being familiar, though never seen in a wakeful state—that they are inherited memories. Some writers are spoken of in the "Scientific American" (1875—1879), as believing in the transmission to the child *in utero* of some impressions made on the mother at the time. I know of personal observations which may prove of interest to my readers.

I reported, a couple of years ago before the Chicago Medical Society, the case of a child who was born with a very crooked nose, which anomaly was ascribed by the mother to the fearful impression made on her some time before by the sight of a man whose nose was half destroyed by a cancer; and medical literature and tradition abounds in such instances; but I wish to speak from personal experience of one such strange case of mental heredity.

My mother was brought up and educated in a most romantic country village, which she revisited a few months before I was born. The first time that I visited it I remembered vividly having been there before. In fact I could tell at that time what next would follow in the scenery, and I

argued with my relatives who were denying my former knowledge of that place; my mother having died when I was about nine months old, and I had not had any description of it from any one, nor conversed with any one in regard to the village scenery. For many years I wondered over the, at that time, inexplicable fact. I was twelve years old when this incident happened, and, as I was possessed of a good memory for places, I never could doubt that this was a plain case of the heredity of memory.

The next instance of the kind that I came across was one in the family of Mr. J. E. Lanou, a very intelligent and well informed man, with whom I resided while attending college in Burlington, Vt. Here a little girl had inherited so good a memory of an uncle, whose funeral had been attended by her mother, not long before this little girl's birth, that she could give a full description of him, and she knew his picture at once the first time that she ever saw it. The fourth case I heard of was one communicated to me by the manager of MIND IN NATURE, and is too valuable and interesting to be long left unreported by him.

Of the preceding only the first instance is a plain case of hereditary memory: the second and third cases seem of the same nature to me, but they may be cases of *maternal impressions*. Though analogous cases are often met which are ascribed to certain disposition on the part of the mother having influenced the progeny before birth, most such cases are to be referred to peculiarities of character inherent not in the parents alone, but even in the grand-parents, and transmissible by heredity.

Nevertheless, few physicians would deny maternal impressions in totality. Indeed, just as puppies, having a cat for foster-mother, have been known to wash cat-fashion their faces with their paws; just as a child brought up by strange parents takes often a great deal after them in its habits and features; so the influence of a mother over her progeny *in utero* may well extend to higher phenomena yet, for the relation is much closer and more direct. Such heredity is a sort of link between true heredity and the influence of education. In fact it is most probable that a mother *thinks* for her unborn child just as well as she *eats* for it. The communication between the two need not be nervous, for it is protoplasmic, and protoplasm is endowed with the properties of all tissues; and such cases are not easily excluded from the laws of heredity, though here necessarily unilateral."—*Mind in Nature*.

WHAT THE FRONTISPIECE OF THE FACE SYMBOLIZES.

THE fool may only see in his nose a convenient thing to smell with ; but the philosopher reads there the sure indications of sagacity (literally keen scented), of judgment and force of character, with many other things not to be dispensed with in the mental furnishings of either civilized or savage. An inch on the end of a man's nose is a good deal, both as regards the dignity of expression in that appendage and the qualities of mind which it signifies. Roman, aquiline, Grecian, or pug, we are all obliged to wear it, and so it may be well for us to inquire what this frontispiece of the face symbolizes, in general and in particular.

Alexander the Great was a Greek ; but at the upper part of his nose we see the prominent sign of aggression, which marked the Roman nose and character. It was this extremely large faculty which led Alexander to depart from the established policy of Greece, and to carry on aggressive wars of foreign conquest, and to plant colonies and kingdoms in other countries. The lower end of his nose indicated the same artistic and literary tastes which marked the Greeks as a nation. In the Apollo, in Venus, Mercury, and other idealizations of Greek art and thought, we see that delicate and perfect chiselling of the nostrils which indicates refinement and symmetry of intellect.

The common Roman nose was less finished at the end ; its possessor loved knowledge for the sake of power and conquest rather than for its own sake. Aggressions and self-defence were the leading signs which gave character to the Roman nose. They are large in the face of Julius Cæsar, who carried the genius of Roman conquest up to its meridian splendour. Civilization has always had to push its way against a mass of obstacles. The Roman nose is a moral battering ram to beat down these walls of savagery and ignorance.

No person with a very short nose ever made a profound impression in the world. The hard Roman nose, pushing its way despite all personal suffering, has played a conspicuous part in the moral as well as the political advancement of the world. It dominated the old Roman race as well as the modern aggressive Briton. It carried Washington on to triumph, stood in the forefront of Lincoln's unyielding strength, as it had sustained the shocks of Waterloo in the face of the Iron Duke. Against him was pitted the Roman-nosed Napoleon ; but in the septum of Wellington's nose the

sign of synthesis, of intellectual combination and perseverance, was very large ; and this caused him to hold out on that day, even when the apparent tide of war had turned against him, until Blucher came, and all was saved.

The face of John Wesley, a cousin of Wellington, shows the same aggressive character. In all the great founders of religion, or of sects, we see the same aggressive nose. It stands boldly forth in the face of Zoroaster, in Mahomet, in Calvin, in the otherwise gentle face of the Nazarene, and in the hosts of other leaders who have done fierce battle for opinion. Nature never puts a great cause upon a saddle-backed nose and expects it will ride into power. It was not Victor Emmanuel, but rather the high-nosed Garibaldi, who achieved the independence of Italy.

A low-bridged nose will do for the helplessness of childhood or the servility of the African ; but such a bridge will never carry a great work safely over. The aquiline nose of the Jews has large signs of aggression, defense, and protection, while the breadth of their noses indicates their money-making propensities. This form of the nose was common among the old Assyrians, as shown by their sculptures.

The projection of the tip of the nose indicates observation, the questioning faculty, and belongs to the inquisitive mind of the child. He has everything to learn, and how can he learn except as he asks questions ? This faculty takes the lead in our intellectual processes, as its advance-guard position in the face plainly shows. If we inquire and observe, some discovery will follow.

PHRENOLOGY FOR CHILDREN.

THE SEMI-INTELLECTUAL FACULTIES *continued.*

IMITATION.

- (a) What is the definition of this faculty ?—(b) What is its location ?—(c) Who discovered it, and how ?—(d) Draw on your slates and then tell me how you represent a large and small organ of Imitation ?—(e) What is its correct language ?—(f) Are habits largely formed by its influence ?—(g) Are children apt to be awkward when mixing with their mates without it ?—(h) When this faculty is large, strong, and active, do children need guiding to imitate only the good ?—(i) Do animals show it, and if so, how ?

(a) The definition of this faculty is to work from a copy, to imitate other people and things once seen, to draw patterns and make models.

(b) It is located on both sides of the head below Benevolence and in front of Spirituality.

(c) "Robert, can you tell me by whom this faculty was discovered, and under what circumstances?" "Yes, Sir, I have read that Dr. Gall first decided that it was a distinct quality of the mind by observing the singular breadth of the head of a friend of his, who imitated without the least hesitation, any character you liked to ask him for. Dr. Gall afterwards made many comparisons between people who had the organ large and small, and was particularly struck to find it large among deaf and dumb children; as though it were given to make up for a loss of power in other directions."

(d) "Now, Charlie, tell me what you have drawn on your slate to represent a head with a large development of this organ?" "I have, Sir, rather a high, round, full, broad head, from the line that runs from side to side over Benevolence; I have drawn that faculty large as well as Ideality, which lies just below." "Thomas, what have you got to represent a small organ of Ideality?" "I have drawn a picture I once saw hanging up in a shop-window. It looks just like a sugar-loaf. And, if you please, Sir, I have drawn another head of a boy, with small Benevolence and large Imitation, and it makes the head look as flat as a table with the leaves up."

(e) "Alice, can you tell me how this faculty shows itself in your schoolfellows?" "I have often noticed," said Alice, "how some girls can sing a song correctly, after hearing it once sung at a concert, and others have to work away for weeks at the same song. I suppose, one has more Imitation than the other." "Quite right, dear. It was the wonderful talent of Imitation that enabled Blind Tom to play any piece through that was once played for him, with all the accidental mistakes as well, without any previous knowledge of the piece; for many a musician played an unpublished selection of his own composition. Blind Tom showed not only a good memory of sounds, but large imitation, which enabled him to reproduce the same emphasis upon every note. It makes one nation able to imitate the sounds of other languages. It made Arthur speak just like John; so that when outside the door it sounded as though John was calling. It makes one boy stop and see how another succeeds in flying his kite so high, that he may do the same."

(f) Yes, habits are largely formed by the influence of this faculty. It makes younger children do what they see their older brothers and sisters do. It makes the older boys and girls imitate their parents.

(*g*) Without a proper amount of it children are odd, and awkward when thrown among strangers ; they seem to have no power to adapt themselves to new surroundings and new ways, or fresh people. Such children must encourage imitation all they can.

(*h*) Unfortunately, when large and active, this faculty imitates the good, bad, and indifferent, and many children sadly need discipline in this respect ; even when they have reached years of maturity they do not let their judgment guide their great delight to caricature and mimic and reproduce the pure and good when compared with the bad. You should pay a little thought to this, children, and avoid imitating the coarse and vulgar when you are young, that the habit may not grow upon you.

(*i*) Several animals show imitation. You know how the parrots, the monkey, and the mocking-bird, all imitate what they see and hear ; and how careful you have to be, about what you do and say with these creatures in the room.

This is a very interesting talent, and much more might be said about it. Study it well and use it rightly. It is often more available than genius or sound knowledge.

MIRTHFULNESS.

(*a*) What is its definition ?—(*b*) What is its location ?—(*c*) What is its language ?—(*d*) Does it act with the other faculties ?—(*e*) What nations show it the most ?—(*f*) Must it be cultivated by all ?

(*a*) The definition of this faculty in children is playfulness, inclination to see the funny side of everything, and the constant desire to crack jokes.

(*b*) It is located on the outer edge of the forehead on each side of Causality.

(*c*) Its language all children know ; even if they have only a small amount. The witty boy is always surrounded by a group of schoolfellows, who think him wonderfully clever, because he is always brimming over with sharp comical sayings. He never goes anywhere without picking up some fresh pithy stories. Many children laugh at the fun of others, yet cannot make it themselves. It sheds cheerfulness and brightness all around. It is a splendid tonic to small Hope, and should be cultivated more than it is.

(*d*) It very largely acts with the other faculties. With Combateness it makes one tease, and say sarcastic things. With the social group it acts when friends drop in, or in society ; with Imitation it makes the comedian. With literary tastes it manifests itself in writers like Artemus

Ward, Mark Twain, Mr. Burnand, etc. With large Veneration, it often makes humorous preachers ; and so it acts with each organ that is the most influential in a character.

(*e*) Yes, some nations show more of it than others. The Irish, for instance, are noted not only for their “blarney,” but also for their wit. The Yankee is also full of this quality, and it shows itself on every possible occasion.

(*f*) Of course, it must be kept in control when very large, so as not to wound sensitive persons over any peculiarity. But many a fault can be pleasantly pointed out through the aid of this faculty when it could scarcely be mentioned in a more serious mood. Strive therefore to be cheerful, and not easily cast down.

PERCEPTIVE, OBSERVING, AND KNOWING GROUP.

(*a*) What faculties come under this group?—(*b*) What is the general use of this group?

(*a*) Twelve faculties comprise this group. Try and commit them to memory. They are: Individuality, Form, Size, Weight, Colour, Order, Calculation, Locality, Eventuality, Time, Tune, and Language.

(*b*) This group you will soon find help us to see, watch, remember anecdotes and facts, measure and weigh by mental calculation, arrange, classify, enumerate, and locate things ; also to remember the time and harmony of musical sounds, as well as the time of day. We will first talk about

INDIVIDUALITY.

(*a*) What is its definition?—(*b*) What is its location?—(*c*) How do girls and boys express it?—(*d*) Why is this faculty generally large in children?—(*e*) How do some show a deficiency of it?—(*f*) How must it be cultivated?—(*g*) How does it work with the other faculties?

(*a*) The definition of Individuality is observation, desire to see, identify, and examine objects and ideas.

(*b*) The location of this faculty is very central, being at the root of the nose, between the eyebrows, and is easily found.

(*c*) This is one of the first faculties a child uses. You girls and boys have many times watched your baby brothers and sisters show their first sign of intelligence, when they first begin to notice mother, and the light in the room ; and then later on picture books and objects about the place and out of doors. There is scarcely any faculty you all delight in gratifying more than this one. As you learn to talk properly, you know how tempted you are to ask questions and talk about what you see ; but first of all, you want to see and experience

for yourselves. I fear, at times, you become very meddlesome and inquisitive, and say nearly every two minutes of the day, "Mamma, I want to see ; mamma, I want to see."

(*d*) This faculty is large in most of you. You all know how much faster you learn when you see anything illustrated than when it is simply explained ; hence you cultivate this quality of your minds very early ; and through the activity of it you encourage the exercise of others, as we shall see further on.

(*e*) Tom shows a deficiency of it. He always goes head-long over chairs and hassocks, and seldom looks where he goes ; hence he does not gain information or facts about anything he passes, and misses all the beauties of nature. If he sees, he does not look with any definiteness or with any desire to remember. This is not right.

(*f*) Every one of you boys and girls must cultivate Individuality when it is small, by paying attention to works of various kinds, either mechanical, ornamental, or artistic. In exhibitions and museums you can learn a great deal if you try. You can learn in nature all the various kinds of trees, birds, animals of all descriptions, scenery of every kind, flat or hilly, rocky or wooded ; and people of all tribes, colour, and classes.

(*g*) This faculty works with each one as that faculty calls it out. For instance, with Constructiveness it looks how a thing is made and put together. With Ideality it looks especially at beautiful things, and points out special types of loveliness. With Order it looks at the arrangement of things, and so on ; but you must study how each organ is affected in its own peculiar way by this one.

FORM.

- (*a*) What is its definition ?—(*b*) What is its location ?—(*c*) What is its natural expression ?—(*d*) What practical use can it be put to ?—(*e*) Who were known to have this faculty large ?—(*f*) What did Gall say of this organ ?

(*a*) The definition of this faculty is the perception of shapes, recollection of outlines, countenances, and expressions.

(*b*) The location of Form is between the eyes ; the first organ situated on the arch of the eye.

(*c*) Its natural expression is to notice the shape and character of everything. It sees that no two leaves are exactly alike ; that persons are distinguished from each other by their various features ; that houses are to be recognised by their difference in forms and outlines. It helps you to learn to

read ; and is a great assistance in enabling you to remember the forms of words in spelling.

(*d*) It can be put to practical use in drawing correctly. It gives you the power to remember, word for word, pages after pages of poetry. You can repeat your lessons much more easily when you cultivate this organ, or when 'cramming' for some special examination. It shows you its practical use when you are modelling statues, or, with your Constructiveness, designing patterns, pictures, etc. John has it very large, and hence finds no difficulty in reproducing on paper or describing with the use of language, what he has seen. He forms a great contrast to the boy sitting next him, who needs to cultivate the organ ; he, it is curious to note, remembers the number and locality of a thing, but carries a poor idea of its form. Now, children, look at each other's foreheads, and see if I am not correct ; by so doing, you will exercise your Individuality first, and then your organ of Form by examining closely the outline or shape of the head.

(*e*) Who can tell me what characters in history have shown it large, and who have been wanting in it ? "Michael Angelo," says a chorus of voices. "Rubens," says another. "The Chinese must have it large, as theirs is such a difficult language to remember," says John. "Cuvier," says Edith, "had the organ remarkably developed, for he could remember the bone of any kind of animal, or its form, after seeing it once." "Gall," it is said, "had the faculty very small," says Elsie. "Many animals show a wonderful development of Form, in remembering their masters and their homes," says George.

(*f*) And now I am going to tell you what Gall once said about this faculty. It was one of the first organs of the mind he discovered, and he called it Knowledge of Persons. He was so conscious of a want of the organ himself, that he often remarked he could not recall the faces of people he had been talking with, when he met them a short time afterwards. Phrenology, physiology, botany, geology, all help towards the cultivation of this and its kindred perceptive faculties.

SIZE.

- (*a*) What is the definition of Size ?—(*b*) What is its location ?—
 (*c*) What is its expression ?—(*d*) How do some of the other faculties act with it ?—(*e*) Who show it to the best advantage ?—
 (*f*) Is it necessary to cultivate this faculty ?

(*a*) The function of Size is distinct from Form ; though some may think that Form and Size are the same thing. It

gives the power to remember the height, the magnitude, the length, the proportion, the breadth, and correct distance between one thing and another.

(*b*) Its location is next to Form, on the arch of the eyebrow.

(*c*) We have just learnt that Form helps us to remember the shape of things ; by Size we learn how much one thing varies from another in its dimensions and proportions. With you children, the organ expresses itself very often in the division of your presents, especially if the organ of Benevolence is not particularly active. Some of you have the organ so fully developed, that you can measure accurately by the eye.

(*d*) With Sublimity large, Size often inclines you to exaggerate a story or incident ; and with large imagination you see a thing to be much larger than it really is.

(*e*) The organ was notably large in all our great astronomers, as in Herschel ; also in Newton, and all accurate draughtsmen, designers, and scenery-painters ; and artists who draw from nature, not from their imagination. Builders, engineers, jewellers, and architects also show a large degree of Size ; so do men who have much to do with machinery.

(*f*) Yes, you must cultivate and exercise this organ all you can.

WEIGHT.

(*a*) What is the definition of this faculty ?—(*b*) What is its location ?—(*c*) Who was instrumental in its discovery ?—(*d*) When large what appearance does it give ?—(*e*) Who have it largely developed ?—(*f*) Do animals show it ?—(*g*) What power in nature corresponds with it ?—(*h*) How do little children show it first ?—(*i*) Do you ever show an excess of it ?—(*j*) Why is it necessary to cultivate it ?—(*k*) Did Brunel have it large ?—(*l*) What did he do ?—(*m*) What did his son do ?

(*a*) The definition of Weight is the power to balance and carry things with a steady hand.

(*b*) It is located outward of Size, over each eye.

(*c*) It was Dr. Spurzheim who located it, by the aid of his large perceptive and reasoning faculties.

(*d*) When large it gives an over-hanging of the eyebrow toward the centre.

(*e*) You will notice it largely developed in acrobats, who begin when very young to be trained, so that they can do all kinds of difficult movements with grace and ease, and balance themselves in pyramidical forms ; tight-rope walkers, like Blondin, who crossed the wonderful Falls of Niagara ; men working on dangerous points of a building ; sailor-boys, who

run up the rigging like monkeys ; and as Weight has much to do with sea-sickness sailors are seldom troubled with it. Good dancers must have it large to blend their graceful movements without stepping on the toes of their partners. You will also find good skaters, easy riders, and graceful walkers show an unerring balancing power. Marksmen, ladder-climbers, blacksmiths, bagatelle and billiard players, are noted for large Weight ; and those who have to do with any kind of machinery in motion. Pianoforte-players, who excel in wonderful execution, need it to give true emphasis to their musical effects. The best sculptors have it large to give correctness and steadiness of hand. Good writers show it ; so do etchers and designers. It is necessary in tennis and archery. To William Tell it meant a great deal ; he knew if he missed his aim his dear little son's life was in peril ; but his organ of Weight, together with courage, served him a good purpose ; for you all remember how his arrow went straight into the apple instead of into his child's head (as Gesler thought it would).

(*f*) Many kinds of animals show it. I dare say every one of you could tell me a story about a favourite dog, monkey, or cat, that has been taught all kinds of tricks that require balancing power. Horses show a wonderful difference in this respect. Take the circus horses, for example ; watch them bend their bodies to the inside of the circle. It is curious to compare them with some horses you see, who appear to have very little if any control over their run or their walk.

(*g*) The law of gravitation keeps all things in their places ; hence this law which governs nature corresponds with our mental law of Weight.

(*h*) Tiny children first show this faculty when, after creeping for some time on all-fours, they stand erect and walk into mother's arms. And what equals her look of pride when she makes her little one repeat his wonderful feat when father comes home from work !

(*i*) You show an excess of it when, with small Cautiousness, you attempt some very dangerous summit, or climb a high trapeze, or walk on the edge of a cliff.

(*j*) It is necessary, children, for you to cultivate this faculty in order to save yourselves from innumerable tumbles, falls, and accidents ; but do not run great risks in riding, walking, skating, or paddling your canoes in rough weather.

(*k*) Yes ; Brunel had large Weight.

(*l*) He could not have built the Thames Tunnel unless he had been a very clever engineer ; for such workers must have it largely developed, we have learnt.

(*m*) His son built the wonderful steamer called the *Great Eastern*, which was first used to lay the Atlantic cable.

COLOUR.

(*a*) What is the definition of this faculty?—(*b*) Where is it located?—(*c*) What singular proofs are there that it is small in some people?—(*d*) In whom is it essential?

(*a*) The definition of Colour is the perception of shades, hues, and remembering them; judgment in matching and arranging them.

(*b*) It is located next to Weight, and when large gives a roundness to the outer edge of the eyebrow.

(*c*) Many curious examples might be given of boys and girls who have been at a loss to distinguish the difference between red, blue, green, orange, or brown.

(*d*) It is particularly necessary to the successful painter, or any one who has to do with the mixing of paints. It is also necessary to the draper and his assistants, or else they cannot detect the variations in shades. To the child who has very little of this faculty all the beautiful combinations of colours in the garden, in the woods—everywhere, in fact, are lost, and things must seem a dull monotony. Let those of us who have the power to appreciate shades and tints rejoice, and always strive to use the faculty appropriately. Those who have it small must educate themselves to detect the different colours accurately.

LAWS OF MATERNITY.

BY NATHAN ALLEN, M.D., LL.D., OF LOWELL, MASS.

THERE is a large class of facts which, for discussion and a better understanding, seem to come, more properly than anywhere else, under the heading of this paper. These facts are so constantly passing under the observation of medical men, and entering into their studies, that they should be more thoroughly understood. Connected with these laws there are some problems not easily solved, and, while we may not be able to throw much light upon them, we may start inquiries which will lead to important results.

Our aim in the present discussion will be of a *suggestive* nature, but far from exhausting the subject.

The laws of maternity are based upon physiology, and, as we have been accustomed to interpret their operations for many years, we are not inclined at first to call in question their correctness. Their performance may be normal or

abnormal, without our discovering exactly where the true line runs. We see a great difference in the action of these physiological laws, and that some work far better than others ; but we do not stop to ascertain the cause. One of the most important of these maternal laws is that the mother should nurse her offspring—that she should furnish a proper and healthful supply of milk. It is a primary law of nature that when it makes a demand, it invariably furnishes a supply. If there are found exceptions to this general law, there must be some well-grounded cause.

When Sir Astley Cooper, fifty years ago, wrote his great work upon the "*Anatomy and Diseases of the Breast*," he took it for granted that all women could nurse their offspring, except in case of disease or malformation. After discussing the great advantages, both to the mother and the child, from nursing, he admits there are exceptions to this practice in these words : "Some women are prevented from suckling by want of milk ; some by want of strength ; some from a deficiency of the nipple ; but too frequently it is the result of caprice, the fear of trouble, the dread of spoiling the figure and from anxiety to avoid the confinement which it enforces ; and in some, from the contrary desire of having many children." These sentiments of Sir Astley Cooper have been the prevailing opinions of the profession, both in Europe and in this country. Of course, a large latitude has been given to opinions on the subject. It is impossible to find out exactly to what extent the ability in mothers exists at the present day to nurse ; then, the practice does not always correspond with the ability, as some prefer to employ "wet nurses," and others who might probably nurse, resort, for various reasons, to feeding by hand or the use of the bottle. Besides, the course pursued in this matter varies very much with different classes in the community, according to convenience, fashion, and means.

But there can be only one opinion among physicians and others, which is, the mother should nurse her offspring,—this is a natural law, and in a normal state of physiology, the interests of both the child and the mother demand it. The excuses for not observing this law are so many, and so obscure and complicated, that it is very difficult to determine when and how far they are justifiable. There are women who, on account of weaknesses and diseases, should not attempt to nurse ; this physicians and all good judges will sanction, but others decline, whose excuses will not bear examination. The laws of maternity are here frequently trifled with and violated in a shocking manner.

Nature in its normal state, or highest development, has made ample provision in the organization of woman for nursing her offspring. But, in order to provide this nourishment pure in quality and abundant in quantity, she must have a well-balanced organization, especially a good development of the lymphatic and sanguine temperaments, together with vigorous and healthy digestive organs. The mammary and other glands should be neither too large nor too small. If there is a great predominance of the brain and the nervous system, and a constant strain is made upon these parts, thus requiring a large amount of nutrition, there will be a failure in lactation.

It has long been observed that there are great differences among women as to qualifications for nursing; some furnish an abundance of milk, some only a partial supply, while others furnish scarcely any. Why should there exist such differences? Why should not the primary causes be more thoroughly investigated? It is surprising how ignorant or indifferent the profession itself is on this subject. In confirmation of this statement we make a quotation from an address before a large body of physicians, by a Professor of Obstetrics and Diseases of Women in one of the oldest and largest medical schools in the country. Says this Professor: "Why do American born females make such poor wet nurses compared with the immigrant from Ireland or Germany? After nearly thirty years of practice I cannot answer the question. That it is the fact, few practitioners in our cities and large towns doubt. Allow that some women with us, as with foreigners, object to being bound to their children's call; yet the mass of American females are totally unable to act the wet-nurse with success."

This acknowledgment was made some years since; but similar statements and inquiries have been made in our hearing by physicians who have had a large obstetric business for many years, and were thoroughly posted in other departments of medical practice. Instead of studying into the physiology of women, and inquiring what there was in their organization that made these differences, attention has been directed almost exclusively to the means of providing an artificial supply. The ingenuity of chemists and physicians has been taxed to the utmost to invent a substitute for breast-milk. Experiments have been tried over and over again upon this and that preparation.

The manufacture and sale of "Infant Food," has become a great business. At first the milk of the cow was the chief dependence; but on account of the difficulty of obtaining

this just when wanted, in quality and quantity to suit, and because the demand rapidly increased, resort has been had to artificial preparations. These are now advertised and pushed into the market the same as quack medicines. Some of them have a great sale, and large profits are made in the trade.

Upon making inquiry, a retail druggist in our own town named over twenty-five different preparations of infant food, with which he was conversant, and as other localities might have different kinds, the whole number must be much larger. It was mentioned that this food cost some families near £20 to rear an infant. If the mother could nurse the infant, all this expense would be saved, besides an immense amount of care and labour in preparing the food and taking care of bottles.

From the writings of Sir Astley Cooper and of others, wherein they have attempted to give reasons why women did not or should not nurse, it is generally accounted for by some malformation or positive weakness or disease. This, of course, would apply to exceptional cases which are found only here and there. But when the failure is general—when it includes the great majority of women,—women who have good health and no organic disease,—what can be the cause? It is very evident the failure does not originate from a single cause, or from the agency of one individual, but the causes must be of a general character, applicable more or less to all.

This general failure in nursing cannot arise from local causes—from any difficulty with the nipple or breast alone. The evil is not confined to an individual, nor to any class of persons. The causes must be general and have become constitutional. There must be some changes in the physical system of women which interfere with the maternal functions in this direction. No law in physiology is better established than that when particular parts or organs of the body are constantly exercised, they increase in size, strength, and vitality, at the expense of other parts, from which nourishment is withdrawn. In this way, may not a class of organs, or one temperament become altogether too active and predominant over others? Is it not possible that the development of the body may become, one-sided and fail, more or less, in discharging functions which nature intended? May not such changes apply more effectually to the organization of woman, as she is charged with extra or specific duties? Inasmuch as a portion of her organism is not indispensable for the support of her life, would not this part be likely to suffer first and most?

If a careful survey was made of the anatomy and physiology of our women becoming mothers, what should we find? What, as to the nipple and mammary gland in their adaptation for nursing? Besides, in order to furnish a sufficient supply of milk, there must be a good appetite and strong digestive organs, which are not common in such cases. But there is generally found a marked predominance of the nervous temperament, together with great sensitiveness throughout the whole system, which has always been considered unfavourable for the production of milk.

If all the physical qualities described in books as essential to a good wet-nurse were brought into comparison with those of Yankee mothers, we shall find a great failure in this respect. Let us compare the physical development of our women with those of the Irish, Scotch, English, and German women. What flat and narrow chests in the former, what a want of fulness and plumpness of body, what small and weak muscles, what a failure in the accumulation of adipose tissue as well as in the development of the lymphatic system generally! These qualities are closely identified with the laws of maternity.

Perhaps if a more general application of these laws be made it will throw new light upon the subject. What is the design and adaptation of woman's organization with reference to family life? The fact was established some years since, from a careful examination of over one hundred thousand cases in the Registration Reports of Scotland, that married women bearing children, live longer, on an average, and have better health than those who are childless. In fact, all history proves that in the case of women, married life and the production of children tend to promote health and prolong life. This is necessary for the perfection of her organization and the highest development of her character. It accords, moreover, with physiological laws in a normal state.

It should be borne in mind that these facts have been established only where these laws have been properly observed. Abundant illustrations of such facts may be found at the present day in Great Britain, and once existed in New England. While physiology is the same that it ever was, we have good reason to believe that important changes have taken place in woman's organization. If nature designed that woman should bear children, and nurse them too,—if her organization was what it ought to be, the process should agree with her constitution and health. Accordingly, among the Germans, English, Irish, Scotch, and Americans, we find women having a large number of children, who seem to

improve in their organization, and good looks—certainly do not break down nor early grow old. Such examples are very common in the old country, and are not infrequent here with the foreign element. Such instances, too, were very common formerly in New England.

But, what a change in this respect do we find in the present state of society? Where do we find women from 30 to 40 years of age,—mothers of numerous children,—who have good health and the probabilities of its continuance to old age? Such an instance is certainly very rare. While, on the other hand, how many women in having two or three children, break down in their constitution and health? How many in having only one? And for some reason, many have none! Now, what is it that makes these differences? There must be, somewhere, a cause for these differences. It cannot arise from race, nationality, climate, or any external circumstances; neither can it come from the will-power of the individual. The cause must originate, we believe, in difference or change in organization. In one class of cases physiological laws are favourable to certain results; in the other class, these laws are not so favourable, and there are greater difficulties in the way of their observance.

What, then, is the type or character of the organization most favourable? There is in physiology, we believe, a normal standard, adapted to bring about the highest and best results. The secret of this standard consists in harmony of parts, or a well-balanced organization. In other words, all the organs of the body should be so fully and evenly developed that each shall perform its own respective function without help or hindrance from the others. The great law of human increase, we believe, is based upon this type or standard, and, consequently, marked deviations from this type impair, more or less, the execution of this law. Unfortunately, large numbers, if not a majority of our New England women, at the present day, are suffering by means of deviations from this standard.

The “love of offspring” constitutes one of the most important of the maternal relations. It is the noblest and purest of all the instincts or affections in woman. It was wisely designed that this “love of offspring” should become a leading feature in female character. Accordingly, we find among the women of all nations this affection very predominant, and the more enlightened and Christian a people are, the purer and stronger should be this attachment. But what is unfortunate and strange, we find certain influences in society operating to stifle, to suppress, and crush out this

natural affection ! It may be truly said this instinct is dying out in New England.

This is manifest as shown in the indifference of mothers about nursing the child ; in the unwillingness to assume the responsibility of taking care of children as a mother ; in creating a public sentiment that it is unpopular and unfashionable to have a large family. Connected with this sentiment is another creeping into popular favour among our young people,—that the bearing and rearing of children belong to low life and is degrading ! Such a sentiment is shocking ; but there is good reason to believe that it prevails extensively, and bids fair to increase more and more.

The cause of this decline in the birth-rate in New England is a question of grave importance. It has been observed that the higher civilization reaches and the greater the cultivation of the mind, the birth-rate declines in a corresponding ratio. All history, it is said, establishes this fact. Now, why is this, and what is the reason ? Is it not because the mind is exercised too much at the expense of the body ? There are, undoubtedly, other factors, but this must be the principal cause. Upon the same principle, let not only the brain but certain other parts of the body be unduly exercised, thereby withdrawing nutrition from other parts, and we have a one-sided, abnormal development of the system. In this change from unequal exercise, supposing those parts that are particularly active in the functions of propagation should become checked in their development and weakened in strength and vitality, may we not have an organization similar to that which characterizes a large majority of New England women ? If only here and there one was found thus organized, the effects would not be so perceptible in society, nor so serious in final results.

These changes of organization must have great influence on the family. All the laws of maternity sustain, in some way, an intimate relation to this institution. What effect, then, will these changes have upon the family ? This question opens up a subject of vast importance. We can refer to only a few points. Divorces constitute the greatest foe of the family. What strengthens and cements the ties between husband and wife so much as children ? What makes home so attractive and binds together a family so closely as the living evidences of the parental relation ?

Another serious evil is, that a great predominance of the nervous temperament does not prove favourable to a good temper or kindly disposition, especially when things in a family do not move along pleasantly or prosperously.

Again ; with this ill-balanced, or one-sided organization, there are greater physical weaknesses, more dependence upon domestic help and liabilities to illness and disease. By such means the interests of the family suffer in a variety of ways.

Another point, and not the least in importance is, the effect these changes of organization have upon the sexual propensity itself.

The questions here raised cannot be regarded as unimportant. The writer is fully sensible that, in this discussion he has entered upon new ground, and that his views are radical in their character. He has felt for a long time that there were grave evils growing out of the violation of physiological laws, which threaten the best interests of society. It is the special duty of medical men to investigate these evils, and do all in their power to correct them. In this paper inquiries and suggestions have been the leading features, and not pronounced opinions or attempts to settle great principles.

Neither the profession nor the public are prepared to entertain definite views on the subject. There must be first, investigation, discussion, and criticism. No one realizes more fully than the writer what immense difficulties surround these questions. Before they are fully settled, generations may come and go. But whatever changes may occur in physical organization, and however men shall differ in their opinions, the great laws of physiology, which God has established for the government and highest welfare of His creatures, will remain unchanged.

THOUGHTS OLD AND NEW.

By V. F.

1. Mental pleasures never cloy ; unlike those of the body, they are increased by repetition, approved by reflection, and strengthened by enjoyment.

2. We may judge a man's character by what he loves—what pleases him. If a person manifests delight in low and sordid objects, debasing songs, and vulgar language ; in the misfortunes of his fellows, or cruelty to animals, we may at once determine the complexion of his character. On the contrary, if he loves purity, modesty, truth—if virtuous pursuits engage his mind, and draw out his affections, we are satisfied he is an upright man. A man debased shrinks from the association of the good and wise.

3. What maintains one vice would bring up two children.

4. It is more noble to make yourself great than to be born so.

5. In the education of children bodily health should have primary attention. The tree of knowledge should be grafted with the tree of life.

6. Exercise, whether called labour, recreation, or amusement, is essential to health; and, as the body was made for labour, work is its natural and honourable duty. An idle man or woman is a discredit to society, and usually liable to fall into disease; whilst an industrious person adds to the wealth of the country, and is more likely to be healthy and happy.

7. If you would pass for more than your value say little. It is easier to look wise than to talk wise.

8. Superficial knowledge is like oil upon water; it shines deceitfully, but can be easily skimmed off.

9. Aim at perfection in everything, though in most things it is unattained; however, they who aim at it, and persevere, will come much nearer to it than those whose laziness and despondency make them give it up as unattainable.

10. To pardon those absurdities in ourselves which we cannot suffer in others is neither better nor worse than to be more willing to be fools ourselves than to see others so.

11. There is no mind that cannot furnish some scraps of intellectual attainment.

12. Do not believe one half you hear; but make sure that you believe all you say.

13. You are not obliged to tell the truth; but let what you do tell be the truth.

14. He submits to be seen through a microscope who suffers himself to be caught in a passion.

15. A woman needs nothing more than mental lassitude and antipathy to action to poison the holy trinity of wedlock—child, husband, and self.

16. The aim of education should be to teach us rather how to think than what to think; rather to improve our minds so as to make us think for ourselves, than to load the memory with thoughts of other men (here note the difference between the phrenological system of education and the ordinary method of 'cramming').

17. Men with few faults are the least anxious to discover those of others.

18. It is always to be feared that they who marry where they do not love, will love where they do not marry.

19. Men spend their lives in the service of the propensities, instead of employing their propensities in the service of their lives.

20. He will make the best use of his wealth who esteems his intellect as the best part of it.

21. It is impossible that an ill-natured man can have a philanthropic spirit; for how should he love ten thousand men who never loved one?

22. You had better send a man unarmed and helpless into a wilderness of ferocious wild animals than into the world without education.

23. A New York paper says it is willing women should vote if they want to. We should like to see the man that could make them vote if they did not want to.

24. We are what we are; we cannot be truly other than ourselves. We reach perfection not by copying, much less by aiming at originality, but by consistently and steadily exercising all the best and noblest faculties God has given us.

25. Everyone who gives way to thought must of necessity become wiser every day; for either the ideas that present themselves to his mind will confirm his yet rickety theories, or observation will teach him that his previous views of things were ill-founded.

26. It is a great mistake to suppose a great mind inattentive to trifles; its capacity and comprehension enable it to embrace everything.

27. There is something intuitive in the power some men have to dart into the minds and drag forth the motives of those they see; it is akin to instinct, it is born with them, not acquired.

28. Quickness of intellect is no proof of solidity; the deepest rivers flow the smoothest.

29. Geology, after all, is but the history of the world written by itself.

30. Teach children to love everything that is beautiful, and you will teach them to be beautiful and good.

31. The culture and discipline of the mind produce the most important results on our well-being as rational and moral creatures. The diligent cultivation of the intellectual faculties and moral sentiments secure at once our usefulness and our happiness, and in the conquest and control of the propensities consists the highest dignity of our nature.

32. The knowledge of men and things is the foundation of all practical usefulness; and without a thorough acquaintance it is impossible to act upon all occasions either well or wisely.

33. It is a law of nature that whenever a muscle is called into frequent use, its fibres increase in thickness, and become capable of acting with greater force and readiness; and that when it is little used, its volume and power decrease in a corresponding degree. By the same law also, a phrenological

organ when brought into constant activity increases in volume and power, and decreases in the same ratio when seldom used.

34. Bad health is the result of the infringement of the conditions decreed for the well-being and activity of every organ of the mind and body.

35. Sleep is a provision of nature for restoring the strength of the body expended during wakefulness.

36. Never dispute about trifling things; and be careful that you do not acquire the habit of contradicting obvious evidences.

THE OLD CORNER SHOP.

A STORY OF VERY POOR HUMANITY.

BY A NEW WRITER.

CHAPTER IV.

THE FINDING OF THE GHOST.

The temporary relief from the money-lender, Grabbit, afforded us by Corvisant's generosity, enabled us to get a little more stock in the shop; but it all quickly went, as before, to feed the ravenous poor, whose necessities were never stilled, and who had little or no money with which to pay. I often used to think in those days of Uncle Smoothdrop's saying: "It is a costly thing to keep a shop if you don't know how to make it keep you."

The night after the bailiff's flight a circumstance happened, curiously enough, that led to the discovery of the identity of the ghost. From what we could gather from Froggy, the ghost had appeared at the kitchen window. We had sometimes noticed that the noises were mostly at the back of the house. This particular night Raff refused to take off his clothes, but lay on the bed with a rug over him, ready for a march, in case the enemy should appear. This the enemy undoubtedly did, and early too; whereupon the eldest born of the house made instant tracks to the parental bedroom, leaving Phil, who refused to be routed so easily, to take care of himself. On this night the demon, lubber-fiend, goblin, or whatever the enemy might be, seemed to be recreating himself by throwing the garden and kitchen utensils about; thus occasioning a din, which, breaking in upon uneasy slumbers, was well calculated to scare a timorous soul. But while this particular noise made Raff flee, it caused Phil to reflect. It was inconceivable, he thought, that a ghost should be addicted to such exertations; and this led to the consideration that perhaps someone was playing us a trick. This thought nerved Phil to the encounter. The window was open at the bottom about an inch, the weather being mild; Phil asked himself if he should go to the window and listen, and try to make out what was going on; half resolved to do so, he sat up in bed.

Then a thing happened that almost curdled his blood. First a low howl made itself heard, then there was a scratching and scrambling, and then—Phil nearly died with affright to see a long, thin, skinny arm put through the aperture, and the sash slowly raised, until there was room for a head and body to be thrust in—a black body and a black head, with two fierce, glaring eyes! There was just light enough to see this. Pfew! Phil thought it was the devil for certain, and that his end was come!

His body became as if charged by an electrical machine; every nerve tingled; every particular hair felt as if on end. Another moment, thought Phil, and the infernal thing might launch itself upon him and perhaps carry him off bodily. Our younger brother remembered that he had under his pillow a policeman's staff, given to him by an old Peeler (as they were then called) as a protection against all kinds of dangers. In a trice, with lightning swiftness, the staff was drawn forth and launched in air. Phil was a good shot, and could take the pipe out of Aunt Sally's mouth twice out of three shies; and the missile, thrown with desperation, sped to its mark with the precision of a god or goddess-directed shaft. There was a simultaneous thud and a howl, followed by a heavy fall and a series of wails.

Phil sprang out of bed and ran to the window to make secure his victory. He shut down the sash and fastened it. Then he breathed freely. Picking up the staff, which had fallen inside, he felt and examined it carefully, in the dim moonlight, to see if there was blood on it; for nothing, he thought, could receive such a blow without yielding juice of some kind—if of flesh and blood: but the missile was spotless. "A creature infernal then," mused Phil, and crept into bed again.

Phil was up betimes. He carefully examined the ground beneath the window to see if there were signs of anything unusual; but he found nothing remarkable: a bit of earth turned up—possibly by a cat—that was all. "The devil leaves no mark," he thought. In the afternoon, however, he found a trace of blood on the threshold of the shed, just at the corner where the jamb had partially rotted away, leaving a hole large enough for a fowl to get through. This led him to make further exploration. After careful search he traced blood stains to the end of the shed where it joined the house, and in the hinder corner, behind an iron trough or tank, which seemed to have been used by the defunct painter to mix linewash in, he found a hole that led under the house, formed apparently by the removal of a couple of bricks. As the corner was dark Phil got a light. At the entrance he found more blood, and, holding the candle so that it cast a light inside, he was startled to see the gleam reflected in a pair of eyes that winked and blinked like a lighthouse.

"A cat!" exclaimed Phil, withdrawing the light and pondering. He called "puss! puss!" in his blindest tones; but in vain. Then he went for a herring, thinking to tempt the animal out, whatever it

might be. "It can't be a cat, anyway," thought Phil; "a smell as strong as that ought to draw a tiger."

Phil was very patient while his patience lasted; then he was all impatience. When the herring failed, therefore, he tried a squib. When it went off he heard a great howl and a scuttling noise, and when the smoke cleared off there were no eyes to be seen. Then, like many persons of his temperament, Phil became compassionate; he feared he had hurt the poor brute, and so got a bowl of milk and a few bones, and placed them within the hole. The next morning he found the milk gone, and the bones polished. He replaced the bones with others, and refilled the bowl with milk; and again the third day; on the fourth Grimalkin was tamed, and came forth.

Phil was startled; it was the biggest cat he had ever seen—a tom—a great, black, long-legged animal, with a huge head, and wild, tigerish eyes. He trod gingerly with his right fore foot, which was badly swollen. The poor thing was terribly thin, and seemed half starved.

Imagine our surprise when Phil came triumphantly into the house carrying in his arms an animal half as big as himself; for he had not previously made us acquainted with his discovery. We were all at first a little inclined to vent our anger upon the brute for the many scares he had given us; although he was in no way responsible for the superstition which made us attribute his nocturnal whinings and wailings to the spirit of the defunct painter. But when we saw the poor animal extended upon the rug in front of the fire, and marked what a pitiful object he was, what anger we felt soon went, and we all vied with Phil in making him comfortable. We helped him to bathe his limb, to rub it with oils, and to tie it up carefully in wet rags, because it seemed inflamed. But Tom gave all his gratitude to Phil, evincing it in his own particular feline way.

For a short time Jim Armit was a very regular visitor. He used to pop in of nights, tell us of his work, his prospects, and his preaching, and make himself agreeable to all of us; but especially to Murietta, of whom he seemed to be exceedingly fond. Then he discontinued his visits as suddenly as he had begun them, and we saw no more of him for a month or six weeks; when, quite unexpectedly, he turned up rather late one Friday evening with a young person whom he introduced to us as his wife. Of course we were extremely surprised; mother, indeed, at first, seemed inclined to be offended. I believe she had looked with rather a favourable eye upon his wooing of Murietta, thinking him a steady, religious young man, one who in a few years' time would make her a good husband. But, as it proved, Mury was well out of the bargain.

After a few minutes mother's good sense prevailed, and she was as cordial as one could desire. The little body—Jim's wife—took to mother most amazingly, and made more of her in a short time than her own daughters, although she could hardly have loved her more than they did. Poor thing! she had never known what it was to have a real mother's affection, having lost her own when very

young, and been obliged afterwards to put up with an article of the step description—a woman of unsympathetic disposition and violent temper, who made her life a penance. To her father she was most devotedly attached; but as he had of late years taken to a business that compelled him to travel a good deal she saw but little of him, and that little at long intervals. He, too, always pre-occupied with his business, saw nothing of his daughter's unhappiness. The little thing had suffered so much at her stepmother's hands that she almost hated her, if we may say such a thing of so gentle a creature.

But of all this we knew nothing on her first visit to us. Then she was all smiles, and what was said about her stepmother was said by Jim, who, of course, felt obliged to set forth a reasonable defence of their hasty, clandestine marriage. He prided himself much on his gallantry in rescuing his wife from her bondage and misery. "Why, she was going to commit suicide—she said she was," Jim affirmed; and Nelly, when appealed to for confirmation, said she often felt very much inclined that way. "Any man would have done the same who was half a man," the hero continued. "But won't there be a rumpus when the old man comes home, eh, Nelly?" asked our cousin, with a laugh. He seemed to think the 'kicking up of a rumpus' by the aggrieved parent would be a highly diverting incident: not so Nelly, however, who turned pale and thoughtful at the mere suggestion of it.

"I'm afraid he will never forgive me," she said.

"Oh, won't he though," returned the confident Jim. "You'll see, he'll take on roughly at first, tear his hair, have 'appleplectic' fits, and that sort o' thing, and then he'll soften down and want to see his little Nelly, and in the end he'll come down handsome. You'll see."

'Appleplectic' was Jim's favourite and most successful joke: judiciously used and in the proper company, it used to tell.

The picture thus drawn, in accordance with his wish, pleased Jim greatly, and caused him to laugh immoderately.

Although when they came in Jim said they had so little time that they must go immediately, they stayed till nearly midnight. Moreover, his tongue went all the time without stopping. He found time to tell mother privately that the 'old fellow,' meaning Nelly's father, had a load of money, and that his wife would come in for a nice little fortune.

Mother observed in reply, with one of her quiet little smiles, that she hoped the marriage was based on true affection, and not merely upon his hope of fortune to come; whereupon Jim answered that he had "pricked for Nelly in the Good Book, and so it could not help but be all right." But we remembered that he had also pricked for Mury.

When they finally rose to go, Nelly asked if she might come and see us by herself; mother, of course, said we should be delighted to see her, and she came a few times, Jim generally fetching her at night. She took greatly to Tom, and never came without bringing

him some dainty; for which he evinced his gratitude by diligently rubbing his occipital against her whenever he could get a chance, and, when his limb got well, accompanying her half, and sometimes all the way home. A strange animal was Tom!

But the most curious thing about him was that he could neither mew, nor yet 'spit,' as cats are wont to do; but he had a very plaintive cry, and a very human kind of howl. In the course of a few days his foot got well, although he always went a little lame. Phil fed him up with milk; he begged and bought all he could, but without making any appreciable improvement in his protégé's appearance; at length, therefore, he gave up the attempt, saying Tom would not fatten if he had the Milky Way to run at. Moreover, the brute soon showed that he was quite capable of foraging for himself. Nothing was safe from him unless it were under lock and key; he could open the latch of any door. We soon discovered, too, that he was in the habit of making use of the chimney to get from one part of the house to another, or into the house, if other means failed; but this not till later. If he had lived in an earlier age he would surely have been thrown into the water for a witch, and cast into the fire after if he did not drown, in accordance with the summary methods of our reasonable ancestors. Indeed, Tom possessed so much human-like intelligence, as distinguished from mere feline instinct, that my knowledge of him has made it impossible for me entirely to disbelieve in the doctrine of metempsychosis, and I have ever since had a great deal of respect for what we are pleased to call the 'brute creation.' When I have seen an intelligent dog I have asked myself: "May I not here have before me the soul of a Cæsar?" When I have met a well-taught bear I have said: "Here possibly we may have a tamed Tsar"; and in the erotic Tabby of a friend I used to imagine the soul of Sapho. A belief like this makes one kind and considerate to one's dumb fellow-creatures.

But there came a time, and that not long, when we thought we could no longer put up with Tom's thefts. Often were the times when we had to go dinnerless or supperless because he had chosen to take his refection first. We bore for some time his predatory inroads upon the shop-window or the pantry with all the equanimity possible for Phil's sake; but it is not in human nature to be patient when your much-needed meal is in another's stomach. Phil was teaching his protégé with great assiduity to be a moral and well-conducted being; and when the brute had well filled himself—at our expense—it was surprising how good he could be. He would stretch himself on the rug to be caressed; he would walk about on his hind legs at his master's bidding like a veritable Christian; would indeed behave himself in all things as became a pious and sedate cat. But, alas! after all his master's teaching, I fear he had as little respect for the tables of the law as for our neighbour's tripe, which he purloined and never thought of the bill. But I suspect cats and their like have law-tables 'after their kind'—and I don't blame them.

As affairs were getting desperate at the Caliph's Head, the

enforced tribute for Tom's keep became a very serious matter, and the question how to rid ourselves of him was frequently discussed. Whenever Phil heard of such discussions, however, he was highly indignant, and vowed Tom should not be beholden to us for anything; he would divide his meals with his favourite; would punish him if he stole; would, in short, make him a respected member of the family, and so forth. But Tom stole incontinently all the same, and so watchful and clever was he that he seemed to set all our precautions at defiance. In brief, we bore with his depredations until our stock of patience was completely exhausted.

The proverbial straw that broke the camel-back of patience was added in this wise. Mother was one day in great straits for the wherewithal to make out a dinner. There was a little despised pease-meal in the shop, and we had a morsel of dripping to boot: a passable dinner for hungry people might at a pinch be made from these, although it would be rather thin, especially as we all had appetites like steel saws—all except father, who in those days pretended to have an indifferent stomach; albeit we did not quite believe him. Mother hoped he would bring in some money to enable her to stiffen the meal by the addition of a little meat. The shop had so long proved but a broken reed that to put our hopes upon it would have betrayed a weakness of intellect bordering upon idiocy; nevertheless, to prove that miracles do sometimes happen in these prosaic and degenerate days, a customer actually came in for a lot of hearthstone. It was Mrs. Frost, from the shop in the next street, and she bought all we had, although it was so hard that everybody about had refused to buy it, and we ourselves had occasionally to get a pennyworth elsewhere for our own use. Talk of denying Providence after that!

After the purchase was made mother was troubled with some conscientious scruples whether she ought not to have told Mrs. Frost that the stone was hard—but not for long: a slight calculation showed her that for the amount in hand she could buy a couple of cow-heels, a dainty which she thought would go well with the pease-pudding, and accordingly the heels were got. I believe mother shed tears over those two hoofs, as though they had been two loved feet that had gone astray, and had come back to the fold after many days; and if Mury and I did not also pipe our eyes over them, we were moved in another direction: our mouths watered plentifully, for pease-meal and cow-heels formed not a dainty we could count upon every day.

While we were thus in a manner gloating over the clean white heels lying on the dresser, ready to be put in the pot, the shop bell rang. "Another customer!" we girls cried in a breath. Mother, more sedately, but with beating heart, quickly wiped her eyes and hastened into the shop. Cruel! it was a run-away ring. But though we looked up and down Thornhaugh Street and along Parr's Lane we saw no one.

"It's someone," says mother, "who knows that the sound of a

customer sends one's heart into one's mouth, and so they play with us."

This remark, by the way, was repeated later, when mother was relating the story for the benefit of the boys, who did not return until night; whereupon Phil said: "That suggests a conundrum—Who are they that have meat in their mouths ten times a day and yet are not fed?" A small joke, but one of a number, some better, some worse, that used in those days to make us laugh and think lighter of our troubles. I think God gives easy laughter with a small purse, while care often goes with a larger. If it were not so it would be a sad world indeed.

When we came again into the kitchen we found the cow-heels gone!

How can I describe our astonishment? Mother threw up her arms and stared in blank amazement. We could not make it out. If Tom had been about we should of course have laid the blame on him; but we had seen nothing of him since breakfast, and the back-door was shut.

Our dinner was a poor one, as it was reduced to the pease-pudding alone, and that was further spoiled by some soot falling into it while mother's back was turned. To make matters worse father came in quite hungry; he looked rather disconsolately at the dark-coloured mess before him, but after a moment's hesitation he fell to, seeing mother do the same, and made a show at least of eating a good dinner. When we had finished, and father had returned thanks, he asked mother if she had been trying a new recipe for compounding pease-pudding. After we had had a good laugh mother explained, and then we had another laugh over the morning's disaster, mother with tears in her eyes all the time. Somehow in those times laughter and tears with her were nearly always mingled. I have since found it to be the general case with the poor.

It was frequently a matter of wonder to me in after years, when I knew the world better, how father could say grace after a meal of pease brose thickened with soot. But I soon learned to know that thankfulness is a tribute paid for the little rather than for the much.

All the afternoon we saw nothing of Tom—a circumstance which did not then strike us as at all strange. But in the evening, as we were seated at tea, his lordship very demurely opened the door and walked in, and, after casting a very sly glance at mother, went to Phil and, standing on his hind legs, affectionately rubbed his head against him, all the while keeping his windward eye on the head of the household. Murietta noticed his peculiar manner, and cried out: "Tom, what is the matter? Did you steal the cow-heels?"

Tom looked very sheepish, if a cat may be said to look like a sheep; at the same time he gave utterance to the nearest approach to a mew of which he was capable. It was an offended, petulant sort of a cry, and said as plainly as possible: "How can you think me capable of such a crime? It might have been possible before my dear young master took me in hand, but not now. I did not believe that of you, Miss Mury!"

Father said : " Tom, you rascal, you will have to be punished."

Everybody was now convinced that he was guilty, except Phil; who naturally defended him for the credit of the system of moral training under which he had been putting him. Nevertheless, from that night Tom was a doomed cat. Father was a humane man, and mother was so tender-hearted that when she had kittens to drown she invariably bandaged their eyes, and carefully steeped them in warm water, which she augmented with a profusion of eye-rain, until their little souls were fled. But the good man did not forget having had to eat soot pudding, without relish, in consequence of Tom's misdemeanour; and mother could not overlook the fact of being compelled to set such a dish before her lord and master: it was indeed felt by all that this last lache had filled out the catalogue of Tom's crimes.

A few nights after—it was a cold, snowy day in March—Phil having gone to pay a visit to Uncle Abe, it was decided that a better opportunity could hardly present itself for putting the arch-thief out of the way. Accordingly the poor brute was caught, and, after a struggle, in which Raff got a good scratching and a bite into the bargain, put into a sack. Then father threw him across his shoulder and went forth into the night, we watching him until he was lost in the foggy gloom. He trudged a long way through the snow, and came at length to the water-side. It had been his original intention to throw the culprit, sack and all, into one of the docks; but either his heart relented or his nerve failed, and he decided simply to turn him loose among the labyrinth of shipwrights' yards and brickfields that then covered that part of the river's bank. But imagine his surprise on taking the sack from his shoulder to find that Tom had made his escape—quietly bitten a hole through the bottom of the sack while father was thinking of the Lord knows what, as he generally was, and stealthily 'levanted.'

Father came home and told us of Tom's escape; but he added: " I don't think he will find his way back again through all that maze of streets and timber-yards, and on such a night;" for it was again snowing heavily.

But our worthy parent was wrong in his judgment for once: we were all wrong. Had our deliberate sentence been carried out, and Tom sent, sack and all, like the simple wife or redundant relative of a Sultan, to a watery grave—I shudder to think of the result!—this narrative certainly would have remained unwritten.

Fortunately Phil came home very tired, and went to bed immediately; otherwise we may have had a scene. We all congratulated ourselves that it was so, and that the inevitable outbreak was postponed till morning; for everybody had a respect for, if they did not fear, the spirit indwelling in that almost tiny form, that would burst out in anger, indignation, or scorn, at what he considered a mean or base act, and be afraid of none; and some of us were not sure that it was well done to judge, condemn, and carry out sentence in the absence of the only possible counsel for the defence.

After we had all gone to bed, I, who was a nervous, wakeful little thing, thought I heard someone knocking at the garden-door; then the sound passed from the back to the front; but as our bedroom was at the back of the house I did not hear it so distinctly. Imagining it might be someone who had sent a child for a couple of candles—on credit—as not unfrequently happened, and thinking the loss would not be great if the customer were disappointed, whoever it might be, I pressed closer to Mury and went to sleep. But presently I was awaked by a noise on the landing, and distinguished Tom's most ordinary vocal note; Phil called it his 'mewe,' but it was more like the screech of an ungreased cart-wheel than anything else I can think of. Then I heard the boys' door open, and I distinguished no more until presently either Phil or Raff, led by Tom, went to see what was the matter.

The cat had first tried to wake Phil, but he was so tired after his long walk that he could not, or would not, be roused, but only struck out at his favourite and sent him further. Then Tom tried Raffael, and after awhile, by dint of tugging at the bed-clothes and 'mewing,' succeeded in making him understand that something was amiss below; so he slipped on some garments and went down. After getting him down-stairs Tom would not rest until he had brought him to the garden-gate, where, outside, lying huddled up in the snow, Raffael discovered a woman insensible. Raff ran and got a light, and then came back and looked into the face of the frozen creature. It was Nelly—Jim's wife!

He lifted her up and bore her into the house, where mother and Mury were presently engaged bringing her back to consciousness.

We were all, naturally, greatly astonished to find ourselves with such a visitor on our hands, and at such an hour; but we were much more amazed when we came to learn the circumstances which brought her to our door. For sometime, as already mentioned, we had neither seen nor heard anything of Jim or his wife; they had not called, and we did not visit at all, for reasons which my women readers will understand. We had often wondered what kept them away, especially Nelly, who seemed to become so greatly attached to mother. The poor little wife now told us the reason, amid sobs and tears, and mother, who always had the tribute of wet eyes ready for a tale of distress, cried in sympathy. And as the little woman told her story of grief, she held Tom in her arms, and every now and again interrupted her narrative to fondle and caress him; he meanwhile looking much like a fox at confession. However, he deserved her gratitude, having probably saved her life by bringing Raffael to her aid; for had she remained in the snow all night the chances are twenty to one but, frail as she was, and almost without covering, she would have been frozen to death ere morning.

The fact seems to be that when Tom made his escape from father's sack, instead of coming home, he decided to go and seek Nelly. He knew where she lived well enough, having, as already stated, frequently accompanied her to her door when she had been

paying us a visit; but he had never entered the house, Jim having shown a decided repugnance to him. He sat on the doorstep until he saw Nelly hastily leave the house, in a state of violent agitation; he then followed her through the snow to our door.

Poor Tom! For that one noble deed we forgave him all his grievous laches—even the double crime of theft and deception, coupled in the purloining of the cow-heels; for I, for one, never could free my mind from the conviction—knowing Tom's cunning as I did—that not only did he take the heels, but that, in order to do so, he went round purposely and rang the shop bell, knowing that it would fetch us all out of the kitchen, as the advent of a customer generally did, and so leave the coast clear. In our house certainly there was no one who could reason like that cat!

(To be continued.)

THE RAIN-DROP.

FROM THE GERMAN OF CANON SCHMIDT.

A SUDDEN shower, one April day,
Disturbed three children at their play;
And soon the nimble youngsters stood
'Neath shelter of a neighb'ring wood.

Scarce had the rain-drops ceased to patter,
Scarce had the sun begun to scatter
His rays again, when something bright
Fell on the children's wondering sight.

"Oh! what a lovely light is this!"
Cried Charles; "just look how bright it is!
See, Fred'rick, in the bush; its hue—
I never saw so clear a blue."

"I see the little light," cried Fred,
"There, on the branch above my head;
But yet—I'm sure—what can you mean?
I never saw a brighter green."

"Green, blue," cried Hal; "where are your eyes?
The tiny light close by me lies;
And, I declare, it is as red
A light as ever ruby shed."

The lads returned to their play.
Whence was that many-coloured ray?
A rain-drop there reflected bright
A sunbeam to the children's sight.

Thus oft unto our earnest eyes
The truth in varied colours lies;
But, when we get a nearer view,
We see one, pure, unchanging hue.

J. A. S.

Book Notice.

How to be Happy though Married (FISHER, UNWIN, and Co.) The title of this amusing and, in its way, instructive book is borrowed from an old sermon by Skelton. After one has read, smiling and laughing the while, this little volume, and summed up the wisdom learned from it, one finds that it amounts to this—that married people ought to behave considerably towards one another. Wives should be kind to their husbands, while the author's advice to husbands may all be summed up in St. Paul's well-known hexameter: "Husbands, love your wives, and be not bitter against them." Jokes against the married state are generally pitiable, not only from a moral but also from an intellectual point of view; and yet the flattest, dreariest joke about the tyranny of wives and the subjection of husbands is sure to raise a laugh. But a wit of worth would as soon think of extorting mirth from the supposed odiousness of mothers-in-law as from the equally vulgar theme of conjugal misery. The jokers who think the mother-in-law a safe target for satire should read the beautiful poem addressed to his mother-in-law—as mother-in-law—by Edgar Poe. Utterers of jocular platitudes about marriage and the misfortunes of married people may at the same time be referred to one of Hood's letters to his wife, full of the most affectionate tenderness, and to a wise sentence of Sydney Smith's in reference to marriage generally; for from these they may learn that the two wittiest Englishmen of this century saw nothing ludicrous in a condition which to minor wags is an unfailing source of mirth. These 'documents in the case,' with many more of a like nature and tendency, are to be found in "*How to be Happy though Married.*" Sydney Smith compares marriage to "a pair of shears, so joined that they cannot be separated, often moving in opposite directions, yet always punishing any one who comes between them." Hood's letter is too long for reproduction. That many great men have owed their advancement in life to their wives may be true, though it would be a mistake to lay too much stress on the proposition. If, as we are assured in the chapter on 'marriage-made men,' Prince Bismarck once said of his wife, "She it is who has made me what I am," his Excellency must have been joking at the time. He once told a deputation of working men that he trusted all his money to his wife, and advised them to follow his example; but the personal qualities of the great Chancellor are not of the kind that even the happiest marriage could have produced. Matrimonial happiness, and such happiness as may result from grand political prospects nobly realised, are indeed two distinct things, and ought not to be confounded. Neither Napoleon, nor Nelson, nor Wellington, nor Byron, nor Goethe—to name almost at random a few of the greatest men of this century—owed any part of their success to marriage. A man pursuing happiness, either in marriage or in any other relation of life, is too often, indeed, like a man pursuing his shadow, which flies from him when he runs after it, but if he turns away from it it follows him.

Facts and Gossip.

WITH the astrologers a large nose was always a sign of much character of some kind, but what was determined by other characteristic marks. A Roman nose was a sign of a courageous temper and a disposition to face and overcome difficulties; while a more strongly aquiline nose was an indication of rapacity; the idea being evidently borrowed from the similarity of this description of beak to that of the eagle, the most rapacious of birds. The snub-nose showed little character, but much temper; while the Greek nose, even, straight, and regular, was a sign of the temperament of the owner. Large nostrils indicated good lungs, health, and long life; while swelling nostrils showed a war-like spirit and fire. A very sharp nose was considered an indication of a busybody; while a bluntness at the end of this member was an outward sign of the possessor's mental lack of acuteness. Large ears were always bad, the similarity between their owner and the donkey being supposed to extend further than the ears; while small ears were always good. The lobe of the ear passing insensibly into the cheek was a sure sign of a thief and liar; while an exceedingly sharp division between the two indicated honesty and candour. Thick ears meant thick brains; while thin, delicate ears declared their possessor to be a man of refined intelligence.

IN comparing races as to their stature, we concern ourselves not with the tallest or shortest men of each tribe, but with the ordinary or averaged-sized men who may be taken as fair representatives of their whole tribe. The difference of general stature is well shown where a tall and a short people come together in a district. Thus, in Australia, the average English colonist of five feet eight inches looks clear over the heads of the five feet four inch Chinese labourers. Still more in Sweden does the Swede of five feet seven inches tower over the stunted Lapps, whose average measure is not much over five feet. Among the tallest of mankind are the Patagonians, who seemed a race of giants to the Europeans who first watched them striding along their cliffs draped in their skin cloaks; it was even declared that the heads of Magallens's men hardly reached the waist of the first Patagonian they met. Modern travellers find, on measuring them, that they really often reach six feet four inches, their mean height being about five feet eleven inches—three or four inches taller than average Englishmen. The shortest of mankind are the Bushmen and related tribes in South Africa, with an average height not far exceeding four feet six inches. Thus the tallest race of men is less than one-fourth higher than the shortest, a fact which seems surprising to those not used to measurements. In general, the stature of the women of any race may be taken as about one-sixteenth less than that of the men. Thus, in England, a man of five feet eight inches and a woman of five feet four inches look an ordinary well-matched couple.

It has occurred to a Danish pastor in charge of a large institution for children to observe the progress of their growth, and to endeavour to ascertain the laws by which it is determined. He has now been engaged on the subject for five years, weighing and measuring some 130 children daily during all that time. The children are measured once a day; but they are weighed four times—in the morning, before and after dinner, and at night. Mr. Hansen asserts that the figures thus obtained prove the existence of three well-marked periods of growth in the year, further divisible into some thirty lesser stages. Bulk and weight are acquired between August and December. From December to April there is a further increase, but at a greatly diminished rate. From April till August the weight and bulk gained in the spring period are lost; so that at the beginning of August the weight is almost the same as at the close of the previous December. The growing period, on the other hand, is in the spring and early summer; so that the two processes do not go on together. Mr. Hansen believes that similar laws are discernible in the vegetable world. Be this as it may, he has accumulated a valuable mass of statistics on an interesting subject, and one which hereafter may yield practical results. Food and clothing presumably play an important part in growth, and possibly admit of adaptation to the varying natural determination of the vital energy at different seasons.

ONE of the poets of the *Spectator* has written a couple of stanzas "On last looking into Smiles's 'Self-Help.'" His reflections are, no doubt, such as have occurred to many readers of that inspiring volume. Such glorification of success in life is all very well, is in some respects even 'salutary,' as Mr. Matthew Arnold might say; but what of the men who have displayed, perhaps, many excellent qualities, and yet have not succeeded? "Is there," says the *Spectator's* poet, "no Homer for the beaten side? Are they beneath the wisdom of the wise, the pity of the good?" And the inquiry is not altogether without reasonableness. This is the time for making presents of books to boys. How many of those books, one may ask, are likely to be devoted to celebrated failures, to the men who have fallen behind in the forced march of life? It is true that there is a work on the subject of "Men who have Failed," published by a well-known and excellent society; but how often are such men taken as the heroes of the volumes intended to nourish the imaginations of the young? It may be said that we want our boys to get on, and that therefore we put into their hands the stories of those who have made honourable names for themselves in the world. And quite right, too, so long as there is not too constant and unmitigated an insistence on the supreme virtue of making money. But there is a good deal to be said in favour of biography of another sort—of the memoirs of men whose inability to achieve distinction was due to some unavoidable error or misfortune. Of course, successful men have often had weaknesses, which it is the function of the moralist to point out; but the careers of unsuccessful men must obviously be

still more full of warning. And surely warning is in its way as useful an instrument of education as encouragement.

THE French have discovered a new use for that victim of vivisection, the rabbit. Dr. Chibret, noticing that where a human eye had to be excised and a glass one substituted the results were most unsatisfactory, conceived the idea of using an animal's eye for the purpose. After much experimenting he selected the rabbit, and in last May performed his first operation. It had a qualified success. The success would have been complete but that the silk threads used to keep the foreign eye in its place till nature attached it caused suppuration, which in the end destroyed a part of the eye. The rest of it adapted itself to altered circumstances, and the gain to ocular surgery seemed assured. Since then other operations have been attended with absolute success. The new eye, in texture, mobility, colour, and transparency, seemed to match its fellow, and the irritation produced often by such a foreign body as glass was avoided. Of course vision was not restored, though Dr. Chibret, with the enthusiasm of an innovator, believes that this may yet be accomplished.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE.—ED. P.M.]

S. E. B. (Wellington).—You have a highly active, locomotive, nervous, susceptible organization; are intense in your thoughts and feelings, and very much in earnest in everything you take hold of. There is danger of your overdoing and prematurely exhausting your vitality. You need to husband your resources, take time to live and to enjoy, as well as to perfect. Your powers are mental rather than physical, and philosophical rather than scientific. Your standard is high, and you are not satisfied with the progress you are making because you have not yet reached the climax. You have rather too many ideas and plans; are liable to be abstract in your thoughts, and far-fetched in your ideas. You are ingenious in argument, vivid in imagination, and very much given to scrutinising and criticising. Your animal impulses are not strong; have nervous rather than physical energy. You need more Language, perceptive power, and memory to accomplish what you wish. You are qualified for public life, teaching, writing, or taking some responsible place, where you can plan for others. You take delight in studying laws and fundamental principles, and in becoming acquainted with theology and the laws of government. Try to be as practical and scientific as possible, and give off as well as receive ideas.

T. P. (Southsea).—The photograph of this lady indicates much ardour, earnestness, sincerity, and susceptibility of mind. She is easily interested, and gives her earnest attention to whatever subject excites her. She is feminine and domestic in her turn of mind; has a strong, social, loving nature. She is well adapted to married life, especially with a companion of a kindred spirit. She not only loves, but can appreciate the attentions of her friends. She is sensitive to praise; is steady and reliable in her principles; is decidedly strong in her sympathies, and philanthropic in her feelings. She has a good share of energy, and power to endure and go through severe trials. She has good practical talents; is quick to learn to do new things, and is quite wide-awake to what is going on around her. She has an analogical cast of intellect, and readily sees the difference between one subject and another. She is more intuitive in her perceptions than philosophical and abstract. She delights to be where there is something going on; is fond of experiments; and can attend to many different kinds of business. She dislikes change of place, but prefers to be settled down and remain in one place continually.

J. W. B.—You have rather too much brain power; have too many ideas, and are too fruitful in your imagination. You have a strong, emotional nature; cannot keep quiet or take life easily, and are liable to go to extremes. You are very versatile in your talents, and want to do many different things; are liable to have your hobbies. Your greatest faults or defects arise from not having enough of the vital animal nature to balance the mental and the motive. You will probably break down in health once or twice before you learn to take proper care of yourself. You have the capacities for a scientific man. You acquire knowledge easily; have a wide-awake consciousness of what is going on, and a good general memory of what you have gone through. You are ingenious, even artistic, in talent; are forcible and copious in speech, and take great pleasure in telling what you know. You are social, domestic, and capable of strong family attachments. You are much interested in children, and all that belongs to home. You would be more happy in wedlock than out, if happily married. You delight to acquire property, because you want it to spend and use for your pleasure or advantage. You should be a public man—a speaker, lecturer, or artist.

H. P.—You have a vital-mental temperament, and are warm, ardent, excitable, rather impulsive, and easily interested in any subject where your sympathies or affections are awakened. You are capable of enjoying life. You are fond of home work, and do not venture into the fiercest of the fight. You are better adapted to some position of trust, to be a teacher, or hold some office in society, than to be a day labourer. You have the qualities to render you popular, particularly with women and children. You are mirthful, imaginative, sympathetic, easy, and affable in your manners. You are critical, discriminating in the discernment of truth, quick

of observation, and wide-awake to what is going on around you. You are naturally hopeful, and see the bright rather than the dark side. You love the novel and the mysterious, and have the elements of faith in the spiritual. You are ambitious, anxious to be favourably known, and prepared to make some personal sacrifices to render yourself agreeable to others. You may have some prejudices, but not much hatred or revenge. You appreciate property because it helps you to live and enjoy, but have not the spirit of a miser. You need a wife who has a predominance of the vital motive temperaments, giving energy, industry, and stability. You will make many friends, and have few enemies.

M. W.—You are earnestly womanly; are delicate in tone of mind and scarcely strong, stout, and forcible enough in your nature. You can bear up under many difficulties as they come, but you are sure to keep away from trouble and hardship if possible. You have scarcely enough animal force and executive power, but have great steadiness of character, perseverance, and uniformity in the tone of your mind. You respect others under all circumstances, and never trifle or give way to careless expressions or imprudent actions. You watch yourself in everything you do, so as not to contradict yourself in your actions. You are reverential and given to worship, and have strong feelings of respect for superiors; are quite tender-hearted and sympathetic; are intuitive in your perceptions, and remarkable for your power to discern the difference between error and truth, or that which is natural or false. You have good powers of observation, and a good memory of what takes place. You possess fair conversational talent among friends, but are not particularly witty or inclined to argument. You have very little of the sense of cruelty or revenge, and are not selfish or greedy in matters of property. The tone of your mind is very high, and your sense of virtue and propriety is much stronger than that of most individuals.

S. S.—You have a genial temperament; are so favourably balanced as to enjoy yourself; are not subject to many extremes unless exciting causes exist outside. You may be impulsive, sometimes too excitable, and carried away by your feelings, but generally speaking your feelings are of the better sort. You live for others as much as for yourself, and are remarkable for your prudence, circumspection, sense of justice, firmness of principle, respect for the sacred, and sympathy for those in distress. You have also industry and economy. You keep your own affairs to yourself; are rather discreet about exposing things, and are somewhat remarkable for your originality of mind, capacity to plan, think, teach, and explain. If rightly directed in your studies and properly surrounded with judicious influences, you would make a good preacher. You love to talk, and it does you as much good to tell others what you know as it does to gain the knowledge for yourself. Your standard is high, and your thinking, moral brain predominates; hence you are

more in your element when living and labouring for others, and elevating your own tone of mind, than you are in simply gratifying your own selfish ends. You are quite warm-hearted, full of love and affection; have great parental attachment, and can enjoy married life highly. You ought to do more good in the world than nine women out of ten, and make many friends and no enemies. Will probably live to be very old.

G. F. A. H. (Croydon).—You have a favourable organization for a rising man; you can afford to stick your stakes high, and labour with the expectation of rising to a fair degree of prominence and influence. Your tone of mind is elevated, and you would prefer to be good rather than great; to be characterised for a high-toned mind than to be simply wealthy. It is comparatively easy for you to control your animal nature, selfish feelings, and impulses. You have not a craving disposition in the selfish direction; more Destructiveness would facilitate your onward progress. Your talents are practical and available. You have good powers of analysis and discrimination; are decidedly intuitive in your perceptions, methodical in your life and habits, and able to figure up and make correct estimates. You can tell what you know in a plain, simple way, so as to be understood by all. You are steady, firm, persevering, and disposed to mind your own business. You are respectful, and were an obedient boy at home and at school. You are neighbourly, kind, and sympathetic; are not speculative in your philosophy, nor inventive in your mechanical powers; nor are you much given to argument, to wit, or extravagancies. It will be an easy matter for you to live a life of usefulness, and to make many friends and no enemies.

M. A. H. (Bishop's Stortford).—Your organization indicates a long-lived ancestry, rather slow in maturing, but appearing to a better advantage in old age. You are not characterised for instability or great versatility of talent, but are remarkable for your solidity, energy, power of endurance, and capacity to go through the trials of life. You have no idle moments; you either wish to be doing for others or yourself. You are thoroughly domestic, and are attached to home, and especially to children. As a farmer's wife you would take great interest in the stock. You are reticent in speech, prudent in action, careful about making promises, but quite sure to fulfil them. You are remarkable for your powers to treasure up knowledge; are able to refer back to the past, and seldom forget your experience. You are a good judge of men and things, and take common-sense views of everything. You are not particularly witty, brilliant, showy, or captivating, but are strong-minded, steady, uniform, and reliable; are apt in teaching, successful in giving advice, and you naturally take upon yourself charges and responsibilities, especially if others are delinquent. You have a regulating power over others, and exert a great influence by your quiet, unassuming, uniform manner.

THE Phrenological Magazine.

MARCH, 1886

MR. FRANCIS GALTON.



HIS is a well-balanced head, and Mr. Galton should possess a fair proportion of all the mental powers. The intellectual and moral, however, take the lead, and have the most sway. But there is no apparent lack of the social faculties and the propensities. Among the strong qualities are love of home and concentrativeness. He is a man of strong habits, and of certain peculiar idiosyncracies of character. In other words, he has hobbies, and he is likely to ride them far. He is a kind of senti-



mentalised Uncle Toby. He is a man of great manliness of character, strong in his purposes, settled in his convictions, and capable of being very dignified, although not usually a dignified person. Conscientiousness is a strong power, and this faculty in particular, as well as his moral tone in general, he obtains from his mother. He is hopeful, and rather speculative and enterprising. He accepts nothing as final, and always feels that success is ahead; hence is a great worker, and plans almost more than he can do. He has hardly a

lazy bone in him, and certainly not an idle nerve. He would believe in a future life, even though his intellect should say—"There is no hereafter." He is also somewhat spiritual-minded; or, in other words, fond of the marvellous and the supernatural, imaginative and metaphysical. The faculty that gives veneration, respect, and a devotional turn of mind, is strongly represented, as is also that which inclines to benevolence and sympathy. These were maternal traits, and his mother's prayers still hang about him. He is cautious, careful, and particular to fulfil all his engagements.

Intellectually, he is characterised for the following qualities: observation, criticism, language, memory, wit, and the power of analysis. There are also the indications of great order, and special arithmetical powers. The organs of Form and Size appear to be well represented, and there is no want of the love of harmony; indeed, there appears to be sufficient to have enabled him to excel in music if he had given his mind in that direction. The organ of Mirthfulness is so large that it inclines him to see humorous contrasts, and so causes him to find abundant subjects for amusement. Hence the ordinary cast of his mind is pleasant and agreeable. For perfect judgment in all matters, he possesses perhaps a little too much imagination. He is a good judge of men (except where sympathy biases him), and is fond of company.

Few men are so firm, persevering, and constant. Having made up his mind, it is hard for him to give up or change in the slightest degree. Still he comes under the influence of women and children rather easily. He seems to have come of rather a long-lived ancestry, and apart from the highly nervous temperament which characterises him, he is likely to live to a good old age.

The thing that annoys him the most is stupid people; he is quick-tempered and irritable, but there is in him very little hardness of mind. He values property, but is by no means a greedy or grasping man; still he would not be wasteful. He would be judicious in the investment of his money, and exceedingly careful to get his money's worth. But he would rather have to do almost anything else than business. His best gifts lie in the direction of science, theology, literature, or organization.

Francis Galton, F.R.S., F.G.S., third and youngest son of S. P. Galton, of Duddestone, near Birmingham, grandson of Dr. Erasmus Darwin, author of "*Zoonomia*," and cousin of the late Charles Darwin, was born in 1822, and educated at King Edward's School, Birmingham, which he left to

study medicine, first at the Birmingham Hospital, and subsequently at King's College, London. He graduated at Trinity College, Cambridge, in 1844, travelled in 1846 in North Africa and on the White Nile, and in 1850 made a journey of exploration in the western regions of South Africa, starting from Walfisch Bay. For this journey he received the Gold Medal of the Royal Geographical Society, in whose proceedings he has since taken an important part. Mr. Galton is the author of the "Art of Travel," also of "Meteorographica" (1863), the first attempt to chart the progress of the elements of the weather on a large scale, and through which the existence and theory of anti-cyclones was first established by him. In later years he has published the following works, bearing more or less directly on Heredity and the Development of Faculties: "Hereditary Genius: its Laws and Consequences" (1869); "English Men of Science: their Nature and Nurture" (1874); "Inquiries into Human Faculty and its Development" (1883); also several memoirs on allied topics, including "Experiments in Pangenesis." He was General Secretary of the British Association from 1863 to 1868, and has been president of various sections. He has been vice-president of the Royal, the Royal Geographical, and Anthropological Societies, besides serving on many others, and he is at present president of the Anthropological Society.

THE STUDY OF THE HUMAN FACE.

AMONG the questions which ancient philosophers found worthy of their discussions was one which at the first glance appears trivial. It was: Why does one man differ from another in personal appearance? When the same question was considered with reference to other parts of the visible world, it was found that no two objects were exactly alike, and although general points of similarity might be detected, differences, more or less minute, might always be observed between animals and objects of the vegetable kingdom, so that the proverb "as much alike as two peas" is but comparatively true, and true at all only when the two peas are looked at with unobservant eyes.

Noting the difference is a step towards its explanation, and as nothing better pleased the ancient philosophers and school-men of the Middle Ages than to be wrangling over some such point as this, a thousand theories were suggested. One after another they were, however, rejected and passed out of mind, and after an immense amount of disputation

over the point, a general agreement was reached that the difference between men's bodies was due to some supernatural influence exerted at the time of birth. What this influence was remained conjectural until the theory of planetary supervision over earthly affairs came to be definitely believed in and taught by the astrologers, when, to the Middle-Age mind, the whole matter was perfectly clear.

There was still, however, a missing link. It was noticed that men's personal appearance changed; that as certain mental traits of characteristics manifested themselves, they were not infrequently attended by peculiar physical manifestations. The man swinish in his habits, sometimes in advanced years, looked like a hog; the foolish man, like a sheep; the shrewd schemer, like a fox; the habitual deceiver, like a snake; the jester, like a monkey. It was thereupon concluded that in some occult way, mind had an influence over matter; that traits of mind had their outward sign in peculiarities of personal appearance, and when the conclusion was reached, there was a foundation for the sciences of physiognomy, phrenology, metoposcopy, and palmistry.

Lavater has been reputed the inventor of physiognomy, but the science, if such it can be called, long antedates even modern times, being known to the ancients in the speculative form already alluded to. The Hebrews studied both it and palmistry to no inconsiderable extent, the matter being alluded to repeatedly in their Scriptures, and particular mention made of the personal appearance of Moses, David, Jonathan, and many others. The writers of the Talmud devoted an entire treatise to the subject, in which they sum up the knowledge, both of the Hebrews and of the Orient generally. It is believed to be one of the occult sciences objected to by the Apostles in the case of Simon Magus, and was certainly well known among the Greeks and Romans.

Among both Greeks and Romans physiognomy was combined with phrenology, the two being considered one science and never dissociated, either in study or practice. According to the Roman practice, the several parts of the head were each under the domination of a deity who there set his mark or seal. The forehead was under the control of Mars, the god of war; Apollo presided over the right eye, Luna of the left; Jupiter governed the right ear, Saturn the left; Venus was seen in the nose, and Mercury, the god of orators, took the mouth. When the astrology of the Middle Ages superseded the learning of ancient times, it was an easy matter to transfer to the planets the attributes of the deities, and the same idea was also followed out in palmistry. Some of the

ancient ideas in phrenology have been justified by modern conclusions in the same subject, the ancients judging from the form, proportions, and dimensions of the head just as modern phrenologists do, while in several particulars the ancients and moderns agree—both concluding, for instance, that a head disproportionately small signifies a vicious temperament, while a head out-of-measure large is an indication of stupidity. A head full behind the ears was considered an indication of a strongly animal temperament by the ancients as well as by the moderns, while a head flat on top has in all ages been regarded as the mark of a thief and a liar.

This is, properly speaking, the science of divination by inspecting the lines of the forehead, together with its shape, size, and any other characteristics that may present themselves to view. In this branch of predictive philosophy, as in all others, the stars exercise a potential influence on the upper line. Saturn, nearest the hair; Jupiter, on the next below; Mars, on the third; the sun, on the fourth; and the moon, on the fifth; Mercury, on the sixth, at the root of the nose. The moon rules the left eye, the sun the right, and Venus the nose. The signification of various forms of the forehead are thus enumerated by Albertus Magus: "First, a great and spacious forehead signifies a sluggish and fearful person—that is, compared to the ox; most of those that have the forehead such, are given to do any hurt: they are very fit to become lawyers. Second, the little forehead denotes the person indocile, wicked, and given to mischief; believing nothing but his own foolish opinions; they are compared among the beasts to the cat or rat. The Emperor Caligula had it so; so also was he an epitome of all cruelty and cowardice, and would never believe any person of authority. Third, the broad forehead represents a person gluttonous and unclean, as having somewhat of the nature of the swine. Such persons are given to flattery, professing in show all manner of friendship, but behind man's back they are his enemies, speaking evil and offensive words, and scandalous to those they pretend an affection for. Fourth, a forehead pointed at the temples, so that the bones almost appear without the flesh, signifies vanity, inconstancy, little capacity, and not much resolution. Fifth, he that hath a forehead somewhat swollen by reason of the thickness of the flesh at the temples, as if he had jaws or cheeks full of flesh, denotes the person very courageous and martial. It is one of the marks that a great captain should look for in the choice of his soldiers."

The bald-headed man is reported to be inconstant and wrathful; he that has pits and mounds in his forehead is

fearful, deceitful, a cheat, and ambitious. Those who have much fleshiness about the eyes, so that the eyebrows hang down, are fraudulent, cruel, and unmerciful, deriving their cruelty from beasts of prey. A depressed and low forehead denotes an effeminate person. "This kind of forehead suits well with a woman, for a man that is so hath a low and abject soul, is fearful, servile, effeminate, cowardly, and carried away with the many words of a great talker."

The astrologers judged of the temperament by the lines of the forehead, the length, depth, straightened, and general appearance of these being considered when forming a judgment. The lines when complete in a forehead were seven in number, the upper one nearest the hair being the line of Saturn, next in order below the lines of Jupiter, Mars, the Sun, the Moon, Mercury, and Venus. When any particular line was long and fair, it denoted an excess of the temperament indicated. Saturn was ill-tempered ; the line of Jupiter long, denoted inordinate ambition. When Mars was long and fair, honourable success in war or controversy was indicated ; the Sun line long, foretold happiness in a reputable course of life ; the Moon long and fair was a sign of success in love and marriage. A good Mercury line gave fortune in business or oratory, while a Venus line was unfavourable, and denoted a tendency towards the coarser vices.

The lines of the forehead were good only when they were long and fair ; that is, not broken or intersected by other lines. When this was the case, the character of the individual was judged of by the nature of the interruption. When the line of Jupiter was broken by the line of Saturn, it was an indication of laudable ambition thwarted by evil passions ; when the lines of Mercury and the Moon ran together, it foretold marriage for monetary considerations, and indicated a temperament that would not allow love to interfere with business. A forehead seamed with lines in every direction was always evil, especially if the lines turned downwards at the temples, while long, regular lines were favourable, and especially so if they had in the middle of the forehead a depression towards the nose. Circles upon the lines intensified the favourable tendency of the line on which they were found, while crosses were unfavourable. Islands in the lines were by some astrologers deemed a good sign, while others considered them the reverse.

A large nose was always a sign of much character of some kind ; but what was determined by other characteristic marks ? A Roman nose was a sign of a courageous temper and a disposition to face and overcome difficulties, while a more

strongly aquiline nose was an indication of rapacity, the idea being evidently borrowed from the similarity of this description of beak to that of the eagle, the most rapacious of birds. The snub nose showed little character, but much temper, while the Greek nose, even, straight, and regular, was a sign of the temperament of the owner. Large nostrils indicated good lungs, health, and long life, while swelling nostrils showed a warlike spirit and fire. A very sharp nose was considered an indication of a busybody, while a bluntness at the end of this member was an outward sign of the possessor's mental lack of acuteness. Large ears were always bad, the similarity between their owner and the donkey being supposed to extend further than to ears; while small ears were always good. The lobe of the ear passing insensibly into the cheek was a sure sign of a thief and liar, while an exceedingly sharp division between the two indicated honesty and candour. Thick ears meant thick brains, while thin, delicate ears declared their possessor to be a man of refined intelligence.

Large, bulging eyes were not a good sign—though, when other characteristics were favourable, the eyes were sometimes ignored,—but small eyes invariably denoted intelligence. Half-shut eyes, through which the owner looked as through a partly-closed window, showed not only great intelligence, but secretiveness, and a habit of watching others while wishing to appear unobservant. These, by the ancients, were considered to be the most dangerous eyes of all—seeing everything, while appearing to see nothing. Fleshy eyes were those of a sensual person, thinking much of the good things of this world and little of the pleasures of intellectuality. Eyes slanting up from the nose were the eyes of a hypocrite and deceiver; while a downward slant told of inward cruelty and malevolence. Black eyes were those of a snake, and were not to be trusted; brown eyes were those of a gazelle, and were to be loved; grey eyes belonged to the eagle, and were to be respected; while blue eyes were of the angels, and were to be adored. The mouth and chin were much regarded as striking features. A prominent chin indicated firmness and decision of character; while a receding chin was a sign of irresolution. Thick lips betokened coarseness of disposition; and thin lips sharpness of temper. A mouth cut straight across, like a gash in the face, indicated resolution without delicacy; while a mouth in outline like Cupid's bow showed both refinement and delicacy of perception. A large mouth was an indication of strong will; and a small mouth, of little character. The upper lip beyond the

lower was a hint of weakness of intention ; while the lower being the more prominent showed arrogance and conceit. A mouth turned up at the corners showed a merry disposition ; and downward, the contrary. A wide mouth, with narrow, receding forehead and thin cheeks, was the mouth of a frog, and was supposed to betoken a gluttonous disposition. All these indications, with many more of the same kind, showed that the astrologers of the Middle Ages were by no means backward in guessing at the characteristics of an individual by his facial marks, and their judgment has in many cases been confirmed by the researches of modern physiognomists and phrenologists.

THE "Recipe for Genius," the *Cornhill Magazine*, is a very lively, suggestive disquisition on the various genealogical steps which, according to Nature's unwritten rules and unknown regulations, are requisite to the birth of a genius. And here is the conclusion arrived at: The ultimate recipe for genius, then, would appear to be somewhat after this fashion. Take a number of good, strong, powerful stocks, mentally or physically endowed with something more than the average amount of energy and application. Let them be as varied as possible in characteristics ; and, so far as convenient, try to include among them a considerable small change of races, dispositions, professions, and temperaments. Mix, by marriage, to the proper consistency ; educate the offspring, especially by circumstances and environment, as broadly, freely, and diversely as you can ; let them all intermarry again with other similarly produced, but personally unlike, idiosyncrasies ; and watch the result to find your genius in the fourth or fifth generation. If the experiment has been properly performed, and all the conditions have been decently favourable, you will get among the resultant five hundred persons a considerable sprinkling of average fools, a small proportion of modest mediocrities, a small number of able people, and (in case you are exceptionally lucky, and have shuffled your cards very carefully) perhaps among them all a single genius. But most probably the genius will have died young of scarlet fever, or missed fire through some tiny defect of internal brain structure. Nature herself is trying this experiment unaided every day all around us, and, though she makes a great many misses, occasionally she makes a stray hit, and then we get a Shakespeare or a Grimaldi.

THE working-man's capital is health, not wealth. It does not consist in landed property, but in sinew and muscle ; and if he persist in the use of intoxicating liquors, they will strike at the very root of his capital—a sound physical constitution. After this is lost he becomes unfit for the workshop, for no master will employ a man who wants capital. He has then to repair to the poor-house or infirmary.—*Hunter*.

ABOUT CRIMINALS.

AS criminals form a very important part of the community, anything calculated to throw light upon them, their nature and ways, ought to be of the greatest value. We propose, therefore, giving a series of articles in which the so-called criminal classes will be looked at from a phrenological point of view. In doing so, use will be made of a number of photographs of criminals which we have received, through Messrs. Elliott and Fry, from the official photographer of the State of Buenos Ayres. It is much to be regretted that our own Home Office does not give more facilities for the study of criminals. But we are so much bound up with routine, red tape, and 'circumlocution,' that all investigation in that direction is killed. Perhaps, now that we have a Radical Government in power, there may be opportunity for a little movement.



No. I.

It is, perhaps, somewhat misleading to speak of the criminal classes as though there were special classes of individuals, apart and separate from the rest of the world, whose sole business in life was the manufacture of criminals; and yet, in a less precise way, the term is perfectly true and appropriate. There are Criminal Classes. There are those who, being either criminal themselves, or marrying criminals, cannot do other than procreate criminals. By the word 'criminal' is not meant here a 'convicted criminal.' There are many who, while living a life of crime, manage to escape the meshes of the law, and so remain unconvicted to the end of their days; but they are nevertheless criminal.

To the making of the *bona-fide* criminal it requires several generations of vicious life and criminal indulgence. Let there be a young man—say of a good, respectable middle-class family: he has been well brought up, fairly well educated, and surrounded during his youth and early manhood by good examples. But when he comes of age, and is compelled to go out into the world and act and think for himself, to judge

between good and bad, he gradually—almost insensibly at first, maybe—begins to yield to bad example. Perhaps at home there has been just a trifle too much indulgence, not exactly the wise medium of restraint, the parents or guardian thinking that any fault so arising would correct itself with the coming of age and the growth of reason, forgetting that truest of all adages, 'That as the tree is bent so will it grow'—an adage that should be written in gold in every house.

The young man's yielding is at first so slight that no one notices it, least of all himself. But as soon as you begin to move on an incline, you are sure to go downwards, however slightly it may be at first. Perhaps in the end the sum of his declination from the right amounts to a blurring of his sense of right and wrong, an indifference to what is lofty and good, and a satisfaction with low pleasures. He marries with a woman similar in thought and turn of mind to himself: the result is children with a low tone of organization, or with a tendency, like their parents, to self-indulgence and to the neglect of higher things. The parents did not exercise their moral faculties in such a way as to keep them bright and active, but lived in their passions and impulses; and the children have lessened moral susceptibilities and grown animal propensities. 'For as the twig is bent——'



No. 2.

How common it is in such families for the women to go astray, and the men to sink into vicious indulgence, and live on the verge of criminality, if not actually fall into crime. Sensuality has not been checked, greed has been encouraged, cunning has been allowed to take the place of cultivated intelligence, and there has been a forgetfulness of conscience. The next generation gives us the full-blown criminal.

Let us look at the criminal thus produced. We have him in Pictures 1, 2, and 3. These photographs are picked at random from a group of 200 or more. The cap does not allow the head to be seen very well, but we can see a portion of it; and the face, being shaven, is all that one could wish—

for physiognomical purposes, that is. But when our Home Office takes it into their heads to facilitate the study of criminals, I would suggest that, in addition to photographing a gaol-bird in his ordinary garb, a second picture should be taken of him, shaved, as the accompanying specimens are, and with closely-cropped hair, and of course hatless, in order to show the exact shape of the head.

But there is still something to be seen, in spite of the head-gear. For one thing, it is apparent that all three have good-sized heads : they are, therefore, not idiots. Moreover, one of them (No. 2) has a fairly good intellectual lobe ; he has some cleverness, and no mean capacity for learning a trade ; but parental and personal indulgence has sunk him into the depths of bestial sensuality. It was no doubt in this line that his crime lay.



No. 3.

It should be said here that we have no information respecting the individuals whose portraits we have received.

In the case of No. 1 there appears to be less intellect ; but there is also less sensuality of the mere animal type. The man's weakness lay in his enormous Acquisitiveness and Secretiveness, in conjunction with Destructiveness. A man with such an organization could not help becoming a thief, and a thief of the worst kind ; for he would not stop at murder to effect his object. Some years ago a boy with such a combination of organs came under our notice, and we observed to his guardian that it would be next to impossible to restrain him from crime. His guardian said he had already ran away from school (getting out of the window by night) ; got into his mother's house by breaking open a window ; stolen money from her desk, and then gone off to London to spend it. He was then being sent to sea as the last resource.

No. 3 presents a specimen of the more purely criminal type. It has taken generations on generations to produce him. If he can do less harm than some, he can also do less good : he is simply weakly vicious. We shall have to refer to him again and again.

PHRENOLOGY FOR CHILDREN.

PERCEPTIVE GROUP *continued.*

ORDER.

(a) Definition.—(b) Location.—(c) Its natural language.—(d) Who discovered it?—(e) How does it assist the other faculties?—(f) How do children show it when largely developed?—(g) How do they show a want of it?—(h) To whom is it a vital necessity?—(i) Can you cultivate it?—(j) Must it ever be restrained?

(a) Can any of you orderly and disorderly children define this faculty for me, and for the benefit of the class? “I rather think I can,” answers Harry. “To me it means neatness, power to arrange, and shows system and method.” That is right, my lad.

(b) Now, can any one tell me where it is located? “Next to Weight, on each arch of the eye, giving squareness to the edge of the brow,” says Eleanor, quickly.

(c) Its natural language shows itself in laying plans for future work. It shows the use of putting things away in their proper places; it tells you, among other things, to cover your school books neatly and securely.

(d) Did Gall, Spurzheim, or Combe, discover it first? “It is said that Spurzheim first made a definite note of his observations with regard to it; Gall had only a small development of it. That may partly account for his not discovering it before Spurzheim—his student.” That may have something to do with it, Bertie, but we must all try and cultivate it in our own characters.

(e) How does it assist the other faculties? “I should say it works with Constructiveness, Form, &c., to make the builder; with Ideality, Imitation, to make the architect; with Acquisitiveness and Calculation, to give method in laying out money, and so on,” Annie replies.

(f) Now I am going to tell you how some of you show it who have it large. First of all, you get up at a certain time, summer and winter; you study by rule; you eat your meals regularly; you go to bed within five minutes of the same time every night, when at home; you put everything in apple-pie order, so to speak, before you can think of resting quietly; you make all your plans a day in advance; you are never in a hurry; are never thrown off your balance. One boy had the faculty so large that he contracted the habit of twirling his pencil through his button-hole, and to test him, one day his teacher borrowed his pencil just before the class began to say their lesson. When this boy was

questioned, the teacher noticed him hunt for his pencil, and when he began to stammer out his answer the teacher returned his pencil, but advised him to break himself of the curious habit. There is a similar case, where the child always twisted a certain button in his class; one day the button was gone from its place, and the lesson was forgotten in consequence. Children with large Order always know if their books or papers have been touched, for they remember wherever they have left them.

(g) Girls show it oftener than boys; but Florence is an example among you of a little girl who has very small Order, and I want you all to be on your guard against imitating her ways. She can never find her gloves, her umbrella, her slate, pencil, or handkerchief. She is always borrowing some one else's things, and, what is worse still, she seldom returns the things she borrows, so her friends do not like to lend her pencils, &c., and go without themselves. Therefore I am in hopes that by-and-by she will learn to be orderly. She misses a great deal because she does not set to work in a systematic way. I believe she is often unhappy because of the state of affairs around her, and I hope she will try hard before she is much older to overcome this serious fault.

(h) It is a vital necessity to almost every kind of work. You have often heard it said, "Order is Heaven's first law." The more you study nature the more you will find everything planned upon some great principle. In botany and chemistry you have ample proof of this. Is it not wonderful how everything seems to have its time and season? The light and darkness succeed each other according to known laws; the tides ebb and flow year in and year out; the earth steadily revolves on its axis,—and no effort of man can alter the systematic order of nature. The little fellow who thought that by firing his torpedo-pistol at one of the stars he could put out its light, found out his mistake in after years, if not then. I want you all to learn this lesson on the necessity for order to-day, as nothing is complete or perfect without it. Some of you will be farmers, mechanics, merchants, ministers, lawyers, speakers, politicians, writers, statesmen, teachers, and housekeepers. In each of these positions you will find a second Babel if you do not recognise the law of order.

(i) Yes; by beginning at home and at school to have your things in their places, and never out of their places, except when you are using them. Be careful when you lend to get your things back again; be even more careful when you borrow that you give the articles back to the right owner.

When you have to look for your things just before you go out you often become impatient and fretful, which might be avoided had you your hat on its peg, your gloves and tie in their drawer, your slippers on the proper shelf. The habits of your future manhood and womanhood are being formed, and I shall soon be able to predict what kind of homes and offices you will have, by the way you exercise this faculty of Order. So make haste to be wise. Just a word or two to those of you who are so excessively neat and particular that you believe things were only made to be looked at, and not knocked about.

(*j*) Never mind if grandpa sometimes upsets your toolbox for a nail, or if Bessie disturbs your last set of specimen butterflies; accidents will happen, and you notice them a great deal quicker than any one else because of your excessive and over-active organ of Order. Aim at a happy medium.

CALCULATION.

(*a*) Definition.—(*b*) Location.—(*c*) What is its natural language?—(*d*) Tell me what nationalities show a peculiar development of this faculty.—(*e*) Give me some example of those who have shown it large.—(*f*) Could we do without this faculty?

(*a*) George, define this faculty, if you can. "It is the organ that gives the ability to reckon, count, add up figures quickly, and I have it very small, I fancy." Why so? "Because it is with the greatest difficulty that I can master my sums." The organ is not large, I can see.

(*b*) Can you tell me where the faculty is situated? "Just on the outer edge of the brow, on each side of the head, next to Order." Quite right; now you will be able to tell whether your mates have it.

(*c*) Its natural language begins to express itself very early. In fact, as soon as you begin to talk you also begin to notice the number of things around. You count the fingers on your hands; you count the people who pass along in the street; you ask numerous questions which call for the exercise of this faculty in answering them. All the pictures on the wall, the panes of glass in every window, are numbered by you in turn. You count the number of steps in each flight of stairs, and the distance in steps between your house and your friend's. Many and many a time you have counted the stars from your window. Some are almost idiotic in the way they take pleasure in simply adding things together; some will actually go to the trouble of adding up the number of weeks, days, hours, and minutes, to the holi-

days ; others will count the number of stitches in the piece of work they have done in an hour.

(*d*) The Esquimaux show very little of this faculty, and have a peculiar way of counting when they have reached the number ten, after which they compound the numbers into one significant word. The Negroes also are known to have but little of this faculty.

(*e*) Many examples among girls and boys are to be found who could calculate rapidly. It is found large in all astronomers and good financial, business, and commercial men. Napoleon had it very large ; he was always conscious of the number of men he had in his army. Two boys started together in an arithmetic-class, but the teacher soon noticed a marked difference in their abilities. James, the elder, added up a row of figures by simply casting his eye down the line. Robert was twice as long, and often forgot the numbers as he counted them, and had to begin over again. The teacher was puzzled at first, but after awhile found Robert constantly working out problems far in advance of his class. He was put in a higher class of mathematics, where he appeared in his right element. I mention this fact to show you that it requires different faculties to make a good arithmetician and a good mathematician, and many confuse the two. When you come to study Causality, you will find that faculty aids greatly in all mental calculations—in algebra, euclid, and geometry.

(*f*) No ; we could not do without this faculty ; affection alone will not help you to remember how many pets you have to feed and care for, or how many chickens you had in your last brood. What would you say if mother forgot to count you among her children when she was dividing something very nice. You would wish her Calculation were larger before she divided anything again. Habit and exercise are essential to the cultivation of this faculty of the mind ; a full degree of which you must not fail to have.

LOCALITY.

(*a*) Definition.—(*b*) Location.—(*c*) What is the function of this faculty?—(*d*) Who shows this faculty largely developed?—(*e*) How can it be cultivated?—(*f*) How can it be restrained?—(*g*) What animals have it large.

(*a*) The definition of this faculty is easy to guess ; it is the one that localises things, and gives them definite places. It is the power that remembers places. It gives the desire to travel, explore, and go from place to place. It finds the correct way in a new town.

(*b*) It is situated directly above Size and Weight, and is a very prominent faculty in the perceptive group.

(*c*) Locality and Order are twin-sisters; the one recognises the necessity for a place, the other describes the place. Wherever we are, we realise that there is a place for everything. Houses are located on the ground; while the stars and planets are located in the heavens, and Locality helps us to remember where we have seen them in the heavens. Locality helps also to make geography a reality; but far better is it when places of historical interest can be visited, as well as read about and found on the map. It has been called the pilot of the other faculties. It studies the compass, and never gets mystified or lost. It helps us to remember the location of each organ of the body and the mind, and simplifies phrenology and physiology very much.

(*d*) Some of you children show a remarkable degree of it, by finding your ways through new streets to and from school. You could not do this if you had not large Locality. Your mothers would be frightened to let you go alone without this mental guide and director. Columbus and Captain Cook had it very large; so had Livingstone, Baker, and Fremont; while hosts of living explorers—Stanley among others—have a prominent degree of it. It is so strong in some men and women that it makes them leave their kindred and friends in search of new localities. All navigators, geographers, surveyors, and hunters, have this faculty large and active.

(*e*) It can be cultivated by the study of geography and descriptive subjects, also by travelling, and committing to memory old land-marks.

(*f*) Yes, it is possible to have it too actively developed, especially when inclination and business do not work together. It gives an excessive disposition to wander and rove about; a desire to keep changing one's abode. If it is out of the question to gratify this desire, some of the firmer faculties must assist to a settling down of the mind in one place. In those who have but little of this faculty, it is curious to note the utter want of interest they have to go away from their town or country, especially if Inhabitiveness is large.

(*g*) There are many animals who show an instinct for places and localities. Many find their way where no man could possibly follow the right road. On dark nights, when you cannot see two inches ahead of you, horses will often show a wonderful amount of sagacity. It is curious to notice the birds, also, in certain periods of the year, fly away to the

southern countries, and return again in the spring of each year to the more northern climes to build their nests and lay their eggs. Pigeons, and some kinds of dogs, have a wonderful amount of Locality. Many children are sent to school every day by taking hold of the dog's collar.

Aside from Individuality, Form, Size, Weight, Colour, Order, and Calculation, we need an eighth faculty to remember and localise each in its order. These eight are the true perceptive, observing, or seeing powers of the mind, and are situated where they can best perform their various functions. They are necessary to every scientific man, whether he admits the truth of phrenology or not. The zoologist, ornithologist, botanist, mineralogist, geologist, chemist, and geographer, would be practically at a loss were they to lose these faculties. All such men as Herschel, the great astronomer; Humbolt and Cuvier, the great naturalists; Darwin and Huxley, Galileo, Sir Isaac Newton; all writers of travel and graphic scenery, like Scott and William Black, have a large development of this group of organs; for they are destined to gather up facts, and fix in the mind everything connected with natural phenomena, before the reasoning groups have scope to form their theories.

DEATH OF NATHAN CAPEN, LL.D.

It is with deep regret that we have learned of the death of Dr. Capen, one of Boston's oldest and most esteemed citizens. He had an earnest regard for the cause of Phrenology—from the time of Dr. Spurzheim's visit in 1832, when he became, what he was ever afterwards proud to be considered, the personal friend of that great man. He had been sick but about two weeks, having contracted a severe cold. Dr. Capen was born in Canton, Mass., April 1, 1804, and after receiving his education in the public schools of his native place came to Boston, and at the age of twenty-one years went into the publishing business as a member of the firm of Marsh, Capen, and Lyon. He continued in this business a long period, with several changes in the style of the firm. Possessed of literary tastes, he was an author as well as a publisher; and during his whole lifetime kept his pen employed. He was a frequent contributor, anonymously and over his signature, to newspapers and magazines; and was engaged in the last portion of his life in the completion of a 'History of Democracy'—a work projected years ago, and intended at first to

comprise three volumes, but which is to include four. One volume has already been published, two more are completed, and the fourth is so far completed, that the work will be readily brought to a conclusion by others. Mr. Capen wrote a 'Biography of Dr. Gall,' and edited his works translated from the French; prepared the 'Biography of Dr. J. G. Spurzheim,' prefixed to that scholar's work on Physiognomy; and was the author of other works on History, Political Economy, &c. He edited the Massachusetts State Record from 1847 to 1851; was the principal editor of the 'Annals of Phrenology'; and also edited the writings of the Hon. Levi Woodbury, LL.D. He was among the first to memorialize Congress on the subject of international copyright; and a letter of his, published by the United States' Senate, led to the organization of the Census Board at Washington. Mr. Capen was appointed as Postmaster of Boston by President Buchanan in 1857, and held the office until 1861. During his term he was an earnest advocate of the 'free delivery' system; and through his urgency the custom of collecting letters from the street-boxes was introduced. As in his early, so in his later, life Dr. Capen was a student and observer and active worker, having in view the doing of such things as would be useful to society. One of his last literary productions was the interesting semi-autobiographical volume, 'Reminiscences of Spurzheim, Combe, and others.'

The editor, as well as the publishers of this magazine will ever remember Dr. Capen's beautiful face and dignified form that were wont now and then to be seen in our office. We would that such men might be immortal—they glorify humanity.—*Phrenological Journal*.

THE HEALTH HABITS OF VICTOR HUGO.

BORN February 26th, 1802, the author of "Les Misérables" and "La Légende des Siècles" lived, consequently, to the ripe age of more than four score years. The amount of literary work which he accomplished was prodigious. His interest in the political and religious movements of his time was intense and constant; yet he maintained a sturdy vigour up to his latest years. When he first saw the light he was such a puny and miserable babe that it was only by the greatest care and the most tender nursing that his life was prolonged beyond the period of infancy. In the collection

of poems known as *Autumn Leaves* (*Les Feuilles d'Automne*) he thus describes this earliest period of his existence—

“ A little babe, so fragile and so weak,
It seemed to come to life a death to seek ;
So delicate, its like 'twere rare to find—
A tiny seed, blown helpless by the wind ;
A mere chimera—yea, a thing of nought—
To rear it must exceed a mother's thought :
Asleep, its head bent down upon its breast,
It looked to take upon its bier its rest.”

The wise mother, however, guarded this frail life with such tenderness that the child outgrew this extreme delicacy and weakness ; yet all through his younger years he shrunk from the more boisterous sports common to children of his age ; and when at school in the *Rue de Mont-Blanc*, his biographer assures us “ he was habitually so low-spirited that no one except his mother could ever make him smile.”

The influence of his mother was evidently much greater than that of his father in the development of his character. Of this fact he has not failed to make frequent acknowledgment. She not only bestowed the greatest care upon his moral education, but also understood the necessity of training and developing his physical powers. She saw the evils of confinement indoors, and always endeavoured to select a home which would afford a place and opportunity for out-of-door exercise. She insisted that her children should do a certain amount of gardening every day, at a proper season, and even though the frail body and intellectual character of Victor led him to rebel against this task, he was, nevertheless, compelled to perform it. As he grew older, and became acquainted with congenial play-fellows, he entered more heartily into their sports and enjoyed life with a greater zest ; still, it may be said that he had fewer recreations than most children of his age.

Through his later life he continued to walk daily in the open air, and however inclement the season he never wore an overcoat or carried an umbrella. To these habits, adhered to perhaps too persistently, he owed some severe colds ; and his final illness may probably be traced to a like unnecessary exposure.

He ate moderately and at regular intervals, objecting, however, to highly-seasoned food, taking abundant time at his meals, insisting that they should be enlivened by cheerful conversation, and graced always by the presence of ladies. His severe mental labour was performed early in the day, and the evening was devoted to social intercourse. M. Barbou relates a characteristic anecdote showing how firmly, and yet

how pleasantly, he compelled his visitors to submit to the rules of his household in this respect. In the midst of the social enjoyment of the evening, a philosophical friend who had been engaged in an argument with his host earlier in the day, sought to renew it by asking the question: "What, then, do you think is the proper definition of wrong?" "Why," said he, "I think it would be 'wrong' to speak of 'wrong' now, when we ought to be enjoying the society of the ladies."

In his philosophy he was always a genial optimist, hoping the best for all men, here and hereafter. To this habit of mind he doubtless owed largely his usually good health and his long life. His cheerfulness in later years was perpetual; he felt none of the despondency which often accompanies growing age. A firm hope of immortality, and an infinite prolongation of usefulness under the better conditions of the future life, buoyed up his spirit during the long exile from his native land and remained with him to the last.

Up to recent years it was his custom to bathe in cold water every morning. He abandoned this habit regretfully when the lessening vitality of the septuagenarian warned him that it was no longer safe or beneficial. He used the light wines of his country in moderation, in accordance with the universal custom; contrary, however, to a custom equally prevalent, he was never a smoker of tobacco. In his later life he made it a rule to entertain no visitors after midnight, and he always rose at five o'clock in the morning.

He was a great lover of children, and his association with them doubtless helped him to retain much of his youthful feeling. His greatest griefs arose from the too early deaths of his own children; and the grandchildren who remained were the joy and solace of his beautiful old age.

THE OLD CORNER SHOP.

A STORY OF VERY POOR HUMANITY.

BY A NEW WRITER.

CHAPTER V.

RE-SETTING THE WINDOW.

Nelly's story let us into the secret of one of those most unfortunate of marriages which, apparently founded on affection, are in reality the outcome of baser passions that, for the time being, take on the hue of the master emotion. All are deceived by the resemblance; not only those who are the first parties to the bargain, but those who are concerned in it in a secondary manner. In looking

for a 'gal,' Jim Armit was dazzled by the vision of Nelly's prospects : he fell in love with her father's gold, and consequently with her, as a sort of purse that would one day hold it. She was a pretty silken little purse enough ; but it was the gold shining between the meshes that did the trick for Jim.

Their honeymoon was one of the most theatrical, tin-plated description. The brightness and glamour of it lasted just so long as Jim's small earnings held out, and then it began to tarnish and show its dull, common-place, pinchbeck quality. Jim's earnings were small, and Nelly's knowledge of household affairs of the slenderest. As Nelly said, there was not much to be extravagant upon ; but it might in more experienced hands have been made to last the week out ; whereas in hers it invariably left them penniless by the middle of the week. Then, until Saturday, it was what Jim called 'bread and scrape,' which our cousin could ill stomach. Deprived of his proper food, Jim forgot the part of Methodist saint, and became a savage. He prayed loudly, and with a profusion of words, for light and guidance to understand and expound the gospel clearly to his fellow-worshippers ; yet he could not keep his hands off the tender thing he had persuaded to join him for better or for worse. Her body testified to his brutality.

In addition to the grievance of Nelly's mismanagement of the household affairs, Jim was greatly chagrined that his prophecy had not come true, and that the 'old fellow'—her father—had not come to terms. And very provoking it was : most of us would have been annoyed to have had one's prophecy falsified in that way—and in a matter of such pecuniary importance too. When he saw that his father-in-law showed no signs of seeking a reconciliation, Jim tried to bring it about himself ; but every time he made advances he met with the bluntest kind of rebuff. This did not improve the native amiability of Jim's disposition, but made him all the angrier with his wife. At length he put it to her bluntly that she must return to her parents, as he could not afford to keep her. This she refused to do ; she had disobeyed them and left their roof, and she would not now go and ask them to take her back again. As she had made her bed, so, unfortunately, must she lie. Life was 'too short' for our Cousin Jim to spend time parleying with the poor thing, his wife ; so he simply beat her and bade her begone. That was the night Tom picked her up.

Poor little thing ! She looked so frail, and was so pretty in her weakness and helplessness, that mother knew nothing better to do than to give her shelter. The house was big enough, truly, but there were already more mouths in it than could properly be filled. Nevertheless, we were all willing to share our nothing with her. It only meant more frequent visits to Uncle—not Smoothdrop, hard-fisted wretch that he was ! Every time the shop bell rang, or a knock resounded on the door, Nelly trembled and turned pale. She feared it was the bridegroom come to fetch her home. The event she dreaded mother hoped for ; to her—simple woman that

she was—there seemed no other place for a wife but by her husband's side; and she thought that when the first feeling of resentment had had time to subside, Nelly would gladly fly again to her husband's arms. But in this mother was mistaken: time and reflection only increased the injured wife's determination never to return to him. What love she had had for him was gone—dead as Queen Anne: killed ere the honey was well off their first moon.

Poor thing! she had hardly known what love—what life was, when this master of life and love came and took possession of her. A poor ignorant girl, kept all her days within the four walls of her home, with no means of learning anything; her education, so called, all the wrong way—all poring over books that represented life falsely, and fashioning it to herself upon an ideal thus obtained. What could she know about marriage, its duties to be fulfilled, its miseries to be avoided, or its joys to be carefully sown, and as anxiously watched and cared for ere they could be reaped? She could have kept house beautifully if it could have been done as she had kept her dolls' houses: all they required was to be dressed daily and decently, to have food put before them when and as the fancy took her (and that might be make-believe if necessary), and to be put to bed when their mistress was tired of them. If you could but do the same with the larger being in the doll's image and likeness. But, ah, the difference! Instead of an inside compact of sawdust or bran, imagine a very menagerie of brute passions and impulses. And to put an ignorant girl to be the keeper over that!

Raffael had at this time a couple of boys to teach; he used to go out in the morning and come back about tea-time; for this service he received from his worthy employer—a pawnbroker—about as much as the said worthy spent on his pipe; but Raff was glad to be able to contribute thus humbly to the household exchequer. In the evenings he used to read to us girls, set us lessons to improve our writing, and so forth. Phil sometimes joined us, but oftener pursued his own studies apart. Nelly, almost from her first day in the house, showed great alacrity in joining in these exercises, and so pleased was Raff to be her tutor that she soon absorbed most of his time, we others coming in for only occasional attention. But she seldom did anything except when he was present; during the rest of the day she would sew, knit, darn, do anything mother set her; and though at first she was rather clumsy at most handicrafts, she very speedily improved: and, indeed, I don't know who would not under mother's careful teaching. Nelly rarely left the house; she hardly trusted herself to look out of the window, for fear she should see the form of her bridegroom husband coming down the street.

But, strange to say, that individual never appeared, nor put himself in evidence in any way. Mother's curiosity was so wrought upon by the circumstance that she made some inquiries, and learned that a day or two after the quarrel and separation Jim Armit told a neighbour that he was going to a distant town to seek work, and he had not been seen since. The house, with shutters closed and blinds down, looked like a house of the dead.

Nelly was pleased to hear that her husband had gone away. Her indifference greatly shocked mother; her principle was that a wife ought still to love and cling to her lord and master though he should prove himself possessed of a thousand devils—nay, if it should even be a thousand and one. Nevertheless, the little wife was such a clinging, affectionate thing that mother loved her as her own daughter—we girls used to think a little more, but that was not so. What an amount of helpfulness there was in the little woman, too, we soon had the opportunity to find out, as, what with work, worry, and probably insufficient nourishment, mamma fell ill, and was unable to rise from her bed for a week; during which time Nelly was her untiring nurse.

No sooner was mother up and about again than Mury took her place in bed. The poor girl seemed to be stricken down in a moment; she was well and gay in the morning; in the evening she complained of headache and sickness, and at night was in a high fever, and before morning delirious. Nelly would have had mother do all the nursing; but to that, of course, she would not consent; indeed, there was enough to do to keep us all occupied. Dr. Thomas said she was suffering from typhoid fever, and of course ordered, for us, the most impossible things—wine, beef-tea, grapes (at five shillings a pound!), etcetera. And there was not a penny in the house! Mother, in her despair, said it was cruel to have the cost of a sick girl on our hands in addition to the burden of the shop. Phil said: "Why don't you shut the confounded thing up?" But father and mother still demurred: they said we must keep the shop open so long as there was the least hope. It was really astounding how the two hoped against hope. It would have been an Inferno indeed where they abandoned hope. But that is characteristic of the poor: how they hope! And what patience they show too! Job was an impostor in comparison.

To make matters worse Raff's pawnbroker had the previous week dispensed with his services; he had found someone who was willing to teach his young pledges of affection for less money. Of such is the kingdom of this world. Raff was in despair; and, in addition to her nursing, Nelly had to spare a little time to comforting her teacher.

On the sixth day of Murietta's illness Nelly took a sudden resolution: she would go and ask her father to help those who had been kind to her. Such help was very needful, as, with all our scraping and pinching, we could not get what was necessary for Mury. We knew that Uncle Smoothdrop's money was, as usual, tied up; all our valuables were tied up with another uncle; while Uncle Abe, though helpful to the extent of his ability, was in great straits himself. Nelly asked Raffael to go with her in order to protect her. "You can do that, can't you?" she said, gaily. "I'm only a little bit of a thing, you know."

Brother looked down upon her, and seemed to measure her by himself, straightening up his figure for the purpose. "I would like

to see the man who would dare to molest you," he answered slowly, and blushing at his own temerity. He was a lank, weedy youth, was Raff; but a fierce look came into his eyes as he made that little speech, and I liked him the more for it.

As it happened no one did attempt to molest the little woman during their walk to the other end of the town; but they had their trudge for nothing. They found the house empty, and the neighbours said they thought the old people had gone to reside in the country. They made another effort to find her parents the next day; but in vain. Nelly cried with disappointment and vexation; for they had wandered about half the day, and came home late, tired out and hungry.

We seemed to be deserted by everybody; even our staunch friend, Corvisant, had not been near us for a fortnight: we feared he was laid up with his asthma.

While Raff and Nelly were out on their fruitless errand, father, half distracted, started out in the afternoon to walk to a village some eight or nine miles away to see an old school-fellow, a man very well-to-do, but reputed very mean in money matters; to whom, as a last resort, he had resolved to apply for a small loan to help him over his difficulties. As he kissed mother before setting out, he said she might expect him back that night for certain, though it might be rather late. We did not expect him therefore before midnight.

After father had gone Phil took down three of his pictures from the wall. They were the only ones left, and the relative before mentioned had refused to have anything to do with them. They were in frames of father's own making, and when Grabbit put Froggy into the house, father defaced both frames and pictures (though not irreparably), so that in case of their coming to the hammer they might be bought in cheaply; for they were father's favourites. I well remember him getting on to a chair and scraping the frames with his knife, and drawing a pencil across the pictures. Phil carefully dusted them, and, after clearing out what odds and ends there were in the shop-window, put the pictures in their place. But they attracted very little attention. It was such a cold, desolate day that people passed along with their noses in their coat-collars and comforters and heeded nothing: I don't believe they would have noticed the Star of Bethlehem if it had shone in the sky. During the whole of the afternoon only one wastril of a boy was attracted by father's masterpieces. But at night, when the window was lighted up by three or four dip-candles, a little, crooked old man, with a large hooked nose, stopped and stared in at the window, and then examined the house very carefully through his glasses. Presently he ventured in, and, after taking stock of the shop, asked Phil, with a snort, which he was very fond of imitating, what was the price of the pictures. Phil asked five pounds. The old man pulled down his spectacles and seemed for a moment or two to be boring his little eyes into Phil. Then he snorted again, and said he would give a

guinea for the three. Brother said he would not let them go for so little; adding that sister was ill, and father out of work, else we would not consent to sell them at all.

"Sister ill! Dangerous? Fever, I suppose?" queried the stranger.

"Yes," replied Phil.

"G'day! Ought to warn people!" snorted the old fellow, and was gone.

"I wish I had bitten my tongue off before I was tempted to gab so much!" exclaimed Phil, as he told us of his 'nibble,' as he called it. "A guinea lost for those few words! It's selling breath too dear."

CHAPTER VI.

TO LET.

The incident of the pictures, and Phil's failure to sell them for a guinea, added to the general gloom; and when Nelly and Raffael returned with their lack of success, we formed a doleful company. Brave mother courageously shook away a rising tear and went to her patient. Phil sat brooding in a corner. Presently Raffael, who had for some little time been sitting apart, clasping his knees, and looking vacantly on the floor, went upstairs; but in the course of a minute or two came down again, and went out the back way. He had peeped into the sick-room, and saw mother on her knees by the bedside sobbing; while Mury lay on her back breathing heavily, with the shadow of death's wing upon her face. He was scared by that terrible sight and slunk away, and out into the dreary night.

How often in the sacred privacy of our home has Raffael told the story of that night!

He walked about for some time, aimlessly, despairingly. He had nothing on but a thin coat, and it was a bleak, cold night, with snow underfoot; yet he did not feel the cold, but only a numb sense of pain. He had gone out with the intention of doing something to relieve the want of those he loved, though what he did not know. Nor did he care so long as that end were achieved. The wind presently began to rise, and, as it buffeted him, he felt his temper mount to meet it. He liked the excitement, as it made him forget his weariness, if not his care. Then he began to imagine other opponents to struggle with, and in his momentary frenzy he felt equal to doing anything in order to get money. As he hurried along, an old man suddenly turned a corner, and, probably noticing his wild looks, gave him plenty of lee-way in passing. Raffael was struck by the action, and noting the man's large nose and spectacles, wondered if it was Phil's friend, whom we afterwards knew as 'Antiquity.'

It must have been that person; for not long after Raff had gone out the old fellow returned, and increased his bid for the water-colours to two guineas; which, it is needless to say, Phil at once accepted. This bit of success would have brought joy to all our hearts if the doctor had not just before pronounced Mury's state

almost hopeless; she might not last till morning; but a few hours would decide between life and death.

After passing 'Antiquity,' Raff turned into the Beverley Road. Few people were about, and those few well wrapped up; they were all in a hurry too—going home doubtless to a warm fireside and supper. Raff had had little or nothing to eat all day, and the wind blew through his thin coat and sparsely clad anatomy. Reaching a lonely part of the road, he saw a young man coming towards him with a light, elastic step; he was well-dressed, with a fur-tippet to his overcoat, and a broad-brimmed felt hat; and he hummed a light-some ditty to himself as he came along. Little care troubled that young man's mind. Raffael envied him his joyful heart.

The devil, his hungry stomach, or his whirling brain—one, or all—inspired him with a sudden thought. Why should he not make the young man stand and deliver? There was no time for deliberation; the stranger was within ten paces of him. A moment's hesitation and he would be gone, and mother would weep again——.

"Stand, sir! Your money or your life!"

Raff had barred his passage, and stood with head forward and right arm extended, holding something bright in his hand, that snapped as he spoke.

The stranger started, staggered backwards, tried to speak, but only succeeded in stammering out something inarticulate.

"Quick!" cried Raff.

In an instant the stranger had recovered self-possession, had thrown himself forward, and seized the would-be foot-pad by the wrist.

Raff tried to release his arm, but found his antagonist more than a match for him. His strength failed him; he collapsed, and dropped his weapon in the muddy snow. The intended victim had forced him against some railings that skirted the road, and in doing so had brought his face under the glimmer of a lamp on the opposite side of the way. The sight of that pale, hunger-bitten face made the young man loose his hold and fall back, with the exclamation—

"Raffael!"

Raff now gave a quick glance at his intended victim, exclaimed in a tone of blank amazement, "Harold Fairchild," and, covering his face with his hands, bowed his head.

The young stranger advanced a pace or two nearer Raff, and in doing so kicked something on the ground. He stooped and picked it up; it was Raffael's weapon—an old brazen tobacco-box! Brother, a little before, had taken to intermittant smoking, thinking perchance that the best way to make a man was to smoke-dry a boy, and the tobacco-box was witness of the aspiration and the endeavour.

The young man laughed. "Oh, I see!" he cried; "you knew me, and this was a little joke to frighten me."

"Yes; of course!" replied Raff, with a forced laugh. Then, as Harold seized his hand and grasped it warmly, he added, with an entire change of tone: "No; it was no joke, Harold; I was in real earnest."

"What!" exclaimed the other; "you, Raffael Sturdy, would have robbed one on the highway!" then, after a pause, adding, with another laugh—"and with an old tobacco-box for a pistol! Come, no more fooling; tell me what was your object in scaring a fellow like that?"

"Oh, forgive me!" exclaimed Raff, in a broken voice; "I believe I have gone mad!—and no wonder!"

"Why, what is the matter?"

"Ask me what is not the matter?" cried Raff. "Ruin, starvation, death—everything is the matter! Harold, forgive me; I did not mean murder; but only to compel assistance! Yes; that I meant. I was driven to it by hunger, despair, madness—I know not what!"

"But tell me what is the matter? I think I can see, however. Come, I will see you safely home. You are ill."

"Ill, indeed! Oh, Harold, if you only knew, you would not think badly of me for this mad exploit."

"I do not think badly of you," said Harold, who had put his arm through Raffael's, and was supporting him along; for the poor fellow staggered, and seemed scarcely able to walk. Harold's explanation of what had transpired was that his old friend had broken down through over-study, and had lost his reason. "I do not think badly of you," he repeated. "I still think it was half a joke. But tell me—to change the subject—how are the good folks at home; and especially my little favourite—Murietta?"

"Mury is—is dying!" Raff answered, with a sob.

"Mury dying!" exclaimed the young man, dropping his companion's arm and trembling as erewhile the other had done. "Mury dying!"

"Yes," replied Raff.

"You don't say so!"

"It is only too true."

Harold suddenly stood still, and then staggered against a wall. Raff was now all tenderness. "What is the matter, Harold?" he asked. "Do you feel ill?"

"Just a little faintness, old man, that is all. I shall be all right in a minute."

He seemed to recover in the course of a minute or two, and they again walked on. Presently Fairchild asked what Murietta was suffering from. Raff replied that it was typhoid-fever.

"And is there no hope?" asked the young man.

"Dr. Thomas says as good as none."

They walked on side by side for a minute or two in silence; then Raff, happening to glance at his companion, saw the tears rolling down his cheeks. He almost envied him his tears; for famine had well-nigh dried up his own well-springs of feeling. As soon as he could command his voice Harold asked what had brought on the fever.

"Want," replied Raff.

"Want!" echoed Harold.

"Yes ; we are all starving of want."

Fairchild turned swiftly round, seized Raff by the shoulder, and turning him towards the light of a lamp, examined his thin, worn face, and bright, esurient eyes, that seemed almost fever-stricken themselves. Now the young man appeared to grasp the situation. "Dying of want !" he murmured, in a kind of agony ; "and I with more than I know what to do with ! Come !" he added ; "let us make haste ;" and he almost dragged his companion along.

After a brief pause he began again : "What does it all mean ? Has the world suddenly gone all wrong ? I landed only this evening from Hamburg, and was going to find you out—to find Mury out, and offer her everything I have—and you meet me and tell me she is dying. What does it mean ? Am I mad ? or is this another ghastly joke ? Raff, as you were my friend, tell me !"

"It is no joke, Harold ! It is God's truth. Oh, Harold, I have thought of late that God's moral government was gone wrong. Only the other night I rescued from death in the snow the wife of my own cousin, whom he had beaten and turned out of doors, barely two months after marriage ! Oh, what a world it is ! And she such a sweet, tender thing, you would hardly think that a child could raise its hand against her. I used to think Mury a good, loveable girl, and so she is, but Nelly outdoes her in every way."

"Outdoes Mury !" replied Harold. "It is impossible !"

"You will change your mind when you see her," responded Raff.

"Never !" said Harold, devoutly. "And poor Mury dying. Come ! I must see her once more before she dies !"—with a sob.

The two walked together for some time in silence, each occupied with his own thoughts. Presently Harold re-opened the conversation, and by degrees drew from his companion the story of the family's misfortunes.

"But you," said Raff, at length : "how do you happen to be here ? I thought you had gone into your uncle's business at Hamburg for good."

"So I thought ; but my Uncle Skipgat has just died and left me a fortune, so that I do not need to trouble about the Hamburg business any more."

When they had arrived within a couple of hundred yards of the Caliph's Head they were surprised to see a horseman gallop up and knock at the door. On reaching the house they found mother in earnest conversation with him, her hands clasped, and her face the picture of woe.

"Oh, Raffael !" she exclaimed, on seeing her son, "I am glad you are come ; there is more trouble ; your father has been robbed, and left for dead on the road." Then, recognising Harold, she said : "Oh, Mr. Fairchild, you have come to find a sad house !"

"Sad indeed, as I hear ; but I hope things now will mend. If I can be of any service, Mrs. Sturdy, I shall be only too glad."

It was hastily arranged that Harold should procure a carriage and go for father, while Raff stayed to assist mother. Before going off

with the horseman, however, Mr. Fairchild asked mother how Mury was, and if there was any hope whatever.

She replied that the doctor was now with her, and although matters looked very bad, he was not without hope. An hour or two would decide between life and death. I well remember Harold's fervent "Thank God!" on hearing these words of comfort.

Meanwhile, father was lying at the inn at Cottingham, sorely distressed, not so much on account of his wounds, although they were bad enough, as by reason of having been robbed of the few pounds he had been able to borrow for the succour of the family from Mr. Mildmay. He deplored ceaselessly his ill-fortune. "I seem," he said, "to be the very dog of fortune, good for nothing but to be spurned and kicked by all."

"Cheer up, sir," said the good-natured landlady, who had already provided him with a supper, taking surety of his honest face; "it be a long road that has no turning."

"That may be," said father; "but when the turning comes it will be a turn for the worse, so far as I am concerned."

He seemed to have lost all heart—I think for the first time in his life; and how should a man not lose a little heart when some of his blood has been spilled?

Presently, a good-natured man, who had recently come to live in the village, entered the inn, and told Mrs. Goodrich—the landlady—that having heard that a man had been robbed and hurt on the road, he came to inquire if he could be of any service.

"Well, Mr. Brown," said the landlady, "the poor man appears to be in a dreadful way; perhaps if you went in to him and talked to him a bit you might cheer him up."

Mr. Brown at once agreed to do so.

"He came in," said father, relating the incident afterwards, "and although I knew his face, I could not for the life of me recall him to mind; but he knew me at once, and cried: "Mr. Sturdy, as I live! Lawks-a-me! to think that it should be you! and I have a dog in the house that would have eaten the rogues up, hair and all! There now, what a world this is!"

"Really, sir," said father, "my misfortune seems to have bewildered me. I know your face, but I can't recall your name, or where I have seen you."

"That's too bad—that's too bad," said Mr. Brown. "I should have thought you would as soon have forgotten your own grandmother as Brown, the filter man."

Then father knew him; and as Mr. Brown had always shown himself to be a good-natured man, he confided to him his troubles. Mr. Brown gave a sympathetic ear to all he said, and then answered: "I wish I had known of this; I should have been only too glad to help an old friend and customer; but it is not too late. I can sympathise with misfortunes, Mr. Sturdy, because I have my own sorrows—sorrows, maybe, as great as yours. Yes," he went on; "I have lost my only daughter, the apple of my eye—my life's jewel."

Father commiserated with him, and asked him of what she died.

"Nay," said he, "she is not dead, but ruined—ruined; allowed herself to be inveigled away from a good home and a father who doted upon her by a worthless fellow, who married her for her money, and will bring her down to misery and want; and without saying so much as 'may it please you.'"

The old man heated himself as he talked, and began to walk about the room in a paroxysm of passion.

"But he shall feel my resentment yet, the scoundrel! Yes, pious as you are, James Armit, you shall feel that I can repay!"

Imagine father's astonishment at hearing Cousin Jim thus apostrophised, and seeing Mr. Brown, almost transformed with rage, standing in the middle of the room and shaking his stick in an imaginary face. Imagine, too, Mr. Brown's amazement when father told him that his daughter was under our roof, where she had taken shelter from the brutality of her husband.

It calmed the old man's temper in an instant to hear how his beloved Nell had suffered, and he wept, and cried: "Poor little Nelly! Poor little Nelly!"

Just then the carriage drove up with Mr. Fairchild, who the next instant rushed into the room and grasped father by the hand. Finding him able to travel, he resolved to start back at once. Mr. Brown, who was all impatience to see his daughter, begged to be allowed to accompany them, and while he went to tell his wife what had occurred, Mr. Fairchild poured into father's ear the tale of his own distress.

It was after three o'clock when they reached home. None of us had been to bed. The doctor had only just gone, promising to be back in an hour or two. Mury was hovering between life and death, and poor Nelly, reduced almost to a shade, lay in the corner of the sofa weeping. She and Mury had got to love each other so much. When she saw her father standing over her, she sprang to her feet with a wild cry, and flung herself into his arms, and there fainted completely away.

Father, hurt as he was, and hardly able to walk, crept upstairs to take, as he thought, a last look at his beloved daughter; and Harold, with tears in his eyes, asked mother if he might see her. Mother took him upstairs, and as he gazed upon the poor child she opened her eyes and smiled a faint, sweet smile. It wonderfully cheered mother, although she scarcely dared hope that it was a good sign: it is so exquisitely painful to be lifted ever so little out of your misery in order to be dashed down again.

But it was a hopeful sign, nevertheless, as the doctor presently confirmed. He said there was a decided change for the better, and he had great hopes now that Mury's good constitution would pull her through. But while we hoped, in fear and trembling, his words cheered us all greatly.

After breakfast Mr. Brown resolved to go and see his redoubtable son-in-law, with the intention of giving him 'a piece of his mind,' as

he put it; after which virtuous deed done it was his announced design to take Nelly home with them. Nelly implored her father not to go and see Jim: she was decidedly for letting 'sleeping dogs lie.' "It can do no good," she said, "and may——." But the old man would not be turned from his purpose; he seemed to find satisfaction in the prospect of being able to call our poor cousin a scoundrel. The using of strong epithets appears to gratify some men as throwing stones does little boys: perhaps the one is a survival of the other. Raffael offered to accompany him, if he had no objection. Said our valiant brother: "You know, I am stronger than you, and shall make a good body-guard for you." I doubted the comparison; but no one could doubt his willingness to do his best and mightiest for Nelly, who smiled her grateful recognition.

They were away a couple of hours or more. I was at the door when they returned: a couple of more horror-stricken faces I never saw. Mr. Fairchild had just returned to inquire after Mury, whose improvement was still maintained, and he and father were in the parlour together; he had been and settled with our most troublesome creditor—old Grabbit—and now proposed to pay off all father's outstanding debts, and give him a fresh start. Father was reluctant; but what could he do? Brown and Raffael broke in upon their confab with their white, ghastly faces, and Nelly, who had caught sight of her father from an upper window, ran down and asked him if he had seen her husband.

"Yes, I have seen him, lassie," he said.

"What did he say, father? Did he send any message?"

"No; no message."

"Is he well, papa?" (looking wistfully into the old man's face).

"Very well, lassie—as well as can be; but go now, and I will tell you all about him presently."

Raffael, who had stood twisting his hat about during this colloquy, followed Nelly into the kitchen, while her father went into the parlour with the other two.

"Is anything the matter?" Nelly asked.

Raffael looked earnestly at her for a moment, and then said: "Jim is dead," and laughed.

"Dead!" whispered Nelly, sinking on to the sofa. "Dead! dead! dead!" she continued to exclaim in an awed undertone, while every drop of blood left her face, and all power her limbs.

Her father could not remove her home that day nor the next. Indeed, it was a week or more ere she was able to leave the house; by which time the inquest was over, and the talk about the tragedy at an end; some other sensation having in the meantime come up to occupy public attention.

By the time Nelly was able to travel to Cottingham, Mury also was well enough to make the journey, and, because Mury went, mother must go too, so that I was left at home to take care of father and the boys. But Harold came almost every day to drive one or other of us over, and sometimes all of us together.

How the sun shone on those spring days!—shone so brightly that we almost forgot the darkness of the winter that had passed.

Poor Nelly suffered greatly from the terrible ending of her hasty marriage; but she got over it in the long-run. Oh, what fearful wounds we can survive! She even forgave her husband his cruelty and wrong; and it is not always easy to forgive the dead, although they have ceased their troubling. The real truth about his death was withheld from her for a long time; but unfortunately an old newspaper containing an account of the inquest, one day fell in her way, and the whole ghastly tragedy was revealed to her: how he died by his own hand, or, as Phil put it, by his own rope, and had hung there nearly six weeks before he was discovered, and was then hardly recognisable.

Mother and sister never came back again to the Caliph's Head. At Mr. Fairchild's advice, it was decided to give up the shop, and a paper announcing the premises 'To Let' duly appeared in the window; but though many applied, no one took the place while we remained.

One of the last things that was done before we finally quitted the old house, was to hunt up the sweet-stuff manufacturer. Not having seen anything of him for several weeks we feared he was ill, and father was not only anxious to pay him his debt, but to see if by chance he too might not need assistance. The trouble was that we did not know where he lived, and we probably should not have found out had not Phil called at several shops which he had seen him serve, and learned his address from one of them. Then we found out the secret of his long absence. He was not ill himself, but he had lodging with him a poor young man who had been taken ill with small-pox, and there being no one to nurse and take care of him, the old man did it himself. The great-hearted Corvisant! When father and Mr. Fairchild called on him the young gentleman was convalescent, and was presented to them; but so far as father was concerned it needed no introduction to let him know who he was; for it was no other than Mr. Thompson—Raff and Phil's school-teacher friend—who now became still more intimate with our family, and in due course changed the name of one of father's daughters.

We now went again to reside in the neighbourhood we had left for St. Stephen's, but in a much larger house than before—one with a big garden attached. Harold inherited, with his Uncle Skipgat's money, a country-house at Whipthorp; but as he said he should not want to be always living in the country, he thought it would be the most economical and convenient plan to share a town-house with father.

We brought the Caliph away with us, and Raffael and Phil set him up at the bottom of the garden, and practised shooting at him with an air-gun, until, bruised and battered, he was toppled over among the dead leaves and dust, and there left when his young tormentors went away (Raffael to college, and Phil to Harold Fairchild's former place in Hamburg) to rot and decay. There Murietta and I found him once when she and her husband were paying us a

visit. We commiserated the poor down-fallen potentate, and had him given a coat or two of paint and set up in a niche over the door of the summer-house, and there he still stands, a kind of tutelary genius of our house.

Father never again tried to do business, but stuck to his painting and his teaching, and throve, chiefly through the influence of the old man we nicknamed 'Antiquity,' who became one of his best customers.

Some of the persons who have figured in my humble story are no more ; but their places have been taken by others as loved and as loving—Harold and Mury's children, and Raffael and Nelly's (for they too married in after years). And often of winter nights, when seated around the hearth, we recall the incidents of our time of trial, and though the recital often brings tears to our eyes, we rejoice to remember that though our sufferings were great, and our temptations to murmur many, yet we never lost heart or hope, nor, with Raffael's sole exception, when he went a foot-padding with an old tobacco-box, allowed ourselves to be led from the path of truth and right.

And Tom ? Well, poor Tom certainly came before his time, and was not fully appreciated. About a year after we came to live in our new house, he got into a scrape with a neighbour and was shot—accidentally I hope. But into that story I cannot go now : some other time I may.

THE END.

Poetry.

AN HUNGERED.

TELL you my story, sir ? Well, I don't mind ;
 It won't take me long, and you've been very kind
 To give me this feed : it's the first that I've had
 Since yesterday noon : you may think I felt bad.
 I was ready to drop when I chanced upon you
 And asked for a copper : I'd asked not a few—
 If one, full a hundred—since nightfall ; but there !
 Not one had a miserly stiver to spare.
 And *you* passed me by, sir, unheeded at first,
 As I thought, like the rest, who account us accurst.
 So many ? of course, and you cannot help all :
 You'd empty your pocket were't never so tall.
 And I daresay, sir,—if it's not over bold
 To say so—a man who quits fireside and fold
 To follow his calling all through the night,
His purse is not heavy, if not very light.

But when you passed by me without e'en a glance

As I thought, then I muttered: "There goes my last chance!"
 And my heart it was bitter, and out came a curse :
 Yes, a curse—it's true ; for hunger is nurse
 Of the black, fierce brood begot of despair ;
 And I'd hungered a day and a half : but there !
 I did you wrong, sir,—I own it, straight :
 You turned and offered me sup and bite ;
 And when you saw that I told you no lie,
 But that I was famished to death, or as nigh
 As makes no matter, you bade me eat
 My fill—you taking your cup in the street
 To keep me in countenance. So it seemed.

But my story : ah, yes ! who'd ever 'a' dreamed
 That walking here clemmed, as up nor'ward they say,
 A gent would have offered for supper to pay ?
 You've done a good turn, sir,—p'rhaps saved a man
 From crime ; for at nightfall my feelings began
 To get wolfish and wild, as your thoughts ever will
 When you're perish'd with hunger ; for hunger will kill
 The tenderest conscience that ever wrought
 In the workshop of mind, and make it as nought.

I've felt it before, sir : when I was young
 My father had losses, then died, and my tongue
 Couldn't tell you what suff'rings we had to endure.
 Mother worked for the lot of us—six : to be sure
 The bigger ones soon got to earning a bit ;
 But 'twas years 'fore our earnings would anyway fit
 Our needs, and the margin was uttermost want :
 Cold, hunger, disease—enough 'twas to daunt
 The boldest and bravest ; and we were not short
 Of the generous metal that makes it a sport—
 Almost—to fight in an uphill fight.

We prayed, sir, aye ! and sang of a night,
 And warmed our poor hearts with that sort of thing
 When the hearth couldn't do it : the old tunes ring
 Through my brain as I tell you ; tho' not so strong
 As they sang themselves there as I jogged along
 All day 'bout the streets with my hunger-pain.
 But they can't bring back to my heart again
 The comfort they gave in the days gone by,
 When mother would raise her voice on high,
 And lead the glad hymn, and so make us feel
 Our suff'rings were sent us for nought but our weal.

Poor mother ! it killed her at last : she died
 One winter's night when far and wide
 The snow lay deep and the streets were so still
 We heard only our sobs—and we sobbed our fill
 That night, I can tell you ! for mothers are rare
 Like her we saw lying so motionless there.

We knew we should never find friend like her,
Though we lived as long as Methuselah.—Sir?
Oh, they said 'twas consumption that caused her to die :
'Twas lack of it likelier, thought brothers and I.

But, Lord, how I ramble ! when all you were wanting
Was simply my story, instead of this ranting.
But somehow your kindness has filled a deal more
Than my stomach ; for, sir, as I said just before,
Hunger breeds in the heart what shouldn't be there,
And the cold nips first what is tender and rare—
In the garden the preciouslest flowers that blow,
In the heart the sweetest emotions that flow—
Affection and love and the thoughts that bind
With gentlest tendrils a man to his kind ;
And when they are gone—these blooms of the heart—
'Twere better,—what think you?—from life to depart.
It would have been better for us, sir, a deal,
If we'd gone with mother and made one meal
For the worms that fatten on poor and rich :
For two went wrong. Ah, when I pitch
On that sad subject it's just as though
My heart was gript with an iron claw !

What madness it wrought ! With grief and despair,
One brother it drove to the drink ; he ne'er
Looked up'ard again ; the next one it killed—
The best of the flock, with all graciousness filled.

What do when your family's stained and disgraced ?—
Your strivings like casting good seed on a waste ?
The crime of your brother, your sister's shame,
They cling like a leprosy to your name ;
And the people, they shun you ; they think the lot
Must all be marred with the same black spot.
'Tis murd'rous cruel, sir : but it is fate,
And all you can do is to go your gate.
Our home was ruined—we scattered wide,
Like drift and wreckage upon the tide :
And here you find me, a wastril, a blight,
Of no use to any, though always straight
I've tried to go since ever I've known
The right from the wrong. I've been wicked, I own,
When mis'ry has steeped me deep in gall,
And to my eye it has seemed this twirling ball
Has been but a market of legalised wrong,
Where the good went aye to the mean and the strong,
And the ill to the weak : but how can you blink,
That circumstance 'tis and not we who think,
Or if not wholly, truth partly is there :
You cannot think warm when your body is bare ;
And as you may guess, when the wolf is in,

You're likely enough to think nothing but sin.

So you see how it is you've done a good turn :
That man has rare thoughts in his coffee-urn,
And you paid for me some ; they will last me a bit,
And stave off for awhile the tigerish fit.
So that is my story, sir : saddish, I own ;
But not half so sad as a many I've known.
The worst of it is, if you're down on the bare,
The good and the bad help to fasten you there.

'ONE IN THE STREET.'

Health Hints.

ANODYNES are so liable to abuse that it is doubtful if they do not create more suffering than they assuage. Cocaine, the new anæsthetic, has already begun to make its victims. The wife of a Macon physician, who recently went out of her mind, was discovered to have been addicted to hypodermic injections of cocaine for some time previously, and the character of her symptoms left no doubt that they were to be entirely attributed to the use of that drug. The Chicago papers mentioned a little time ago the case of a leading physician of that town, Dr. Charles D. Bradley, who was found to be crazed from the same cause. While under the influence of cocaine he had made some cruel experiments with it on members of his family, and had threatened to shoot one of his professional brethren who remonstrated with him. One of the physicians who attended him stated that a remarkable effect of the abuse of cocaine was the destruction of the moral sense and the affections. He added that cocaine was the "most diabolical and fascinating" of the narcotics, and that its use was fast becoming prevalent.

IN an article entitled "Brain Rest" Professor J. L. Corning gives seven rules whereby mental bankruptcy may be avoided. Avoid, first, excessive indulgence of the emotions ; second, frantic, desultory efforts to accomplish in one hour an amount of mental work appropriate to double that amount of time ; third, avoid every species of excess which experience has proven leads to general constitutional drain ; fourth, avoid attempting to do two things at one and the same time ; fifth, avoid petty, social, and other engagements which interfere with the function of sleep ; sixth, avoid constipation, as experience has abundantly proven that this condition is productive of abnormal depression ; seventh, avoid indigestible food.

ONE of the most unique, if not the most remarkable, operations in modern surgery has been performed at Dennison, Ohio, by Dr. S. L. McCurdy, surgeon of the Pan-Handle Railway. A young man, a resident of Urichsville, named Alonzo Mitchner, aged about 18 years, applied to the doctor to be operated on for

strabismus, or cross-eye. The doctor, who had been experimenting some in mesmerism, discovered that the young man was very susceptible to mesmerism, and concluded to operate on him without using any other anæsthetic than his power of mesmerism, which he did quite successfully in the presence of a number of witnesses. The patient did not show the least sign of consciousness of what was passing, and stated when he recovered consciousness that he experienced no pain.

A MAN who discovers a new remedy is an undoubted benefactor of his kind. Dr. William Murrell has earned this distinction, inasmuch as he has discovered that terebene is a cure for winter-cough. Dr. Murrell says: "There are few complaints which interfere so seriously with the duties and pleasures of life without actually incapacitating the sufferer as chronic bronchitis. The disease is essentially chronic in its course, and the patient, if a resident in London, is rarely free from the enemy for more than a few weeks in the height of summer. With the first fog, or the first touch of cold east wind, the cough returns with its attendant discomforts. Year by year it comes back with tantalising punctuality. During the last five years I have employed a method of treatment which yields excellent results. I have before me notes of 114 cases of winter-cough, some taken at the Chest Hospital, others at Westminster, and others again in private practice. They were all treated with pure terebene, a substance prepared by the action of sulphuric acid on oil of turpentine. It is an agreeable remedy, being a clear, colourless liquid, with an odour like that of fresh-sawn pine wood. It will not mix with water; but, as the dose is small, it can be readily given on sugar. It is not the same as the patent medicine sold under the name of 'Terebene.'"

Book Notices.

Only Half a Hero: A tale of the Franco-German War. By Alfred T. Story (FOWLER, 4, Ludgate Circus, E.C.) If Mr. Story's hero is only half a hero in his author's estimation, then the rest of us poor humans stand but small chance of approaching the author's acme. Mr. Story tells a tale absolutely idyllic in its simplicity, yet full of the philosophy of life, introduced through the medium of two widely dissimilar characters, and leavened with a quaint cynicism which crops up in every page, and withal full of poetry and beauty. The character of the heroine is strong, life-like, reposeful. A young woman grown out of selfish, thoughtless childhood into the broad-souled, pitying, loving woman, through trouble and sorrow. Sweet and tender were the thoughts from which Jessica was drawn; the author loved the maid as he drew her. The book has one unsatisfactory character; or rather, perhaps, one which is too fragmentary. The reader would like to know more of the cousin-lover, the most completely heroic personage in the book. One is unsatisfied

to think that so fine a fellow must be left to wander about the world—like a dog hunting for his buried bone—for ever. Surely there was something good in store for him. Perhaps Mr. Story means to tell us how Gottlieb's heart-wound was healed at some future period. Let us hope he does; for Gottlieb has won our hearts, and we are loth to part with him. The old Pfarrer—Pastor Boeck—has his prototype in many a German country town. There are even such to be found in England; but, alas, only a few. Vestments and candles and incense, outwardly and inwardly, have had something to do with the disappearance of the Pastor Boecks from our beautiful villages. Love of admiration, of display, vainglory, and hypocrisy, are deadly enemies to charity and large-heartedness such as distinguish Pastor Boeck. Of Mr. Story's style it is hardly necessary to speak; the readers of the PHRENOLOGICAL MAGAZINE are already familiar with it. Suffice it to say it fully befits the tale. It is German, and all the while English. It is light, yet throughout showing serious thought; it is everywhere essentially human, and that is the best kind of praise. *Only Half a Hero* suggests now and again other books and other writers; but that is scarcely wonderful in an age when everyone writes and everybody reads; neither is it reprehensible when, as in this case, the suggestions are all of the highest character. Mr. Story has evidently culled his personages from real life; they are too human to be mere reflections of the imagination. There is no effort in the author's method. Every simile, each bit of fun (and there is plenty of both), all the little turns of poetical thought, each pathetic scene, is the outcome of inspiration, not of design, and yet there is a deliberate meaning and intention running through every page of the book. The story turns on the misuse of good qualities; the benefits accruing from their proper use. Riches should be shared with the poor, love with those who have none, joys with those who sorrow, laughter with those who weep. Help one another is the adage that Mr. Story teaches in his book, and he tells it in such a pleasant manner that the most selfish, the most wordly, may read and take no offence at *Only Half a Hero*.

TRACY LAYARD ROBINSON.

The Praise of Gardens: A Prose Cento, collected and in part Englished by Albert F. Sieveking (ELLIOT STOCK). This is a compilation from the works of a hundred and sixty different writers who have said pretty or witty things about gardens; and it could not fail to be delightful reading. On the whole the choice seems to have been most judiciously made; especial thanks being due to Mr. Sieveking for the good measure of seventeenth-century English prose which he has given. Of course there is Bacon's famous essay, and the noble passage in Evelyn's "Sylvia," which it possibly inspired; also a gem of quaintness from Cowley, who observes that the three first men in the world were a gardener, a ploughman, and a grazier; 'and if any man object that the second of these was a murderer, I desire that he would consider that as soon as he was so he quitted our profession and turned builder.' Fuller puts in an

eloquent plea for the rose, neglected in his days for the 'toolip,' which he terms 'a well-complexion'd stink, an ill savour wrapt up in pleasant colours.' He also wanted to see more fruit-trees planted; partially anticipating the opinion of Johnson, who pronounced that to be the best garden 'which produced most roots and fruits.' But the Doctor loved the sight of fine forest-trees and 'detested Bright-helmstone Downs,' because, he said, "it was a country so truly desolate that if one had a mind to hang oneself for desperation at being obliged to live there, it would be difficult to find a tree on which to fasten the rope." To some bright sentences of Swift, which show his appreciation of 'the purest of human pleasures,' is appended an amusing story of the Dean. As Scott puts it, he had an odd humour of making extempore proverbs; and observing that a gentleman in whose garden he walked with some friends had no intention of offering them any of the fruit. "It was a saying of his dear grandmother," he remarked—

" Always pull a peach
When it is within your reach."

The Springs of Conduct: An Essay in Evolution. By C. Lloyd Morgan (London: KEGAN PAUL, TRENCH, and Co.) The number of those who feel themselves irresistibly driven to lay their views on evolution before their fellowmen is so rapidly increasing that there will soon be few persons of legal age whose opinion on the Darwinian theory and its relation to religious belief will not be in print. Mr. Morgan's object 'has been to provide such of the general public as have the appetite of digestion for this kind of mental food-stuff with some account of the teachings of the modern philosophy of evolution in the matter of science and conduct.' He wisely 'propounds no final system of philosophy,' and in that shows at the outset that he is not to be classed with the majority of writers on similar subjects, who usually, having quite satisfied themselves on every subject, cannot imagine how any rational person can come to other conclusions than theirs. The chief feature of the author's philosophical creed may be summed up in his own words, when he says that "the determinist, in fully and freely accepting responsibility, does not strike away the foundations of all right social conduct; that morality is as real and living for him as for the most strenuous supporter of the doctrine of free-will. And he can afford to smile—though the smile have a tinge of pity in it—at the ignorance or wrong-headedness of those who ask him why he continues to strive to reach a higher moral idea when he is assured that all is determined by strict necessity." There is much in Mr. Morgan's work which deserves attention, and, though occasionally his views are not easily comprehended, on the whole he writes with some consideration for the less philosophic section of the reading public.

Charles Darwin. By Grant Allen (London: LONGMANS, GREEN, and Co.) The death of a man whose name has long been familiar to his countrymen, no matter what his merits or defects, his claims to remembrance or to oblivion, is usually followed after a short

interval by a book described on the title-page as a 'Life,' and written, in nine cases out of ten, by someone who has no particular qualification for the task he has undertaken. Such works, however useful as a temporary means of satisfying the public thirst for knowledge, are invariably more remarkable for their omissions than for their contents, not necessarily from any lack of energy or of literary aptitude on the part of their authors, but from the impossibility of gathering sufficient materials for a good biography within a month or six weeks of the departure of him with whose career they are called upon to deal at a moment's notice. In Darwin's case such a harum-scarum 'Life' was out of the question. Many biographical sketches have appeared, but no one without a thorough knowledge of the subject could have dared to attempt a fuller record of his life and work. At length, however, after a considerable interval has elapsed, the first effort to enter into this great subject at any depth has been made, and with conspicuous success. Mr. Grant Allen has not written the biography of Darwin; that is left for the son of the naturalist, who is already at his work, but in this small volume, the first instalment of a series of "English Worthies," the author has dealt with Darwin's position as a thinker and worker rather than with the details of his private life, and there is reason to hope that 'the lesser book may not clash with the greater, but to some extent may supplement and even illustrate it.' It is only of late years that the doctrine of heredity has been carried to its present limit, and there may yet be readers who will think that that doctrine is carried too far in the second chapter of this volume. Such readers may suggest that perhaps after all it was from the early study of his grandfather's ideas as much as from inheritance that the younger and greater Darwin received his especial 'bent.' To summarise Mr. Grant Allen's chapters on the Darwinian theories would be an unprofitable task. They require reading in full, or not at all, if a connected view of Darwin's mental life is to be obtained. The chapters on the "Wander Years," "The Period of Incubation," and on "Darwin's Place in the Evolutionary Movement," are hardly so interesting as those on the work itself, and it is as an exposition of Darwin's views in clear and attractive language that the present book will be most appreciated. Evolution and Darwinism, as the author points out, are not as most people appear to think, one and the same thing. The two "are quite separate and separable in thought, even within the limits of the purely restricted biological order. Darwinism is only a part of organic evolution; the theory, as a whole, owes much to Darwin, but it does not owe everything to him alone. There were biological evolutionists before ever he published the 'Origin of Species'; there are biological evolutionists even now who refuse to accept the truth of his great discovery, and who cling firmly to the primitive faith set forth in earlier and cruder shapes by Erasmus Darwin, by Lamarck, or by Robert Chambers." The first volume of "English Worthies" is an admirable example of what such popular works should be.

Facts and Gossip.

THE prize for the best Essay on "Size of Brain as a Measure of Power," offered in the December number of this MAGAZINE, has been awarded to Mr. J. Webb, of Leyton, Essex. Of the number sent in, two Essays, in addition to the winning one, are very good, and may possibly be published in the pages of the PHRENOLOGICAL MAGAZINE. They are by Mr. A. G. Hubbard, of Great Yarmouth, and by Mr. A. G. Stooke, of Bristol, respectively. As compositions, and as expositions of the subject, they are perhaps equal to the successful Essay; but we felt bound to award the prize to Mr. Webb on account of the original research that he has been enabled, through his profession of teacher, to bring to bear on the subject.

A PRIZE consisting of the first Five Volumes of the PHRENOLOGICAL MAGAZINE, neatly bound in cloth, will be given for the best Essay on "True Manliness." The subject must be treated phrenologically; but, with that single proviso, competitors will be free to deal with the thesis as they think fit. All Essays must be delivered to the Editor of the PHRENOLOGICAL MAGAZINE on or before the 15th of June. Competitive Essays must not exceed eight pages of the MAGAZINE, and they must be written in clear handwriting, and on one side of the paper only. Ladies may write on "True Manliness" from a feminine point of view, and if any Essay should reach us written by a lady, deemed worthy thereof, a second prize will be given consisting of the same Five Volumes of the PHRENOLOGICAL MAGAZINE. If any Essay on the subject stated should reach us from Australia, New Zealand, or China, within three months of the date given above for the closing of the competition, and it should be thought worthy of a prize, a similar award will be made. The Editor of the PHRENOLOGICAL MAGAZINE reserves to himself the right to publish or not any Essay sent to him in competition for the above prizes.

THE funeral of M. Desbarolles, the French professor of palmistry, took place in Paris the other day. The younger Dumas delivered a funeral oration beside the grave, in the course of which he said that M. Desbarolles had done for the hand what Gall and Spurzheim had done for the brain. He worked out the science of chiromancy as they had done that of phrenology, and taught us to know our aptitudes by the indications which the hand furnished of them. M. Desbarolles was first put upon this track forty years ago, when the travelling companion in Spain of the elder and the younger Dumas. He was led to it by the shrewd guesses made by fortune-telling gipsy women, who examined his palms and those of his fellow-travellers. It is a pity that he did not confine himself to seeking in chiromancy, as he sought in graphology, indications of capacity and disposition. Latterly he degenerated into a mere soothsayer.

THE antiquity of many of the Sanskrit manuscripts is in doubt. But the Reverend B. Hale Wortham allots that of "the Satakas of Bhartrihari" to either the first or second century of our era. Bhartrihari was a celebrated poet and grammarian of his day; but, disgusted with the world as he found it, he resigned his position and became an ascetic. Mr. Wartham has made a translation of the "Satakas; or, Centuries of Verse." Many of the maxims in the book have a Biblical ring and beauty of expression, as may be read in the following extract from the 103 Sloka: "What is most profitable? Fellowship with the good.—What is the worst thing in the world? The society of evil men.—What is the greatest loss? Failure in one's duty.—Where the greatest peace? In truth and righteousness.—Who is the hero? The man who subdues his senses.—Who is best beloved? The faithful wife.—What is wealth? Knowledge.—What is the most perfect happiness? Staying at home.—What is royalty? Command." Messrs. Trübner and Co. are the publishers.

MR. GALTON, president of the Anthropological Institute, has revealed to that body, and so to the world, the result of his now completed inquiries into hereditary stature and hereditary ability. It is open to doubt whether Mr. Galton's results are worth the pains he takes to reach them. "The noblest study of mankind is man," Pope has said; but he did not mean to commend speculation as to what man descended from a given stock would probably become in the third or fourth generation. It is most essential to know what an eminent man's character and ability are, but it certainly seems a waste of time to draw up quasi-scientific horoscopes as to the probable character and ability of his great great grandson. Mr. Galton set forth a wild scheme for the formation of an Upper House of Legislature, in Utopia, on purely scientific principles. Among things which the President of the Anthropological Institute says "would have to be kept steadily in view" is the following:—"Men who earn distinction of a high but subordinate rank to that of the nobility, and whose wives had hereditary qualifications, should transmit those qualifications to their children. I calculate roughly and very doubtfully," he continues, "because many things have to be considered, that there would be about twelve times as many persons hereditarily qualified to be candidates for election as there would be seats to fill. A considerable proportion of these would be nephews, whom I should be very sorry to omit, as they are twice as near in kinship as grandsons." Before keeping all this in view, and especially keeping it in view steadily, it would be necessary to understand precisely what it means, and, in particular, to comprehend why a man's nephews are twice as near in kinship as his grandsons—a proposition which many will doubt and more will deny.

IN the last issue of the "Housewife," a capital little periodical for the home, there is an interesting article on "The Early Training of Children" that should be read by all who have anything to do with

the young. It is by Mr. Tracy Layard Robinson. Mr. Robinson says very wisely: "In the course of conversation a few days ago, a medical man in large practice said: 'There is a time when the mother slides out of the position of mother into that of elder sister. That is to say, she should do so, and would if she held her proper place in the confidence of her children.' Now it seems probable that, if a mother begins the treatment of her child by neglecting her first duty to it, that of nursing it herself, she will also neglect, or fail to obtain, the confidence which is so necessary to mutual regard and love, and which is the foundation of all known systems of training, moral or physical." And again, "If a child observes neglect on the part of any whose duty it is to care for and cherish it, it will not be long before love goes out of the window and indifference comes in at the door. Further, the parent who neglects a child will find apathy and indifference follow in natural sequence."

"It behoves a mother," says the same writer, "to gain the confidence of her child, and the first step towards this end is to avoid all neglect, actual or seeming. One of the objects of her life should be to make her presence desired by her children." His views in regard to punishment are equally appropriate: "There is a selfishness which is unselfishness, the ardent desire which, in seeking the truest happiness of one's offspring, at the same time procures the deepest contentment for the parent. It is this praiseworthy selfishness, if so it may be called, which teaches a loving parent the time and occasion which make punishment necessary or indulgence advisable. There are very many transgressions of children which it is the absolute duty of the parent to overlook, others which call for leniency, others which, while they require correction, need to have that correction administered with the utmost judgment and care, and there are still others which, undoubtedly, justify the use of the rod, if they do not absolutely demand it."

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE.—ED. P.M.]

F. A. B.—You possess a sympathetic mind, and are all alive to the wants of others; are quick to observe, discern, and criticise; have more than ordinary intellectual ability, and are quite imaginative. You are full of love. You are not physically adapted to hard work; are better able to allow your brain to save your hands. You appreciate high-class music, and as a player would show taste and

expression. You are a little wanting in Hope; are very sensitive, ambitious, and desirous of doing your best. You have an inquiring turn of mind, and also considerable ingenuity. Your temperament is on a high key, and you are capable of high degrees of enjoyment and suffering; are strong in your attachments, but do not lightly enter into new friendships. You may show moral courage and power to defend your principles, but you need more Destructiveness to give force and spirit to your actions. All your perceptive faculties are fully represented. In a home of your own you would take great pride and satisfaction in keeping everything in apple-pie order. You know the value of money, and are not one to waste it; can make a little go a great way. Tone up your system as much as possible; look on the brightest side of things, and avoid extremes.

R. S. (Gorleston).—You are a man of more than common vital nerve and animal life. Your temperament enables you to enjoy life highly, and to make the most of it, and the advantages you possess; but it detracts from your usefulness, inasmuch as it weakens your energy and takes away from your enterprise. You have good intellectual powers, and should be known for possessing a number of exceptional gifts; chief among which are the gifts of language, of ingenuity, imagination, and wit. You are a great talker, and with careful training you might have made a good linguist and orator. You possess a good deal of the inventive faculty, and also some literary power. You are generally a good-tempered man; are amiable to a fault (that is, naturally), and are almost too spontaneous; are a warm lover, a strong friend, and possess much taste, much sympathy, great love for the young, and a generally even, moral tone.

O. L. (Southport).—You have more general intellectual power than you will easily make effective for your public advancement. The fact is, you need more push and energy to counterbalance your other powers. You require to be engaged in a business that does not require you to be always putting forth fresh energy, striking out new lines of action, and coming before people in a way that requires a great deal of assurance and audacity. But you are well fitted for anything that calls for an observing mind, a great memory, good judgment of things, organising power, and general understanding. You would make a good manager of a large concern; would also make a good newspaper man, and editor, or manager, and have gifts for business, although in that respect you would probably do better for others than for yourself. You have a high degree of taste, sense of the beautiful, and imaginative, and, with the right sort of training and study, might develop literary and political ability. You have the type of mind and thought, too, for oratory, and should practise public speaking, as nothing is more calculated to bring out your various powers. Another gift you have is connected with Constructiveness, and if you had been put to something requiring ingenuity and an inventive turn of mind you would have succeeded above the average.

THE Phrenological Magazine.

APRIL, 1886.

IS PHRENOLOGY DEAD?

IN a recent issue of the *Daily News*, the editor gave the world the benefit of his views in regard to phrenology. They were not very matured views; but that is not a matter of surprise: nothing is matured that comes from the illiberal 'Liberal' organ of Bouverie Street. From its 'gushing' opinion about the Right Hon. member for Chelsea to its views on Pasteur and his theories, everything is crude, not infrequently childish, and therefore to be taken the very opposite of seriously. And not the least extraordinary feature of these pronouncements is the 'cock sureness' with which they are uttered. Thus, in the article in question, we are informed that "Phrenology to-day is an effete branch of thought"; moreover, it is only practised "in holes and corners," and to touch it is a mere supererogatory task of "slaying the slain": therefore the commanding spirit of the liberal organ thought it would be safe to kick a dead ass.

But did he find it so dead? We fancy not. To our positive knowledge he received replies from at least a score believers in phrenology, none of which he had the courage or the honesty to insert in the pretended organ of liberal thought. Nor were they written by fools—as the leader in question would have the world believe, by implication, all such believers are; nor by men ignorant of the subject on which they write, as was the writer of the article in question; who, by the way, took care to look into the indices of certain scientific works, so that he might be sure he was safe in the side he took. We may be sure that when he does see the word 'Phrenology' in the indices in question, he will be the first to laud Phrenology to the skies, though he know no more of it than he knows at present.

There was a time when the *Daily News* might be looked to for a judicial opinion, for an impartial view, for a judgment based on a knowledge of what was on both sides of the

shield. Now it seems to be the rule for the one man to judge of everything from what is in his own mind: if he knows nothing about the subject—"Write, sir," he says to his ready writer, "write that there is nothing in it." And so it is written. And so it was written of Phrenology. But, with all due respect to the profound ignorance of Bouverie Street, and the profounder arrogance, Phrenology is still a living science, believed in by millions, nay, known by them to be true by the best of all knowledge—the experience of its truth.

We grant that there are pretenders in Phrenology—quacks, peripatetic humbugs—as there are in all branches of learning and of trade; as there are even in journalism—men who, lacking the sacred fire, simulate it, and so make themselves the scorn of honest men. But neither a science nor an art is to be judged by these charlatans; else what a discredited art would that of medicine be, with its methods and practice changing with every decade, and becoming almost totally reversed with every jubilee period. We grant further that Phrenology is not fashionable just now in England—fashionable England preferring to take its opinion from his Grace This or the Reverend That, or from Dr. This or the other; as though they, known as a class to be the most prejudiced of mortals, and not infrequently the most addle-headed to boot, were the final appeal in such matters. In countries where Mrs. Grundy is not so omnipotent it is otherwise: they look to nature, not to man, and, in consequence, full advantage is taken of Phrenology.

The talk about the 'New Phrenology' is silly twaddle—the parrot-cry of which ignorant men are so fond. The difference between physiologists and phrenologists is this: that they are like men working a tunnel from opposite ends, and they have not met yet, or only partially—but they will meet on exactly the same ground yet. The physiologist talks of his 'centres,' the phrenologist of his 'organs'; but they mean exactly the same thing. But to men of the *News* leader-writer type the name is everything; and if the name is different the thing is different. Hence, though he probably knows that there is a 'centre' for speech and an 'organ' for language, he does not know that the thing is one and the same. Possibly, too, he may know (or, as likely, he may not) that the cerebellum is by the physiologist recognized as having something to do with the co-ordination of motion, and in some as yet unknown way with the sexual functions; but it is hardly likely from his article, that, under a different name, this is simply the Amativeness of the phrenologist.

At these two points phrenology and physiology have met, and they will meet more and more: nay, those who know best believe that we are trembling, as it were, on the brink of a great discovery that will reveal to us the true functions of the different parts of the brain; and they are not slow to grant that they are of opinion that the revelation will be in the direction of the phrenological theories.

So much we deemed necessary by way of reply to the attack of the organ of persiflage and Pecksniffianism. It was hardly worth it; but we were asked what it meant by so many ardent admirers and students of Phrenology, who were so utterly astonished at a 'Liberal' paper taking up such a position towards a subject of such profound interest and such wide study, that we conceived we could not do otherwise than take notice of it in one form or other.

MR. THOMAS BURT, M.P.



THE above likeness indicates a genial man. All the forces of his nature work easily and harmoniously; his thoughts come to him without his going far after them; his feelings are warm and ardent, and he is in earnest in every thing he does; he works and thinks easily and without friction. He started life with a temperament calculated to get through easily and quietly; he is not subject to many contradictory extremes, nor is he violent when highly excited; can poise himself quite well, and has a regulating influence over others. He has the organization to be graceful in movement, smooth and plausible in speech, inspiring as a writer, engaging as a speaker, and cheering as a songster. He is full of animal life, yet it is not predominant in power; he positively enjoys every minute of his existence, and others enjoy his society, and people feel better for having been in his company. He has strong hold on life; and is life-inspiring—cannot have had much work for the doctors. He loves himself enough to take care of himself, to live in the future rather than the unpleasant past; can endure hardships and work hard, if necessary; but would prefer civilization and its advantages to the hardships of a new and undeveloped country. Does not labour hard or long for the fun of it, unless it is in entrapping elephants and catching whales.

He is a social family man, and must have always been in sympathy with his mother; and as a judge he would look most favourably on the feminine side of the question—and

would think that some man was more to blame than the woman. His capacity to love would not be exhausted with a large family or circle of friends, but could enjoy both fully. When with friends, he is one among them and helps to entertain.

He has much reserved force, and not at all wanting in courage to stand by his convictions or depend on his opinions. In times of the greatest danger he is the most cool, and has the greatest presence of mind ; he will listen to



advice and yield to gentle pressure and persuasion ; but resists most stoutly all forcible measures. He has a mind of his own, and he is satisfied with it ; yet he is not dogmatical, or given to proselytizing ; he thinks for himself and allows others to do the same—his sense of justice in the abstract is strong ; yet his mind is too broad and catholic to be much of a sectarian.

Benevolence appears to be his largest moral organ ; and, with his temperament, it must have a modifying influence over his whole character, and helps greatly to take off many

sharp corners, and mellow his whole nature. But the strongest powers of his whole nature are his intellectual faculties, and those that more particularly come under their control.

He has a great variety of gifts, and could excel as a scientist, a doctor, a naturalist, in literature, as a speaker, a mathematical, architectural designer, or linguist.

Having not the slightest idea as to who the subject is, or his calling, I am led to infer that he would prefer a scientific or literary course. He has great powers of observation, accumulates knowledge easily, judges correctly of things and their uses, and knows how to use all his powers to the best advantage. He must be very fond of coming in contact with the active, outside world; is fond of experiments, and must have a great command of facts and general information. He does his work with mathematical precision, and is naturally capable of making correct estimates and close calculations. His Language is large, enabling him to use language appropriately and correctly; as a speaker, should be easy and flowing in his style. He does not deal much in abstract ideas and subjects, but has a happy faculty to illustrate, amplify, compare, and criticise; and must be easily understood whether speaking or writing. He comes to correct conclusions, and foresees results from the beginning; he is remarkably sagacious and intuitive; his mind culminates with great rapidity; his intuitions are correct, and his first thoughts are his best; and his best ideas come with the best labour. He understands human nature correctly, and should know how to make good use of his knowledge of it.

He is ingenious and versatile in talent, and knows how to present his ideas in many ways, and can do many different things, if necessary. He would be ingenious in constructing sentences, in laying the plot of a story, in varying an argument, in describing places and localities, and in giving scope to his imagination. He has the qualifications for a musician or an artist, and appreciates colours, both in nature and art; few men have so versatile and available an intellect, and with equal culture could do equally well in many things.

He is able to say much in a short time, and his sentences are generally short and to the point; such an organization should have many friends and few or no enemies; for he so takes the advantage of human nature, that persons who may have been severely dealt with cannot find fault.

It is seldom we find so much reserved force joined to so much gentleness; so much self-complacency joined to so much urbanity; so much power to be sarcastic, joined to so much

ease and grace of manner. He is capable of doing great good without making a great noise, and of being a leader and yet appear to follow ; he has great powers of persuasion, and can magnetize the majority who listen to his speech or read his productions. He is not greedy for property, yet has the elements of a financier. He is a good listener or talker, as the circumstances may require. He can be quite reticent, and control both his tongue and his countenance ; and yet at times he speaks with so much frankness that some doubt the truthfulness of his remarks. He has the rare faculty of saying much in few words, of condensing his thoughts and feelings, and concentrating all his mental forces so as to say more in a few sentences than most speakers do in a long speech.

L. N. F.

SIZE OF BRAIN A MEASURE OF POWER.

BY JAMES WEBB.

EXPERIENCE and observation prove that size of brain, other things being equal, is a measure of power. These other things are education and quality, and relative sizes of the various organs. The power of one man is in policy ; of another in deception ; of another in learning ; of another in oratory, &c. One man has great power as an engineer, another as a painter, &c., &c. ; hence, in discussing this question, it is necessary to disabuse our minds of our own preconceived notions of 'power,' and remember that two men might be very powerful—one for good, the other for evil ; hence absolute size is no criterion of kind of power. It depends on the relative size of the different portions of the brain whether the power be intellectual, moral, or animal. For example, Palmer, the Rugeley poisoner, had a large head—he had great power—but the basilar portion being excessively developed, his power consisted of selfishness, sensuality, and deceit ; and, though a 'regular communicant,' he had small religious sentiments. As a medical practitioner, he used his knowledge to *kill* rather than to *cure*.

Professor Owen has a very large head, chiefly frontal ; hence his intellectual (knowing and discriminating) power is almost unrivalled.

Cardinal Manning has a large head, but it is chiefly in height. Its greatest bulk is above the temporal ridge of the skull (and not below it as was the case with Palmer) ; the frontal lobe and the superior parietal lobules especially exhibiting considerable size ; hence his philanthropy and godliness. To pursue this further we should have to consider

the relative size of each organ giving *speciality* of power—as largely developed Constructiveness, and large percepts, marked the intellectual organization of Brunel. Burns and Moore had large Language and Ideality, hence their poetic sentiment; and going further, the relative size of other organs gave each his special feature. For example, Burns had the organs of Tune and Comparison less developed than Moore; the latter losing his narrative in melody and picture, whilst Burns finishes his narrative in simple and complete utterances. Again, Moore and Burns possessed the organ of Sexual Love to a considerable degree; hence their amatory verses. Cowper, Wordsworth, Frances Ridley Havergal, had less capacity in this direction, but large Sympathy and Faith; hence the deeply religious tone of their writings. To speak of the large organs of Weight and Form in Canova, of the large Colour and Form in every successful painter, and the thousands of similarities and differences of men as affected by the differences of their mental faculties, would extend this paper beyond its set limits. The subject is wonderfully interesting and instructive.

The worst scholars in my school (and this applies to all schools) have the smallest brains, and the best scholars the largest and finest.

This question of the fineness of the brain is of the first importance. We call it quality, or organic quality. It is here that anti-phrenologists have fallen foul of our science. They have known comparatively small heads manifesting considerable power in certain directions; they have compared them with other heads, larger, coarser, more animal. Such persons are willing to admit the truth of phrenology if it can be proved to them; but here are facts (as they think) against it, and they stumble and fall. Their judgment is at fault. Phrenologists have taught this doctrine of quality from the first. How do phrenologists judge of quality? How does the artist judge a picture? How does a musician judge the quality of tone? How does the physician know the stage of a disease? How does a merchant know the quality of a handful of grain, or a sample of fruit? By the knowledge gained by observation and experience.

A non-phrenologist forms some opinion respecting the persons he meets; but proper instruction, and careful examination and study will greatly modify and correct his opinion. A first lesson could be given him by pointing out the specialities of a line of 'sandwich'-men parading Oxford Street or the Strand. Here will be found absence of quality. Another lesson could be given in a prison; another in a

workhouse ; another in a barracks ; another on a race-course. Compare sandwich-men, ostlers, loungers about the doors of theatres, with such persons as the following : Cardinals Newman and Manning, Ruskin, Kingsley, Mrs. Somerville, F. Ridley Havergal, Rev. Sydney Smith, John Morley, Gladstone, Beecher, Milne-Edwards, Owen, G. Dixon, M.P., the Archbishop of Canterbury, Sir W. Scott, W. Wordsworth, Bishop Selwyn, William Ellery Channing, Elihu Burritt, Tennyson, Thomas Binney, Victor Hugo, &c. What a difference in the quality of brain there was between Guiteau and Garfield ! Poverty of strain, heritage of moral and intellectual weakness, impotence bordering on imbecility, is the legacy inherited by the sandwich-men. Both size and quality are deficient ; or if not, then size is more noticeable in the animal than it is in the moral regions.

A study of the hair, whether fine, silky, brilliant, and sparse, or coarse and dull ; of the skin, whether thin and transparent, or metallic and coarse, and apparently clogged ; of the eyes, whether bright and searching, or unintelligent, inactive, and leaden ; of the features, whether well marked or ill-defined ; and many other signs obtained from the osseous, arterial, alimentary, and respiratory systems, whether of chin, hand, cheek, neck, lips, chest, &c., will well repay the student of phrenology.

These points are all factors in the estimate formed of a person's organic quality.

It may be of interest to note that Mr. Gladstone's eyes are the most searching the writer has seen. General Gordon had remarkably piercing eyes. Gordon had a fine brain of excellent quality ; in my opinion too fine for the work he was expected to do at Khartoum, or rather the severer and more social organs were not powerful enough in comparison with his fine nature.

Hence, symmetry of proportion, mutual influence of the several organs, exercise, and education, affect quality of brain, and therefore quality is also a measure of power.

Education affects both quality and activity. It strengthens the intellectual faculties, and in doing so eases the flow of blood to the organs of the propensities ; and these, not having opportunities for stimulation during study, it will be seen the Education Act has done immense good to otherwise educationally neglected children by strengthening their intellectual and moral faculties at the expense of the propensities. Street culture acts on the inferior sentiments, and the loss of this street culture is of immense benefit to us as a nation.

This is not the place to speak of the faults of our system of education, its increasing number of examinations, and craving for so-called 'results'; the brain irritation, the tendency to consumption, the increasing demand on brain and mind, without a corresponding increase of force in the organs or faculties which are to meet this demand. Children ought not indiscriminately to be plunged into the exciting whirlpool of competitive examinations; it should be remembered that a chain is only as strong as its weakest link, and insanity follows the lines of least resistance; hence any over-wrought organs, whether it be that of Fear or Firmness, Memory or Music, will succumb. Educate, but educate in accordance with the real needs of a child.

When a phrenologist says that size is a measure of power, he does not therefore mean that size of brain without reference to form or fibre, or of depth or size of the convolutions, any more than he does to the relative size of the cerebrum or cerebellum, nor to the peculiarities of the skull itself, the thickness of its bones, abnormal growths, frontal sinus, &c.

General development or size merely cannot be accepted as a doctrine of phrenology without reference to the relative size of the different regions of the brain and the individual organs located there.

Other conditions being equal, there is no doubt that size is a measure of power. This is true of everything in nature. A piece of iron a quarter of an inch in circumference will bear a strain that will break a similar piece three eighths of an inch in circumference.

But when quality is taken into consideration, a three-eighths-of-an-inch wrought-iron rod will sustain a weight that would snap a half-inch cast-iron rod. The biceps muscle is larger and stronger in the blacksmith than in the clerk; the levator muscles of the ballet-girl are more developed than those of a milliner, and are proportionately more powerful. Compare the size of the retina of the owl and the eagle—that of the latter being highly extended by folds, which provide considerable surface in a small space, and the ganglia, whence the optic nerves arise, are one-third of the whole brain; whereas, in the case of the owl, the retina is simple, and the nerve-centre very small, not one twentieth of the whole brain. Similarly, we might compare the auditory nerves of fishes and mammals, the olfactory nerves of the dog and the sheep, the relative development of the muscles and nerves of the lark and the duck. The fibrillæ of the nerves of smell are far more numerous in the dog, wolf, and cow, than in the sheep; and the lark has small,

weight-saving muscles, and large nerves, giving strength to fly; whereas the nerves of the duck are smaller in proportion to the muscles. The nerve development in the fingers may be compared with the nerves of the back in the human being; the sense of touch being more acute where the nerves are highly developed.

A symmetrical head of good quality, and well cultivated, with well-balanced organs capable of united action when and as required, even though of but average size, will be capable of considerable power, and of astonishing results; but a similarly-conditioned head of a larger size will be proportionately more powerful. An adult head less than nineteen inches in circumference, however well conditioned, is not capable of superior work in any direction, though idiots have often surprised the wise by some specific development. Many beggars, ostlers, and sandwich-men, and paupers, have heads twenty inches in circumference. I have measured many such. They are on the borderland. When children they required watchful sympathy. Few of them got it, or the sympathy took a wrong course.

Laplace and Descartes had average heads, of about twenty-two and a quarter inches, and yet they were exceedingly well developed in the frontal region—Calculation, Size, Weight, &c. Jeremy Bentham had an exceedingly active and vigorous mind. It was very small in the social affections, and his intellect had full sway. His head was not very large. Compare his portrait with those adorning the front page of the *Police News*, and the secret is out. Palmer had a larger head, and almost infinitely more powerful in one direction—in sensuality. Had the phrenologist undertaken the education of Palmer, it would have been with much misgiving, and all his time, or nearly all, would have been given to the development of conscience, self-denial, and virtue. Instead of that he was 'educated' for a learned profession. Fie on such education as refuses to train the conscience or adapt itself to the essential requirements of the people. Education should harmonize the mind, strengthen the weaker powers, and utilize the powerful faculties for the benefit of the commonwealth.

Phrenological observations of the brain are as equally valuable as those of the sun or the stars—and yet how neglected! I have for years taken such observations. I find that the size of brain agrees with the attainments of my pupils; I find that the relative quantity of brain before and behind the ear agrees with the position of a child in the school. All the heads unable to pass the first or easiest

examination in the school range from nineteen and a half to twenty-one inches, including boys from seven to twelve years of age; the older boys, of course, having the larger heads, and most of them, especially the larger heads, having as much or more back head as front head, measuring from the external meatus of the ear.

The largest head, B. M., has two and a quarter inches more posterior than anterior brain, is eleven years of age, and has passed no Standard, though he has been in the school for years; the same may be said of A., ten years of age, with a quarter of an inch more brain behind the ear than before it. The fifteen dullest boys in the lowest class average twenty and a half inches, and the fifteen boys in the Second Standard, eight years of age, measure the same, with a much better development—a better distribution of brain. The boys in Standard II. generally have a higher average, as have the boys in Standard III. ($20\frac{5}{8}$); Standard IV. ($20\frac{3}{4}$); Standard V. ($20\frac{7}{8}$); Standard VI. (21); Standard VII. ($21\frac{1}{2}$).

Our best head, J. B. M., passed the Seventh Standard at twelve years of age, and the Oxford Local at thirteen. His head is now, at fourteen years age, twenty-two inches in circumference, but the anterior brain is two and a quarter inches larger than the posterior portion, and the superior region, over the crown of the head (Firmness), measures fifteen inches. I ought to add, that in passing up from Standard I. to Standard VII., a boy's brain increases in the anterior portion, the posterior portion remaining nearly stationary. If allowed to run wild the animal propensities would have increased at the expense of the intellectual faculties and moral sentiments. This comparison of the value of the school *versus* street can easily be illustrated by any person willing to take the trouble. I think the reader will now be prepared to admit that force of mind is proportioned to the size of the organ with which it is connected, *i.e.*, with the size of the brain; and that consideration of the quantity of brain is an essential element as regards absolute power, but that the direction the power takes depends on the relative size of the different brain regions. The brain of an average male European weighs a little over three pounds; of a female, two pounds and three quarters. Yet Cuvier's and Abercrombie's brains weighed about four pounds, and Cromwell, Chalmers, D. O'Connell, D. Webster, Spurzheim, Buonaparte, Byron, Burke, Franklin, Washington, had large and heavy brains; and though many celebrated men have been found to have heads weighing about fifty ounces, in every case it can be shown that the distribution

of brain has been in the direction of the points for which they were celebrated.

A head of sixteen to nineteen inches in circumference, or weighing twenty to thirty ounces, can only belong to an idiot. Much smaller brains than these have been weighed, and they had all been owned by persons of small mental capacity.

Again, the brain of negroes is much less than the brain of Europeans, though the brain case is much thicker.

Education of the negro increases the size and quality of his brain. The anterior lobes especially are affected by contact with intelligent whites, and by education generally.

This fact is established. Nothing need be said here about hydrocephalic, acephalic, or diseased heads, whatever the cause. It is certain that, other things being equal, a healthy brain is powerful in proportion to its size.

A NEW PHRENOLOGY.

IN an address before the American Association for the advancement of Science, by the retiring president, Prof. J. P. Lesley, as reported in the "Popular Science Monthly," for December, after exhorting the members to zealous and careful study of facts and to "dead work," in connection with them, in which he is severely, though justly, sarcastic on the charlatanry and ambition that causes so many to thrust themselves forward with a few facts or a crude philosophy; he winds up with some excellent advice for the relief of an over-tasked portion of the brain by the exercise of another portion of it; and in this advice he declares the cerebellum to be the seat of the will-power, which the over-worked president of a railway company has been exercising to such excess, that he falls asleep at the director's meeting. He prescribes that the exhausted man ride some youthful hobby—specifying practice on the violin, and the playing of billiards. This, for the relief of the over-worked cerebellum! The professor asserts that the physiology of the brain is sufficiently well understood to permit the physician to prescribe with some assurance, and in this he will not probably be disputed; but from what source has he learned that the over-worked part of the railway president's brain is the cerebellum?

The prevailing opinion with physiologists appears to be that one important function of that organ is the co-ordination of motion, as in walking, and in voluntary movements of the

arms, but not the face or of the muscles of speech, while another function is in some way connected with the sexual instinct. Skill in playing on the violin would therefore require a high degree of one of the functions of the cerebellum. In experiments upon pigeons, after the extirpation of the cerebellum, equilibration is lost, and the bird although unable to fly, walk, or stand, yet retains its will-power, as seen in the effort it makes to escape a threatened blow.

The venerable professor's prescription is far better than his physiology, for it would result in the relief of one portion of the brain and the exercise of another, although the parts do not correspond with his statement. It would seem as though the advice from an Australian judge, which he quotes only to depreciate, "Pronounce your decisions, but beware of stating your reasons for them," would have been useful to him with a slight modification.

It is remarkable that men of science, careful in most things, no sooner touch upon anything relating to phrenology than they lose their ordinary circumspection, as though it were a very simple subject, one that may be safely guessed at; and so they will give no serious attention. In this spirit a remark was made in my hearing in the course of a lecture by Prof. Pope, at Franklin Institute: "The Phrenology of fifty years ago is not true;" and another by the same gentleman, as reported to me by a member of the institute, "We have no phrenology now, but we will have." Phrenology appears to be the stumbling block over which professors of science bark their shins, and which they will continue to do until they consider that the years of careful observation, which have been given to it by men as well able to observe as themselves, entitle their opinion to some respect. Were they to reflect upon the different modes of investigation practised by physiologists and phrenologists, upon the extent of the work done by phrenologists, and that physiologists have attained only to the localization of two centres for mental faculties (Language and Amativeness), and even these but imperfectly defined, and that both of these tend to confirm the accuracy of the phrenologists, they would be less inclined than some of them at present are to treat with contempt the phrenological system.

There are two classes of persons who treat phrenology as though it were merely a system of craniology, as described by a western editor who said he could tell by the bunions on a boy's head whether he was going to be hung or become a missionary! One of these classes has the credulity to believe it, and will declare a man to be honest, if he has a fulness at

a definite situation, in spite of his antecedents. The other class appears to comprehend the subject no better, and they assume that craniology is everything; but, having a little more discernment of character, they find instances in which there is a full amount of brain with little character to correspond, and so, without giving any attention to the temperament or the quality of the brain they discard and decry the system of phrenology. J. L. CAPEN, Philadelphia.

“PALMISTRY AND PHRENOLOGY.”

IN a leading article in the *Daily News*, of the 25th of Feb., the Editor has the following passage:—

“M. Dumas, in the funeral oration, spoke of Desbarolles having done for the hand what Gall and Spurzheim had done for the brain. If this parallel is to be taken seriously, it is not too much to say that the science of palmistry must be regarded as practically extinct. Phrenology to-day is an effete branch of thought. We look in vain for any mention of the word in the indices of works on the brain which deal with the latest information science has elicited respecting the organ of the mind. No one possessing most elementary knowledge of the progress science has made within the last twenty years, in the matter of the functions of the brain, can for a moment accord to phrenology a stable position in the list of modern branches and modes of inquiry. It is, perchance, only breaking the butterfly on the wheel, and slaying the slain, to say so much. But the science of Gall, Spurzheim, and George Coombe, still survives in holes and corners among us, in the shape of demonstrations by peripatetic phrenologists, of the ‘characters’ of their clients. . . . There are many persons who still believe that the mystic faculties of human nature are all pigeon-holed, as the phrenologist teaches, on the contour of the brain.

“The reading of character, and the constitution of mind, would be an extraordinarily easy matter were such things true. The brain, alas! is much too complex an organ to be so lightly disposed of. It has taken the best work of a quarter of a century in modern physiology to open up the subject of brain functions, and it will occupy the energies of many years before we are able definitely to sum clearly and explicitly the exact nature of many of the brain’s ways and works. But what we do know of cerebral structure and action slays phrenology more completely than it has ever been disposed of before. The work of Hitzig, Fritsch, Ferrier,

and others, has taught the new phrenology—that of experimental science. It has exploded the old myths about faculties, ‘bumps,’ and brain-organs, of which so much talk was heard half a century gone by. We are able to-day to indicate generally how the organ of mind works; how certain of its parts come to the front over others, how there should exist lower and higher ‘centres’ in its substance, how one part regulates speech, and another seeing, and another hearing. In our hospitals for nervous diseases to-day, the physician, from his studies in the work of the normal brain, is able to place his finger on the region he regards as affected in his patient; and post-mortem inquiry, as well as evidence of other kind, is brought into the field of research to confirm his deductions. Looking back to the days of palmistry and soothsaying, we see in the old phrenology, which still survives in unlearned circles, a fit accompaniment of the ‘science’ of hands. The art of physiognomy, too, may well be left in company with these antique modes of thought. Face and hands only reflect in a dim fashion, if they reflect at all, the nature of their individual possessors. Human Nature is not such an easy study as to be capable of being laid bare to the crowd by the inspection of palms or by the manipulation of the head for ‘organs’ of mind which have no existence in the brain.”

In reply to this presumptuous and dogmatic condemnation of phrenology on the authority of other investigators, Mr. E. T. Craig sent a prompt reply on the same day. He had a few days before sent a brief note, of some four hundred words, on “Rents regulated by Prices,” a subject on which Mr. Gladstone asks for information. The letter was refused admission, was returned, and sent to the *Mark Lane Express*, and inserted.

Mr. Craig’s letter in reply to the Editor was not returned, although the following statement shows it was duly applied for, but no answer given. The Editor doubtless thought that if the letter was not returned there would be an end of the matter, and an extinguisher put down over phrenology.

Mr. Craig is an old journalist, since the days of the Stamp Act, and retained a copy of his communication, and the reader must judge of the mean advocacy of the ‘adverse faction’ in a matter of physical science, where the true study and diagnosis must be on the living subject, not on inert, dead matter, for nervous manifestations.

TO THE EDITOR OF THE *Daily News*.

“Sir,—Two days ago I sent, per post, to your office, a letter giving a very brief reply to your rash and bold denun-

ciation of phrenology and phrenologists. You have not given insertion to my communication, and as I forwarded a stamped wrapper with my name and address upon it, I must, as an old subscriber to the *Daily News*, request the usual courtesy, and the return of the letter.

“E. T. CRAIG,

“Late Editor of the

“*Oxford University Herald*.”

3, Andover Road, Hammersmith,
February 27th, 1886.

As no reply has been vouchsafed by this redoubtable antagonist to phrenology, the letter addressed to the Editor on the appearance of his ‘praveworts’ is here given:—

TO THE EDITOR OF THE *Daily News*.

“Sir,—I read your leading article on “Palmistry and Phrenology” with much interest, but much surprise, at the dogmatic tone of your objections to phrenology, as you ground your objections, not on your own investigations, but on those of men—some of whom were vivisectors, and others—who first injured or destroyed the brain to ascertain its functions, and diagnosed from dead matter what was healthy living organism, what inert lesions and dead nerves could do in perfect health!

“Permit me, with all respect, to say that I have made the subject of phrenology the practical study of a long life. I first saw the large collection of crania, casts, and busts, of Dr. Spurzheim when twenty-three years of age; now I am eighty-two years of age.

“The subject afforded materials for jest and ribaldry when my inquiries began, but facts demonstrated accessible truths, and I have found the leading principles of phrenology as logically consistent as any problem in Euclid.

“My convictions are the result of direct observation of the relations between organization, capacity, and character; and I have been singularly confirmed in the truths of phrenology made in repeated visits to schools, workshops, gaols, and asylums, as well as from intercourse with men of extraordinary talent, aptitude, and special skill—all have confirmed my conclusions.

“A journal like the *Daily News* is, I am aware, restricted as to space; but as I limit myself to some five hundred words, I trust your sense of justice will allow me to quote one or two cases, out of many thousands in my experience.

“When in the City of York, many years ago, I was invited to be present at one of the ordinary meetings of the Yorkshire Philosophical Society, and met Dr. Thomas Simpson,

physician to the County Asylum, who asked me if I would visit with him the County Gaol, and give him my impressions of three prisoners committed for trial, two of whom he brought into the world, as a surgeon, when in practice in Maresborough. I met Dr. Simpson and the Governor, and with them visited the cells where the prisoners were waiting their trial for murder. I took a practical estimate of their cerebral developments and combinations. The men were charged with the murder of an old man, a beerseller, from whom they got only 2s. 4½d.

"I declared Number One to be incapable of committing murder. Number Two, if opposed, would resist to the death. But I said Number Three was the man who was the most likely to commit murder.

"The men were tried, condemned, and executed. At the trial it was proved that Number One stood guard outside the door against surprise. A woman at the back of the house, hearing a noise, stood on a bucket, and saw Number Two striking the old man on the floor. Number Three was proved to have first attacked the old man, and left him as dead. They then went down to the river to wash the blood from hands and clothes. But conscience led them back again when the old man was reviving, when Number Two finished the bloody work unto death.

"When taken to the scaffold, Numbers Two and Three walked steadily over the Castle Yard, but the feeble heart of Number One gave way, and he was dragged, insensible, across the Castle Yard like a sheep to the slaughter-house.

"Eugene Aram's skull, with a label over his name, and the date of execution, was put into my hands for an opinion upon it. My conclusion was to the effect that he was characterized by traits which were ascribed to Eugene Aram. My opinion singularly agreed with that of Dr. Inglis, and others, at the meeting of the British Association at Newcastle-upon-Tyne.

"I have a volume before me containing four hundred portraits of eminent musicians, and all exhibit large developments of brain in relation to musical harmony. It appears to me utterly impossible to find a good musician deficient in nervous structure giving the power to realize harmonious, musical manifestations.

"I could fill a volume with facts from my own experience, and respectfully ask you to give insertion to this note.

"I have the honour to be,

"Your obedient servant,

"E. T. CRAIG."

February 25th, 1886.

HYPNOTISM.

“MAN is fearfully and wonderfully made.” Nowhere are we led to realize the truth of this assertion more fully, than when we attempt to study the human brain, in its psychological and physiological aspects.

Much has been done in the last century in the way of elucidating the functions of various nerve centres, and yet there are many things in relation to the brain itself which remain almost a terra incognita. Many functional disturbances of the nervous system, giving rise to unusual and unnatural phenomena of thought and action, have always been and are yet, to a certain extent, sources of mystery. Whatever was not capable of being immediately expounded by scientific demonstration has, by the great wonder-loving masses of mankind, been at once attributed to a supernatural agency. A peculiar condition of the nervous system, known at various times, and designated by various writers, as mesmerism, electro-biology, clairvoyance, animal magnetism, odylic or odic force, hypnotism, &c., has, as far back as the history of mankind extends, attracted the attention of the scientific, and excited the wonder of the seekers after the mysterious and the supernatural. For many centuries these manifestations were supposed to originate from some mysterious force or influence emanating from certain individuals, and through which they were capable of influencing others.

Among the Egyptians, the Babylonians, the Chaldeans, the Persians, the Greeks, the Hindus and the Romans, diseases were supposed to be cured by the touch of the hand of those persons possessing this mysterious power. The priests threw people into profound sleeps in the shades of the temples, during which they were supposed to have prophetic dreams. The priestess who presided over the sacred oracle at the temple of Delphi, while sitting on the golden tripod, breathed the gases emanating from the subterranean cavern, and passing into a condition of trance or hysteria, gave forth incoherent utterances and exclamations which were recorded and recognized as communications directly from the god Apollo.

Numerous pretenders have arisen from time to time, who have made use of these phenomena for the purpose of deceiving the ever credulous public, and gratifying their own mercenary motives.

During the reign of Charles II., Valentine Greatrakes became famous for curing diseases with a mere touch of the hand. He believed, let us trust, honestly, that his power was

a gift from heaven. Maxwell in 1679 published a treatise on "magnetic medicine" and attributed the cure brought about by himself and others to the accumulation of a subtile fluid which was found in the body of the patient, and also was diffused throughout all surrounding nature. He believed a fortunate few had the power of controlling the distribution of this fluid and were capable of concentrating it, and in this manner curing disease. The theory of animal magnetism was brought forward in Vienna by Friedrich Anton Mesmer, in the year 1775. "There is," he said, "in nature a universal fluid, and through this the human body possesses properties analogous to those of a magnet; there are to be distinguished in it poles equally different and opposite, which may even be communicated, changed, destroyed, and restored; even the phenomena of inclination is observed therein." This magnetic fluid, he claims, when properly manipulated, could be made to cure all diseases.

Mesmer was a charlatan of the most pronounced type. Appreciating the influence which mysterious surroundings have on the imagination, he arranged his apartments where he received his patients, so that the mind should be overawed and fully impressed with the presence of the supernatural. The rooms were dimly lighted, and hung with mirrors; soft strains of music at intervals broke the profound stillness; delicious odours were wafted through the air; and the patients, joining hands, sat in solemn silence around an immense caldron, in which simmered a decoction of herbs.

During this impressive scene, Mesmer glided in, dressed in the garb of a magician, and began his passes and gentle manipulations. The effect is said to have been marvellous. Nervous individuals became hysterical or fainted, while others were seized with palpitation of the heart, and many were thrown into convulsions.

It is said the French government offered him 20,000 francs for his secret, which he refused. After the death of Mesmer, the Marquis de Peuysegur, a distinguished nobleman, somewhat revolutionized the ideas of Mesmer, by showing that many or all the phenomena could be readily produced by gentle passes or manipulations, causing sleep.

This method was followed successfully by Deleuze, Bertrand, Georget, Rostan, and Foissac, in France, and by Dr. John Elliotson in England.

In 1845, Baron Von Reichenbach, attempted an explanation of the phenomena, by his theory of a universal fluid which he called *odyl*. About this time, also, Dr. James Braid, of Manchester, began his researches in regard to mesmerism,

and discovered that he could produce "a peculiar condition by a fixed and abstracted attention of the visual eye on one object not of an exciting nature." This condition he called Neuro-hypnotism. For the sake of brevity, it has since been termed hypnotism.

Dr. Braid was the first to present mesmerism in its scientific aspect. Much was also done in shedding light on the subject by Herbert Mayo and Dr. William B. Carpenter. Re-investigations, resulting in the elucidation of other scientific facts in relation to the subject, have been made by Weinhold of Chemnitz, and Dr. Rudolph Heidenhain, Professor of Physiology in the University of Breslau.

The researches in hypnotism of Charcot and Richer, and their very interesting experiments at the Salpetriere, have developed many other points that were previously obscure.

D. Hack Tuke, M.D., Fellow of the Royal College of Physicians, London, has recently published a small work, showing the relations of somnambulism and hypnotism.

Now, what is hypnotism? Much has been said and written on this subject. At one time the popular tide of belief in its reality has run high, and again the waves of scepticism have swept over it, and, for a period, almost hid it from view. But to-day we may consider it as having been tested in the scientific crucible, thoroughly established, and well worthy the attention of the medical profession.

No medical man, acquainted with the phenomena, and versed in the literature of the subject, can deny its existence. The theory of a subtile force or fluid passing from the operator to the subject has long since passed away.

The subject may be considered a piece of mechanism of peculiar construction, capable of certain unusual conditions and movements, which only await the bidding of the operator to be set in motion. Hypnotism in many respects resembles somnambulism. I have observed that the somnambulist has usually yielded most readily to an effort to produce the hypnotic condition. An illustrative case is mentioned by Dr. Tuke in his recent work, of a girl, sixteen years of age, admitted into Guy's hospital, Dec. 19th, 1882, "on account of headache and sleep-walking." On concentrating the sight and attention for a few moments on a watch held a distance of sixteen inches, and on a level with the eye, she readily passed into the condition.

In both somnambulism and hypnotism we find the individual performing what we may term unconscious cerebration. There is to a certain degree, undoubtedly, a temporary suspension of the controlling, inhibiting power of the cortex.

Whether this disturbance of the normal equilibrium between the various encephalic centres is purely dynamic in its character, vaso-motor, or partially both, is not yet fully determined. However, as it is almost impossible to conceive of any organ of the body engaged in its functional activity without an increased supply of blood, I am inclined to believe that the vaso-motor condition plays an important part.

When the patient is first hypnotised, let us consider the cortex of the cerebral lobes in an anæmic condition. According to the researches of Hitzig, Ferrier, Fritsch, Hughlings Jackson, and many others, certain movements are due to nervous actions in the gray matter in certain areas on the surface of the cerebral lobes.

The will is suspended while in the hypnotic condition, and the subject connected with the external world, solely through the sensorium at the suggestion of the operator.

Why may not these suggestions to the sensory centres so control the vaso-motor condition as to regulate the blood supply to the area of the cortex required to produce the necessary action? I am aware that sometimes there is flushing of the face in the hypnotic state, and that the retinal vessels have been examined without discovering contraction; but even this is not proof positive that the surface of the cerebral hemispheres is not anæmic.

Haidenhain also hypnotised a subject who had inhaled nitrite of amyl.

But we must remember that the effect of nitrite of amyl is quite evanescent, and even if its effects remained, the hypnotic condition might be sufficient to arouse the paralyzed cerebral vessels to contract.

There are various degrees of sleep, from the slightest slumber to the most profound coma, depending upon the condition and parts of the brain involved. So also are there various degrees of hypnotism. For the sake of investigation, we may recognize three different conditions, viz., the cataleptic, the lethargic and the somnambulistic. Immobility, or a tendency to occupy the same position in which the various parts of the body are placed, may be considered the characteristic feature of the stage of catalepsy. Tendon-reflexes are absent and neuro-muscular hyper-excitability seem also to be wanting. Another interesting fact pointed out by Charcot and Richer is the perfect uniform tracing of the myograph, which is shown when the instrument is applied to the muscles of the extended limb of a subject in this stage. The uniform tracings of the pneumograph are also no less insignificant. According to the statements of Charcot and

Richer, with these two instruments we are enabled to distinguish at once between the simulator and the true cataleptic. In the state of *lethargy* the eyes are usually closed, the limbs flaccid, and the body powerless ; the pneumograph shows the respiration to be deep and somewhat irregular.

The tendon-reflexes are usually exaggerated and neuromuscular hyper-excitability exists as a marked characteristic. In some individuals this exists to such an extent as to enable us to secure results quite similar to those obtained by Ducheen through the application of galvanism. Analgesia in this state appears to be complete. On two different occasions, I have performed minor surgical operations when the patient was in this condition—the first was lancing a bubo and the second an ordinary abscess. In neither instance was there the slightest pain experienced.

In the somnambulistic stage the phenomena are much more complex, and, with our limited physiological knowledge, difficult of analysis. The patient is in the midst of a dream, the incidents of which are inaugurated by the suggestion of the operator. The will is suspended and the perceptive centres of the cortex are called into play while consciousness is absent. "It is not therefore," says Dr. Tuke, "a mere question of the cortex of the hemispheres as a whole, on the one hand, and the ganglia at the base of the brain, on the other, but of different localized areas in the hemispheres themselves as well." The reflex action of the cortex apart from consciousness, as insisted upon by Prof. Laycock, is as great a fact as the reflex action of the basal ganglia, the medulla and the cord. In hypnotism, then, we may not only have the perceptive centres of the cortex unaffected, but also mental functions in action though the will is suspended. It is not pure automatism.

In the *Revue Philosophique*, Nov. 1880, page 478, M. Ch. Richer says :

"The somnambulist has a perfect memory, a very lively intelligence, and an imagination which constructs the most complex hallucinations. We have in this condition an illustration of the reflex cerebral action of Prof. Laycock and also organic memory. Ideas are so exalted that the memory of long past events is often recalled. So when we see in the 'Bells' a revival of all the occurrences of a horrible murder developed under the influence of the mesmerist, we witness no simple fiction, but a possible fact."

How may hypnotism be produced? It is an admitted fact that all persons are not equally liable to the hypnotic condition.

With a sensitive subject, a prolonged stimulation of any sensory nerve in close proximity to the brain, together with a concentration of the attention on one idea, is usually sufficient to bring about the condition within a few minutes.

By the prolonged stimulation of the sensory ganglion, some portion of the cerebral hemispheres becomes, as we suppose, exhausted, possibly anæmic. We shall be better able to describe this condition when our physiologists are more prepared to answer the question, "What is inhibition?"

Mr. Romanes, in his preface to Haidenhain's book, says: "The truth appears to be that in hypnotism we are approaching a completely new field of Physiological research, in the cultivation of which our previous knowledge of inhibition may properly be taken as the starting point."

Dr. Braid's method was to concentrate the attention of the sight of the patient on a glittering piece of glass, or some other bright object held just above the level of the eyes and at a distance of ten or fifteen inches. At first the pupils are contracted and then slightly dilated, sometimes widely, and in a short time usually resume their normal condition. I have noticed, however, in a few subjects that the dilatation continued throughout the hypnotic condition. Respiration is also usually increased.

Professor Tamburini, of Reggio Emilia, has made a number of observations with the pneumograph, and in some instances found the frequency of respiration to be doubled and the respiratory pause suppressed.

From observation and experiments, we arrive at the conclusion that hypnotism is a fact; an unusual physiological condition brought on by a perverted action of certain parts of the encephalic centres. It affords a rich field for investigation, and in the hands of skilful men, so powerful a method of influencing the nervous system should certainly be utilized for remedying disease.

The German physicians, as is the case in many other avenues of medical thought, have probably done more than all the rest of the medical world, in establishing hypnotism as a therapeutic remedy. Dr. Berger of Jena has reported a number of cases of spasmodic trouble and of hysterical mania, relieved by putting the patient into the hypnotic sleep. Dr. L. E. Fisher also reported similar cases in 1883. Dr. Creutzfeldt, assistant to Prof. Preyer, reported cases cured in the same manner. (Preyer *Der Hypnotism*, Berlin, 1882.) In the *Berliner Klinischer Wochenschrift* for Jan. 21st, 1884, there are four (4) cases, in the clinic of Prof. Baumler, reported by Dr. A. Wiebe. Two were hysterical patients, suffering

from violent and persistent clonic spasms. One was cured and the other was relieved. The third case was one of functional hemianalgesia and hemiasthnaesia in an apparently otherwise healthy girl. Hypnotism entirely cured her. The fourth case was one of trigeminal and brachial neuralgia which had resisted counter-irritation, electricity, and various internal remedies. In a single hypnotic sleep, the pains entirely disappeared. His method was to put the patient into the hypnotic sleep and allow them to remain until they came out of it spontaneously. In a recent number of the journal of the Am. Med. Association, we find a case mentioned quoted from the *Gaz. Med. de Paris*, which came under the observation of Prof. M. Beauni, Professor of Physiology in the Faculty of Medicine at Nancy. The patient was a girl, twelve and a half years old, and suffering from her fifth attack of chorea. As soon as the child was hypnotized, all choreic movements ceased, and then when asked to write, instead of the previous meaningless scrawls, her writing was quite steady and legible. These seances were continued for a number of days and she was completely cured.

The statement has occasionally been made that only individuals possessing diseased nervous systems were capable of entering the hypnotic state. This I do not believe; I am, however, more inclined to the opinion that every living being is to a certain extent, capable of being hypnotized, there being of course a wide difference as to susceptibility.

M. Brimond has recently made a large number of experiments on soldiers and sailors from fourteen to twenty-six years of age, and proven positively that the phenomena of lethargy, catalepsy, and somnambulism, may be produced in healthy non-hysterical people. (*Med. Record*, March 22nd, 1884.) We know that by the prolonged stimulation of some sensory nerve, we are capable of producing a condition similar to hypnotism in many of the lower animals. This I have often produced when a boy, for my own amusement, in chickens, dogs, cats, &c.

By means of the sphygmograph, the myograph, and the pneumograph, hypnotism is proven. It stands out as a scientific fact, and is full of rich resources through which we may study more closely the psychology and physiology of the human brain. Every year finds the scientific world in possession of new facts illustrating the wonderful influence which the mind has over the body.

IN the best books great men talk to us, give us their most precious thoughts, and pour their souls into ours.—W. E. CHANNING.

TELL-TALE FINGERS.

BY A BELIEVER IN PALMISTRY.

“Es nuestra alma en nuestra palma.”—SPANISH PROVERB.

DESBAROLLES is dead, but the art for which he did so much lived long before him, and will grow and flourish after him. If any doubt that the system deserves to grow let the sceptic experiment on the hands of his friends and acquaintances, guided by a few of the plainest rules laid down in “*Les Mystères de la Main*.” No sign stands alone, but some signs are less than others beset by palliations, exceptions, or enhancements. A hand should be half palm, half fingers. This is the proper balance of parts in a hand of faculty. Desbarolles says this proportion denotes a mind which is at once synthetical and analytical. The hand with much palm and little fingers goes with a strongly material character—love of eating, perhaps, and of comfort; a vulgar soul, content with a vulgar paradise. Much finger, and hardly any palm, connote the opposite characteristics—unpracticalness, neglect of the body, and absorption in less material concerns. Mrs. Jellyby, who was often “looking into Africa,” and who postponed maternal and household cares in order to correspond about the affairs of Borrioboola, had doubtless great length of finger and very little palm. The palm may be normal, considering the size of its owner, and the fingers may be exceptionally long. Had this been Mrs. Jellyby’s case, the mission to Africa might have gone on all the same, but the children would not have fallen downstairs quite so often, the house would have been less uninviting, and the lady would have been less untidy in her own person. Long fingers give power over detail. ‘Finish’ belongs to the drawings of the long-fingered and to their musical performances. With them, genius may well seem “nothing but labour and diligence,” as Hogarth defined it; for the longer they work at a task, the more they infuse into it of careful and successful elaboration. It is the short-fingered who, striving to better their performance, spoil what they would mend. Short fingers go with gifts (if any) of the impressionist sort in art and letters. It is partly true that “conversation is a lost art”; but the poor survival from better days is worth considering in this connection. There is a “type of man who loves clear intellectual light before everything, and who derives pleasure from objects and ideas only so far as he defines and understands them. . . . Social intercourse is to him simply an opportunity for exchanging clear ideas

and sharing in sentiments which repose on definite convictions." This is the man with very long, taper, rather pointed-tipped fingers. "For another class converse owes its value to the opportunity it affords for indulging in vague emotions." This class has short fingers, very taper, and very pointed at the tips. The hands are probably very white. They are certainly soft and fleshy. Short fingers (always supposing a "hand of faculty" before us) denote a power of seizing things by their essential points—quickness, "all-there-ness." With them often goes that "sense of proportion" which Plato quaintly said "saves men's souls." The short-fingered know the intrinsic from the merely extrinsic. With them, "Things done well, and with a care, exempt themselves from fear." They succeed at once or not at all. But it must be said that in an otherwise unpromising hand short fingers may mean nothing more than impulsiveness, and the inability to go deeply into anything; and long fingers, which in a good hand may mean thoroughness, often "denote love of trifles and want of that saving sense of proportion." Beau Brummel had, doubtless, very long fingers. So probably had his valet, who pointed to "our failures."

There are two hinges (it is more convenient so to call them, for 'joint' means the whole space from hinge to hinge, or hinge to tip) in the finger besides the hinge attaching finger to palm. If the hinge nearest the finger-tip be strongly marked, order in the ideas may be inferred. Desbarolles calls this developed hinge when it occurs in the first finger the *nœud philosophique*. Of a person possessed of this, it will generally be safe to say that he questions everything, and that his doubts are a pain to himself. Religious controversies agitate him peculiarly. He seldom sits through a sermon without longing to interrupt the preacher and set him right. A great many owners of *nœuds philosophiques* do not go to church at all. From the point of view of the rest of the congregation, the room of these fidgetty, critical worshippers is better than their company. A large middle hinge promises order in material things—tidiness, punctuality, and many serviceable work-a-day qualities. It is common enough to find this hinge large. It is comparatively rare to find order in the ideas marked in the other hinge. Large hinges take away from the spontaneity of the qualities indicated in a finger. The large-hinged hands belong to beings of the plodding order—to the inductive, rather than the deductive, philosophers.

Lithe and supple hands are eloquent of faculty—the hands of dull people often move as if made out of wood. Tradition

says fingers that show light between them belong to sturdy, independent characters. There is a kind of hand in which, in repose, the fingers fall back one upon the other, with not a hair's breadth between. This hand is one much like that cut out of a sheet of putty, or in unbaked pastry; and it indicates great want of originality, conventionality, and reverence for the opinion of others. In the colour of the lines of the palm is found the signs of temper. The colour ought to be pink. If red, it augurs hot temper; if crimson, violent; if livid, brutally violent; and if pale and wide (other things concurring), it probably denotes a sulky temper. Generosity is plainly indicated; but not so its degree and kind. The first finger, which turns away from the thumb, proclaims love of giving, or at worst love of spending—open-handedness. The same finger running towards the thumb, and making the hand look claw-like, means miserliness.

One of Oscar Wilde's much-quoted sayings is, "There is so much soul in teeth!" Palmistry declares that there is "much soul in nails." The hand with small nails buried in flesh is like a face with sightless eyes, or no eyes. The nearly nailless may be kind, useful people, but they discover no Utopias—they won't even tolerate ideality. The high things of holiness, of art, of human character, are not within their field of vision. They "fag in paltry works, no god attending." Shakespeare says, "There's no better sign of a brave mind than a hard hand," and palmistry supports the view, if by 'brave' Shakespeare meant long-enduring and energetic. Energy is also shown in the width of the hand across the knuckles; and endurance in a curved outline from the base of the little finger to the wrist. Experience proves that wit is indicated by long, taper fingers which curl slightly upwards at the tips. Desbarolles makes no mention of the quality of humour, perhaps because there is no French word for it, or because humour is moribund, or extinct. A crooked middle finger is the sign of mendacity. These are a few of the signs which are the most trustworthy when viewed apart from the whole hand. The great difficulty of palmistry is that all the signs have to be summed up, and a balance struck. Sometimes single signs directly contradict other signs. Desbarolles claims the power of prediction for his art, and bases palmistry on astrology; but Sephardo, not Desbarolles, is right—

True; our growing thought
Makes growing revelation. But demand not
Specific augury, as of sure success
In meditated projects, or of ends
To be foreknown by peeping in God's scroll.

I say—nay, Ptolemy has said it, but wise books
 For half the truths they hold are honoured tombs—
 Prediction is contingent, of effects
 Where causes and concomitants are mixed
 To seeming wealth of possibilities
 Beyond our reckoning, * * *

O my lord, the stars

Act not as witchcraft or as muttered spells,
 I said before they are not absolute,
 And tell no fortunes.

Yet, in two senses, a man has “his fate in his hands.” The hands tell his qualities. His qualities are responsible for more than half his destiny; for do we not see, every day, how little outer circumstances affect us, how much we ourselves make our own fate? The honest sceptic, before he spurns palmistry, will experimentalize with the rules here laid down.—*Pall Mall Gazette*.

THE LITTLE BOOKSELLER FITZ.

CHAPTER I.

THE FIVE-POUND NOTE.

“BEDAD, Misther Murphy, I don’t believe you ever saw the likes of your humble servant for downright maneness and dishonesty.”

“You’re very frank about your faults, anyway, Fitz.”

“That’s about the only bit of saving-grace your Riverence will find about me.”

“The recognition and acknowledgment of a fault go a long way towards amendment.”

“But they are a mighty way from it all the same.”

“Do you mean to say, when you speak of being dishonest, that you find yourself capable of doing a dishonest act?”

“Bedad, I do!”

“You surprise me!”

“I surprise myself, begorra! or *it* surprises me I ought to say.”

“What do you mean by *it*?”

“I mane the baste inside me; I mane the ravenous baste—the gluttonous baste—the baste that cannot see a portable thing that isn’t his but he says to me, ‘take it! take it!’—the dharty baste that—dog or devil—won’t to kennel. And, bedad, that’s poethry! It comes out of me whether I will or no.”

“You’re a queer fellow, Fitz.”

“Your Riverence may well say that,—so quare that I’m a constant source of speculation, inquiry, and wonder to myself. Who’s the philosopher that talks so much about the ‘I’? He succeeded in making the world think he was somebody because he discovered that he was an ‘I’; and a divilish cackling he made about that

same. I don't know what he would have said if he'd done like me—discovered that he was two 'I's.'"

"You talk in riddles."

"I live in riddles, your Riverence, and that's worse."

"But how about your two 'I's'?"

"Well, there's the 'I'—the 'me'—that is talking to your Riverence, that's a bit intilligent and a bit moral and a bit poetic; and there's the other 'I,' that's neither poetic nor moral, and as cunning as the father of sin; the baste aforesaid, that seldom sleeps, that is never quiet, and that is for ever holding me down with the weight of its brute passions. Those are the two 'I's'; and the one has to be constantly dotting the other—with a sthick too, so to speak."

"You seem, however, to have so thorough a knowledge of that lower 'I,' as I may call it, that I should not think it often gets the better of you."

"By the Holy Moses, but it does—daily; but it does it in such a mane, underhand way, that often I don't see it till the thing is done: there's where the maneness of the baste is. Look you: only the other day a gentleman came in to buy a book, and as he was counting out the money for it he dropped a sixpence, and could not find it. I made sure it had rolled into that corner by the 'Whole Duty of Man'; they've done it before; but I wouldn't look until he had gone out. I'd no sooner picked it up than I knew my baste—my dæmon, as Socrates would call it—had played me another dirty trick, and I ran out to hand it to my customer; but I could not find him. Then—imagine the cunning of the baste—he began telling me that it was all right, that I had endeavoured to restore it to its owner, and that, failing to do so, it was now honestly mine. It even beguiled me to put the coin into my pocket among the honestly-begotten children of my trade. But it would not do, sir; it burned—burned, and I had to take it out for fear it should pollute the whole flock. I put it there, beside those Church Services, and said, 'Lie there till your right owner comes in, an' if ye timpt me again, by the holy piper, I'll nail ye to the counter, sterling silver tho' ye be!'"

"Did the rightful owner ever come in?"

"Yes; but it was nearly a month before he did. And would you believe it? he came in for a Church Service! I gave him the sixpence, and I said: 'I thought it rolled there, by the 'Whole Duty of Man,' but I was too lazy to go and see until you had gone out; and if you had not come in I should have nailed the malefactor among the spurious coins on the counter there.'"

"And what did the gentleman say?" asked Mr. Murphy.

"He said, 'Thank you'—never a word more. I could tell you scores of instances of the way the old 'divil' tries to circumvent me," continued Fitz; "I have to be for ever on my guard against him; and just think of the insidiousness of the villain: he will try to get at me through appetite, through vanity, or it may be

through my dread of hunger, and while I am resisting him there—crack! he has taken me on another tack. The wildest devil that ever was; and the biggest strategist too. If Lee were half the strategist he is, he would have doubled up the Federals long before this and won the game. But he can't touch the old man there."

"Why do you call him the old man?"

"Whist! (whispering); it's the old dad."

"What! do you mean——?"

"Just that. There was little that was good in Michael Fitzpatrick; he only fell short of being a fiend incarnate by the breadth of your palm; and I believe he was only saved from the gallows by mother. She was an angel from heaven, barring the wings; and with the usual luck of the like of her, she got this devil for a master. Fortunately, he broke his back before the law had done a worse thing for him. Then mother broke her heart—out of pure companionship, I believe—and died too. If they would have let her she would have gone and succoured his worthless soul in hell."

"My son!"

"The Lord have mercy on his soul! Ah, Father, if you had known what a place he made our home, and what a life he led that angel of a woman, you would not think hard of me for a bitter word! It comes of the brandy he drank, and the bread we lacked. We starved so constantly that it has left a permanent hunger in my mind. And so he tempts and torments me still! All his evil passions grovel within me like a herd of swine, and are only kept from destroying me by mother's good spirit. She used to put her hand on my head, Father, and say, 'Patrick, sonny, don't take pattern of your poor father: be good!' And that would quieten me: and even now, when the old spalpeen tempts me, I feel her gentle hand upon my head, and it is as if I heard her saying: 'Be good, Patrick, my boy, be good!' But the old boy is sometimes too much for her, as of old."

The above conversation, as may have been guessed, took place in a book-shop—in an old book-shop, in fact. The place and time were Manchester during the well-remembered Cotton Famine, and the *dramatis personæ* were Patrick Fitzpatrick, better known among his clients as the Little Bookseller Fitz, and Father Murphy, a worthy Catholic priest. The first named was a man of uncertain age, but of no uncertain lineaments of form and face. He was under the medium size, but broad-set, and with a certain awkwardness and angularity of movement that suggested an intimate acquaintance with rheumatism. His face was in strict correspondence with the rest of his person. It was rough hewn, with broad, decisive lines, and bold prominences, but with most of the delicate lines wanting, as though the creative artist had left the sketch unfinished. The line of the mouth lacked undulation, the nose was too bottle-shaped, the eyes too small; his ears were large and protuberant, as though they had been used to hang him up by when young; his brow irregular, with hills and hollows, and

over-shadowed by a mass of reddish-brown hair that had the appearance of an ill-cared-for thatch. Such was the man in outward appearance, and when quiescent his features, it must be confessed, were unlovely; but when animated, as now, while in conversation with the worthy Father, there was a light in his eye and upon his face that redeemed his visnomy greatly.

It was getting late, and when the Father, after a few confidential words before parting, took his leave and stepped out into the raw, snow-laden night air, the little bookseller prepared to put up the shutters of his little shanty of a shop, for it was nothing better, being what our American cousins would call a one-horse affair: a little primitive looking structure made of planks nailed to a rough framework of deals and covered with roofing-felt. It stood in front of a wheelwright's workshop, dividing the frontage with the diminished gateway. Over the window, which in fine weather stood open, displaying its literary treasures to the passers-by, was inscribed in inartistic yellow letters, on a black ground, the words, "P. Fitzpatrick, Dealer in Books: Old and New."

Bookseller Fitz had buttoned up his coat and turned up the collar, and had taken a shutter from behind the door, when the latter was opened, and an ancient little female body, dressed in sober and threadbare black, stepped in. Fitz set down the shutter, retired behind the counter, and put himself in the attitude of expectant trade. The little body produced from beneath her shawl several old volumes carefully wrapped up in a newspaper and offered them for sale.

Fitz took them up, one by one, scanned them critically, replaced them in the paper, and shook his head. The poor woman's countenance fell: she had watched him as he examined the books—at first with no uncertain expression: it plainly said, "There are treasures for you, if you like!" But as there came no responsive expression into his eyes, her confident look gradually faded. Still she waited: perhaps they were beyond the poor man's means to buy—so she seemed to think. Then the bookseller said—

"I can't buy them, ma'am."

"You can't buy them!" she repeated, almost incredulously. Then, after watching his face for a moment: "I should be glad if you could; I would not have brought them to sell but that we want the money—sadly."

"I am very sorry, ma'am; but they are of no use to me."

"No use! They are valuable books; they cost a deal of money when they were new; they are old, but I understand books become more valuable the older they get."

"That depends, madam. It is not so in this case."

"I can assure you we value them very highly, and nothing would have induced me to part with them but dire necessity: this especially (taking up a volume)—the precious Word of God. And you say you can't buy them?"

"Look here, ma'am (pointing to a shelf behind him), all these

are Bibles; they came to me in odd sets—thrown in for the most part as make-weight: they range in price from twopence to two shillings. The Word of God is cheap to-day, ma'am" (with the faintest suspicion of a smile trembling at the corners of his mouth).

"It is very sad!"

"It is indeed!"

Bookseller Fitz began to refold the volumes in the newspaper. He wanted to get home.

"Are these others of no use to you? This hymn-book was my poor father's; he gave it to me on my marriage" (blotting a couple of tears with the finger tip of her darned black gloves).

Fitz shook his head.

"And this other?—they say it is a rare book! Unfortunately, the first volume of it is lost."

It was the second volume of Smollet's "Humphrey Clinker," in calf.

The little bookseller replied, unsteadily: "I have no doubt they are very valuable to you, ma'am, and you would probably think I was insulting you if I told you how much they would be worth to me."

Said the woman, putting her hand to her throat, to stop the rising lump we all know: "I would be glad to accept anything, for, sir, to tell you the truth, my son-in-law has been out of work for ten weeks, and I myself have earned very little of late, and we haven't a bit of bread in the house—and to-morrow Sunday. What is the most you could give me?"

"I could not offer you more than sixpence for them."

It seemed to take the little body's breath away; she gasped, and said: "Sixpence!" and then, after a pause: "Could you not possibly make it a shilling, sir? We older ones could manage, as we've had to do before; but there are two little ones, and it's so pitiful to hear them cry for bread, and the cupboard bare."

Fitz turned and looked out of the window, and for a moment the trickling moisture on the window-pane seemed to be reflected in his eyes: then, turning to the counter again, he took up the old Bible, held it in front of him with both hands, and passed the leaves under each thumb, alternately. This was a peculiar action of his in examining a book before buying it, and it was the more striking because of the stiff, awkward way in which he stuck out his elbows in consequence of the rheumatically affection before mentioned. Having scanned the book in this manner for a few seconds, he laid it down on the counter, and said: "I will give you four shillings for them."

The little woman was profuse in her thanks, and hoped that in the end he would not be a loser by his kindness.

Fitz made no reply, but opened the till to take out the money. He found, however, that he could not make up exactly the four shillings, and so handed her two half-crowns.

The poor woman's eyes shone with gratitude, through tears, and

after thanking him again and again, she slipped the coins into her glove and left the shop.

Bookseller Fitz put up the shutters of his little shanty, locked the door, and once more took up the Bible and opened it. Out of its pages he took a piece of paper, and held it up to the light, the better to examine it. It was a five-pound note—a five pound note, as fresh, clean, and uncrumpled, as when first issued from the bank. As he stretched it out between his two hands, and drunk in, as it were, at the auditory avenues of his soul the crisp bank-notey sound—the ‘money music’ he once called it—a smile overspread his features, and a chuckle of satisfaction issued from his throat. It was not a pretty smile; there was craft and cunning in it, and the gratification of a low nature; it gave you the idea of the grin of a satyr at the result of some successful knavery.

Having delighted his eye with his treasure for some minutes, the little bookseller carefully folded it up and stowed it away in his letter-case, and put it in his breast-pocket. Then he extinguished the gas and went out, carefully locking the door after him, and wended his way home.

CHAPTER II.

“WE ARE QUILTS!”

It was again a Saturday night, and in his little shanty the Little Bookseller Fitz was crouching over his little stove, warming his big hands by the bright glow that he had coaxed up behind the bars. His striped-cloth cap was pushed on to the top of his head, displaying his knotty brow and small, thoughtful, even cunning, eyes. On a bench beside him lay a glue-pot, and all about him a miscellaneous heap of books; he had been doctoring their backs, but having got tired of the job, he had laid aside the glue-brush for the thinking-cap.

Outside there was a heavy Manchester fog; some of it, too, had got inside, making bookshelves and everything, including Fitz himself, look shadowy and indistinct. His eyes were half closed, and the flickering fire-light played upon his unhandsome features, bringing them now into sharp relief, and now allowing them to relapse into the pervading gloom. On the far wall the gaslight threw his shadow in indefinite outline, the peak of his cap being transformed into a horn, thus giving him a satyr-like look. There was something wild and weird-like in the picture, and, to say truth, he looked like a satyr in a brown study.

Just then a muffled-up figure thrust open the door, and disturbed the little bookseller in his dreamy ruminations.

“You were a long way off just then,” said Father Murphy (for it was he), disengaging himself from some of his wrappings: “I doubt it’s no use offering you the usual penny for such thoughts as you must have been having, to judge by your looks.”

“Out wid yer penny, thin, and see!” replied Fitz, with a smile.

"Bedad, I'd give you the lot, and welcome, for a brass farden, if by that means I could rid meself of 'em."

"Oh, then, it's choice companions they must be, if you're ready to part with them so cheaply."

"Choice companions do you say? As choice as newts and toads and adders, and things of that kidney."

"What is it that is troubling you now? Come, out with it!" so saying, the Father laid his hand on the little bookseller's shoulder, and looked him full in the face. As Fitz hesitated, he said again: "What is it, Fitz?"

"It's the sour grapes that the ould man ate that have set my teeth on edge," said Fitz, with a humorous twinkle in his eyes.

The good priest shook his head, with a smile, and said: "Did you ever hear the fable of Mephistopheles and the Student?"

"No!"

"A student was seated in a friend's chamber regarding a bag of gold which lay on the table. He said to himself: 'I wish Melchior would not leave his money about so openly; I fear the devil will be tempting me to take it.' He had scarcely got the words through his teeth ere Mephistopheles, with his oily tongue and his sardonic grin, was by his side. The student started, but he was instantly at his ease again. 'I was sure you would come,' he said; 'but you can spare your pains, nothing will induce me to take it.' The fiend grinned, and pointed to the miniature of a girl that he held in the palm of his hand, and then vanished. His grinning face had hardly faded from view against the arras ere the young man had nicked the purse and fled stealthily from the chamber."

"I take your meaning, Father; but isn't it rather *faible*?"

"Still your jests!"

"Isn't it all a big jest, Father?"

"No, no; it is no jest. I fear you read too many of these books (waving his hand towards the shelves). It is not good for you; they unsettle your mind."

"Unsettle my mind, do you say? Bedad, it's not the books that unsettle my mind; that was unsettled long before I took to reading. Thanks to the dad, I could not read till I was twenty. Nay, Father, if you took away the books I should go mad. It is not much farther I have to go, you will perhaps be thinking" (with a laugh).

With the Little Bookseller Fitz there was always a laugh ready; but behind the laugh the tears were not far to seek.

"But you get too much of it: all the time that customers are not in the shop you are poring over books, and from early morning till late at night. You should take a walk occasionally."

"And see all the misery there is: White Famine stàlking about here and pinching the people till it makes your heart ache to see them; while his Red brother rages at the other side and turns creation sick!"

"You've got a fit of the blues, my son. Why not go a little more into company, and enjoy society a bit?"

"Who wants to see the likes of me—a poor, ill-shapen, beetle-browed Irishman. The ladies would as soon talk to a gorilla.

"There is only one other way for you."

"What is that?"

"You must marry."

"Father, shall we have another fable?"

"No; no more fables, if you please."

"Very well, then, I will tell you a little fairy tale instead. Once upon a time a poor labouring man was sitting by the way-side lamenting his loneliness. Suddenly a bright little fairy appeared by his side. She smiled upon him, and said: 'You are not happy?' He shook his head. 'You would like a wife and some little ones to cheer your home.' He knew she had said his thoughts, but he did not reply. Then the fairy looked rather stern, and said: 'Come with me,' and touched him with her wand. In the twinkling of an eye they found themselves in a wee cottage: it was a very humble affair, and playing on the sanded floor were a couple of children—a boy and a girl. They were very pretty—the girl with golden curls, and the boy with dark, wavy locks. Their mother sat near watching their gambols with pride, drinking in every word of their infantile prattle. Presently the father of the children came in, and took them on his knee and caressed them; while the gentle mother stood by with her hand on his shoulder. Tears started to the labouring man's eyes; but he still said nothing. Then the scene changed: the mother sat in a dismal garret, and sewed by a miserable light; while on a bed in the corner lay the wasted form of her husband. The labouring man scanned the sick man's features, and shuddered. Then he said to the fairy: 'Where are the children?' In a moment they were in the street, and as they passed along a little girl clad in rags, and with starvation written on her tiny face, offered matches for sale. The poor man trembled, and said to the fairy: 'That is the little girl.' His companion nodded. As they spoke a small boy came by. He, too, was poorly clothed, and his toes were out of his shoes; he looked wet and cold, and seemed ready to drop as he staggered under the heavy load he carried upon his back. The labouring man, stopping the boy to ask him his name, saw that there were tears on his cheeks. This was too much for him; he burst out crying, and implored the fairy to help the poor children, for he had nothing. Then the fairy said: 'Nay, cheer up; as yet it is only a dream;' and in an instant they were again by the way-side. 'Only a dream!' cried the labouring man. The fairy nodded assent. 'And so it shall remain!' answered the other."

"Is it wise to take so much care for the morrow?" asked Mr. Murphy.

"For those who don't is all the more sorrow; an' there's another verse of poethry for ye. Bedad, ye see in me a poet spoiled in the making. Oh, if it hadn't been for the old dad!"

"There you are again."

"Faith, and so I am, and so it will be to the end of the chapter. Ah, Father, you don't know what it is, perhaps, to hunger and to starve with cold."

"Yes, I do: one can't go amongst the people in these hard times, as I do, without knowing it."

"True, Father; but you have not famished—clemmed, as the people say here—till your whole soul has become, as it were, one big, gaunt hunger; nor have you frozen with the cold till your very conscience has become almost congealed."

"No; that I have not."

"I have: and thereby I have learned to know what the wolf-mind must be. Moralists may say what they like, Father, but it is hunger and cold that makes bad men. The father's belly is pinched and the son has a spavined conscience."

"Rank heresy, my son."

"Then I fear I must give a lot of my 'boedry' to the flames in order to save my skin; but I should like you to read some of it first."

"I must think about it. But what has put you in this mood?"

"I'll tell you. It's rather a lengthy bit of autobiography; so sit down."

Then the Little Bookseller Fitz narrated the incident of the poor woman and the five-pound note, much as it has been given in the preceding chapter. When Fitz had finished, the priest looked grave.

"Pretty bad, isn't it?" said the little bookseller.

"You owe that woman four pounds fifteen and sixpence," said the Father.

"No; we are quits!" exclaimed Fitz, slapping Mr. Murphy on the knee so hard that it made him wince and spring to his feet. "We are quits!"

"How is that?" said Mr. Murphy.

"I will tell you."

(To be continued.)

Book Notices.

Wide-Awake. (Boston: LOTHROP and Co.; London: W. H. EVERETT & SON.) This is, without exception, the most beautifully got-up periodical for the young that we have ever seen. It is of the size of the "Century," and "Harper's"; is profusely illustrated, and crammed with good things. Children—yes, and even old persons—will be delighted with it. It has at present run to two numbers—February and March—and those who want a good thing for the edification and amusement of their children will do well to send in an order for it at once. The price is one shilling, and we hope soon to see it on all book-stalls.

Since, as it is now pretty generally known, Mr. G. F. Watts purposes, as a patriotic Englishman, leaving nearly all his works to the

nation, and since nothing like a biography of the artist, or a catalogue of his works, was in existence, the brochure, entitled "The Works of Mr. G. F. Watts, R.A., with a Complete Catalogue of his Works," published as a *Pall Mall Gazette* 'Extra,' supplies a decided public want. The work contains fourteen drawings of the artist's principal works, contributed by himself, a portrait, and other illustrations. The text is supplied by Mr. M. H. Spielmann, as well known as he is esteemed as an art-critic, and whose contributions on French, as well as English, art, have for some time past given a high character to the art criticisms of the *Pall Mall*. The writer has had the assistance of Mr. Watts in what seems to have been a labour of love, and whoever comes after him, as a biographer of the artist, will have to be greatly indebted to his pages. Altogether the work is so well done, and presents the great artist and his works in so clear a light, that the pity is it has not been published in a more enduring form. Among the drawings are Love and Death, Cain and Time, Death and Judgment. The first Mr. Watts has determined to present to America; the second to the Royal Academy; and the third to the National Art Gallery of Canada.

Health Hints.

GOOD fruit is a great luxury, in which we may freely indulge, not only with impunity, but with advantage as to health as well as pleasure. It forms a wholesome sustenance, and lessens the excessive use of various articles of diet; the too free use of which tends to inflammations, fevers, dyspepsia, constipation, apoplexy, gout, jaundice, and a host of other ills. In numerous instances, violent diseases, and almost hopeless cases of chronic complaints, have yielded to the constant use of fruits.

THE vast amount of unhealthy meats, and by far a too liberal consumption of those that are good; also of fine flour, and fine hot bread, of butter, cheese, fat, oils, strong tea and coffee (all injurious in excess), the high state of cookery; the free use of condiments and seasoning, and various rich dishes and compounds, commingled and confused; all call aloud for more fruit to lessen their use, or palliate their effects, and save thoughtless beings from untimely graves, or from lingering out a wretched state of existence. Fruits have a cooling and gently laxative effect, regulating the stomach and bowels, correcting bilious affection, and attenuating and purifying the blood, which is the very life of the whole system.

IF ever you should be in a position to advise a traveller going on a sea voyage, remember that there is some mysterious service done to the bilious system, when it is shaken, by baked apples. Noticing that they were produced on board the Cuba every day at lunch and dinner, I thought I would make the experiment of always eating

them freely. I am confident that they did wonders, not only at the time, but in stopping the imaginary pitching and rolling after the voyage is over, from which many good amateur sailors suffer. I have hardly had the sensation at all, except in washing of a morning; and at that time I still hold on with one knee to the washing-stand, and could swear that it rolls from left to right.—*Letters of Charles Dickens.*

EVERY nerve in the body remembers, and to that dumb, obstinate memory we are indebted for nine-tenths of our illness. The cause of disorder is often quickly removed; the thorn, so to speak, is plucked out, but the finger tingles still. We often say we cannot recover from a fright. It is not that we are still in fear, but our nerves remember. The detrimental effect on the nerve tone of anger is well known. Repentance is nature's remedy for the nerves; it is good physiology as well as good theology. Anger increases the circulation; grief and penitence slows it. But, after all, it does not repair the nerve waste. The water extinguishes the fire, but does not repair the house. The organic tendency of one fit of anger to produce another is as true as the fact that one chill makes way for another. The problem is never simple after the first voluntary act; that sly, unfelt, unconscious form of the other set of nerves comes in with awful power. Think for a moment of the unconscious power of memory! Think of the records that no volition stamped, and that no volition can erase! Do not say that unconscious cerebration is a newly-invented myth of science. Unconscious digestion and respiration are not new, but very old, facts. You draw the line between unconscious and conscious cerebration every time you try to remember something, and cannot. You confess automatic cerebration whenever you say you can't get your mind off a certain line of thought. Why can you not? Because intellection is as much a resultant of voluntary and involuntary forces as breathing.

It is a mistake to believe that a good complexion depends upon the use of cosmetics. It really depends upon digestion, which itself depends upon our mode of life. Persons who rise early and go to bed regularly at ten, who take plenty of air and exercise, eat with moderation at regular hours, having their meals at stated intervals, long enough for the digestion of one to be thoroughly accomplished before they begin the next—such persons are sure to digest well, and in consequence have clear, healthy complexions, which will require no other cosmetics but plenty of soft water and good toilet soap.

THERE are simple means by which the hands may be kept in a presentable condition, as the use of glycerine or honey after washing them, and a little bran or oatmeal to be used sometimes instead of soap. Wearing gloves when the work is rough or dirty is quite admissible. Ladies who have rough, coarse hands should rub them with cold cream at night and may wear loose gloves. Should the hands become hard and horny, treat them with pumicestone and

lemon. Lemon is always good for the hands ; it cleanses them as well as soap and makes them soft. You should clean the nails with a brush, if necessary, but it is better to rub the fingers and nails with the half of a lemon, thrusting the fingers into it and turning until the nails are perfectly clean. Lemon will likewise prevent the skin at the root of the nails from growing upward. Use cold cream and gloves at night, which will keep the nails soft and prevent them from cracking.

THE hygiene of the eyes is very simple. For them, as well as for the complexion, good digestion is equally necessary ; more so, for no cosmetic could attenuate the yellow tinge which biliousness imparts to them, and if some mysterious pencils can supply the insufficient shadow of rare eye lashes, good health alone can give them that brightness which is their principal beauty. Never read in bed or in a reclining attitude ; it provokes a tension of the optic nerve very fatiguing to the sight. Bathe your eyes daily in salt water ; not salt enough, though, to cause a smarting sensation. Nothing is more strengthening, and we have known several persons, who, after using this simple tonic for a few weeks, could put aside the spectacles they had used for years, and did not resume them, continuing, of course, the oft-repeated daily use of salt water. Never read or work in insufficient or too broad light. Reading with the sun upon one's book is extremely injurious to the eyes.

Facts and Gossip.

MONTHLY PRIZES.—Two prizes of 5s. and 2s. 6d. respectively will be given for the best short composition by young persons, of both sexes, under eighteen years of age. The composition may be in any form and on any subject ; but they must be perfectly original. They may be in the form of a letter or a poem, or a prose description of any natural object or scene ; or it may be a fable—or, in fact, any form. One or two of the best or most characteristic essays may be published, with remarks thereon where such are needed. Each composition will be judged on its general merits. The essays must not exceed seven hundred words in length, must be written on one side of the sheet only, and must be in the hands of the editor of the PHRENOLOGICAL MAGAZINE on or before the 15th of the month. It should be borne in mind that, if doubts are entertained as to the originality of a composition, before the prize can be given, the editor may ask for the testimony of two persons as to the genuineness of the competition.

A SURGEON in Chicago, the *Tribune* of that city says, was called a year or more ago to attend a young German who had received a pistol wound, the bullet entering his face near the nose, ranging upward and lodging in the base of the brain. Though told on his

arrival that the young man was dead, the surgeon, seeing such was not the case, extracted the ball after much difficulty. The patient was in a semi-comatose condition and neither moved nor spoke for nearly two weeks. After treating him for that time he awakened out of the stupor, but his right side was paralyzed and he did not possess the power of articulation. After several weeks he seemed to recognize his friends, and learned to say one word, "Nein." Whether he assented to or dissented from a question asked him, he used the same word. Then he added another word to his vocabulary, that of "Donnerwetter." He continued to improve, and, after several months, his physical vigour was almost restored, with exception of occasional epileptic fits. He could speak but few, if any, more words than at first, but his understanding seemed to be perfect. He would do as he was told and could comprehend everything said, but his power of speech is gone, the doctor thinks, for ever.

DR. ROTH is the Crichton Browne of Germany, and he has published some ugly statistics of over-pressure in the German schools. According to these, 64 per cent. of the scholars "who should work up to graduation are much below the normal standard of health." In Denmark, where a still higher standard of education is insisted on, a Government investigation brings to light that 29 per cent. of the boys and 41 per cent. of the girls suffer from over-pressure. English teachers will be specially interested in these figures; as one of the chief answers to Dr. Crichton Browne's charges against the Code was that in Germany, where the children were put to a more severe test than here, over-pressure was a thing never thought of. Mr. Mundella and his friends must find another argument. So far they have been driven from every position they have taken up.

The *Lancet* says:—"A curious tale reaches us from Rochester, U.S., illustrating the belief held by some that there is mysterious sympathy between the individual and detached portions of his anatomy, or, as the Americans would term it, his 'physical economy.' It is related that a woman who had recently suffered amputation of the foot, experienced acute pain in a corn on one of the toes—a fact the like of which often enough comes under the observation of the surgeon, and which, though marvellous to the patient, is easily explained on physiological grounds, for the irritation of sensory fibres of a divided nerve is referred to the terminal distribution of those fibres. But the most curious part of the story tells how that on disinterment of the foot a bandage was found tightly embracing the toe on which there had been a painful corn, and how that on the loosening of the fillet the quondam possessor of the foot gained complete relief from her distressing symptoms. It may readily be imagined with what wonderment the woman contemplated 'the spiritual link' which held in union her greater self and her far-removed extremity, without dreaming of what explanation on a more material phase of the phenomenon in question might be forthcoming.

“GRANTED the truth of the principle of ‘referred pain,’ as stated above, one need only suppose a coincidence of two altogether unconnected events—the cessation of the pain and the removal of the bandage—to explain the apparent association. But there is another element which should not be disregarded, which may have played an important rôle in delivering the woman from her suffering—namely, a psychical state, whether of expectancy or belief; or, on the other hand, mere emotion independent of the mind. It is well known how fear inhibits pain—*e.g.*, most people must have experienced a diminution or cessation of toothache when brought within a measurable distance of the dentist’s forceps; and yet, for all that, the physical basis of the pain can scarcely be supposed to have been withdrawn. In the case under consideration, the patient had been wont to associate the painful corn with tight pressure or other form of mechanical injury, and to feel relief on the withdrawal of the source of irritation. What more likely than that, on learning how the enshrouded foot was ‘cramped’ and ‘in an uneasy position,’ she should attribute the pain she now felt to its former cause, and, conversely, the deliverance from pain to the removal of the bandage? These are matters which in the uneducated nature an innate tendency to superstition, but which to those having a knowledge of the physiology of the nervous system are only illustrations of the manifold ways in which mystery is uncloaked.”

The *Evening Standard* says:—“The well-known apostle of chiromancy, M. Desbarolles, who died a short time ago in France, was in many of his predictions more fortunate than the majority of diviners, for he lived to see them realized. It is related concerning Desbarolles that when Cham, the clever caricaturist, consulted him years ago, he being at the time in the enjoyment of the most splendid health, the chiromancer, after consulting his visitor’s hand, informed him with evident reluctance and surprise that he was destined to die of rapid consumption. Cham made light of the prediction as a matter of course; but it is related that when, at sixty years of age, he found himself attacked, without hope of cure, by the very disease named by Desbarolles, the recollection of the circumstance came back to him, and he frequently alluded to it until the day he died. More than thirty-five years ago, the Frenchwoman who is now so well known in literary circles as Madame Adam, was taken by her parents to Desbarolles, who, after carefully scanning the child’s hand, foretold that the young girl would be celebrated in the future. This prediction was also fully realized. It chanced, some few days ago, that Madame Adam was once more in the presence of the chiromancer to whom she had been presented as a child. She showed him her hand. Desbarolles examined it minutely, exclaiming, ‘I have already seen this hand; but where and when I cannot recollect; but I have certainly seen it.’ Madame Adam aided him in his memory, and brought back to the old man’s recollection the child of years ago, adding that all the predictions made had been fulfilled.

THE new editor of the *Daily News* signalized his advent to power by running amuck against phrenology. He practically denounced all believers in phrenology as fools, and practisers of it as either foolish or worse. He dared not, however, admit into the pages of the liberal (?) *Daily News* a reply to his denunciations sent to him by Mr. E. T. Craig. That reply, therefore, finds a place in this month's magazine. Mr. Craig is the author of the history of the co-operative experiment at Rahaline, which, whatever "Shimei" may think to the contrary, is not the work of a fool.

SHIMEI's arguments against phrenology are on a par with many others we have been favoured with of late. He does not find any mention of the word in the indices of works on the brain. What does that prove? Ignorance or prejudice: not much more. A 'reverend' gentleman lately brought against phrenology the unanswerable argument that so few believed in it—perhaps (for we speak from memory) he said so few 'educated' persons. Could the 'reverend' gentleman have heard or read of a time when Christianity was not believed in by educated people? And we have no doubt the disbelievers of those times advanced the fact as a 'knock-down' blow for Christianity. It is even a noteworthy fact, Shimei, that for many long years it only "survived in holes and corners."

ANOTHER argument that was recently publicly advanced against phrenology was this: The redoubtable opponent said he had attended the late Charles Darwin's funeral, and he noticed that all the famous men in science and art who attended the melancholy function *had small heads, therefore* phrenology could not be true. It is almost foolish to notice such foolish people; but when the editor of a 'liberal' daily paper puts himself on the same rank with such people, what can you do?

"THE COMING MAN," as described by Dr. W. A. Hammond in the new American magazine, *The Forum*, is to be quite bald; but the ladies are to like him all the better for it. According to this authority, the hair was originally intended less as an ornament than for a useful covering. It began to go with the introduction of artificial head-gear; and the decay will continue—Nature resenting such a slight—until man is absolutely bald. Hats and other head-coverings have come with civilization, and therefore the more savage races will retain their hair longest. Dr. Hammond takes the uncivilized aboriginal of America as at the one end of the scale and, curiously enough, the stockbroker at the other. The one has to-day the hairiest of heads, while the other is of all men the most bald. The comparative luxuriance of ladies' hair, even in these degenerate days, is accounted for by their heads being in any case more lightly covered than men's, while often in the open air they wear no artificial covering at all. Most fortunately for the man of the future, women are "rapidly overcoming their prejudices, and see in the bald head an element of manly beauty." Is Dr. Hammond quizzing?

The *Pall Mall Gazette* says:—"The *Lancet* has a new rival in the *Daily News*; and the medical articles which are being made a special feature in the latter exhibit an amount of leaping and bounding credulity unknown even in the professed votaries of modern science. A bacteric cure for consumption, invented by an Italian doctor, has already been accepted and trumpeted to the world as infallible, and to-day it joyfully speaks of M. Pasteur as having achieved 'the most brilliant results in the way of disease prevention which it has yet been the lot of man to attain.' The whole civilized world is watching M. Pasteur's experiments with lively interest; but it is at least premature to crow over the 'realization of Utopian dreams,' seeing that the percentage of deaths from hydrophobia in cases treated by the French savant represents precisely the average which has hitherto been observed among the dog-bitten. It has, moreover, been alleged, and has not yet been disproved, that some of the most marvellous cures (that of 'Dr.' Hughes, for instance) have been effected on persons who were not bitten by mad dogs at all. Under which circumstances an attitude of expectation would seem to be the most appropriate.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

F. W. S. has all the central portion of the brain from the root of the nose to the occipital largely developed. She is very observing, has a superior memory, readily acquires knowledge, could make a good scholar and teacher, and, in due time, a first-rate wife. Is very sincere and confiding, is always in earnest and thinks others are; will easily take an interest in the studies of phrenology and physiology. Would readily learn to delineate character correctly; is naturally orderly and systematic; has favourable abilities for an accountant and music teacher. She will always make lots of friends and draw others to her; is reliable, not changeable in her general disposition, and will live a uniform life. She was obedient as a girl and will be respectful as a woman. Should receive as good an education as possible.

S. R. C. has a strongly-marked character. Is very earnest, energetic, positive, forcible, active, and wide-awake; does his work the day before rather than leave it for the day after. Is naturally strong, and even tough; but is liable to go beyond his strength, and probably

will make inroads upon his constitution before he is half way through life. He has favourable qualities for a surgeon, a public speaker, or an artisan of some kind; he has a vivid imagination, takes broad, if not extravagant views of subjects, and presents his ideas in a bold style. He needs strong reasoning power, and much forethought and cautiousness, to regulate the forces of his nature. He has a public spirit, and should qualify himself for a line of life to gratify that quality of mind; but it will be difficult for him to settle down to one sphere, and therewith be content.

A. S. has a very earnest, sincere mind; is much given to intellectual effort, and naturally inclined to read and meditate. Has naturally an elevated cast of mind and a high standard of action; is quite easily inspired with moral emotions; is naturally industrious, has more than average vital stock, and is capable of a high degree of enjoyment. Is able to exert a very distinct influence over those with whom he comes in contact, for he is quite magnetic and has the power of healing by the laying on of hands. Should not shrink from any ordinary public responsibility, but take hold resolutely and do whatever comes to hand. If careful, he may live to be old; for he is naturally healthy, but not so tough as to be able to trifle with his constitution without evil consequences.

J. H. has a favourably-developed brain, with a superior development of intellectual power; has great capacities for study, and will show extra abilities in the study of grammar, language, and philosophy; is quite original, has many ideas of his own. He also has a strong moral brain, and could easily qualify himself, so far as his education goes, for a professor, teacher, or preacher. He has abilities for a writer and editor of a magazine; he has a superior moral brain, and must allow it to have its full influence on his character; he should let his standard be high, and work up to it. He could succeed in mathematics, figures, or as an accountant. He has a full supply of force, and should lead a life of industry; if possible, he should be a public man.

M. A. S.—You will be rather slow in maturing. You have a long span of life, and will appear to the best advantage later on in life; some of your ancestors must have been quite aged. You should be careful, and not take undue advantage of your youthful strength, and cripple yourself in any way; for if you do not interfere with your constitutional power, you will be able to do your day's work when seventy-five years of age. You have a fairly-balanced brain, and only need favourable circumstances for development, and proper direction of mind, to take a public position, and maintain it with credit. You need a companion of medium size, quite compact, rotund in form, energetic in spirit, high toned in mind, with sound judgment, power to think and plan, joined to a strong, emotional nature. She needs to have good health, and a strong, social, domestic disposition. She must be ambitious, and willing to exert herself to gain the reputation she may desire.

THE
Phrenological Magazine.

MAY, 1886.

CHARLES STEWART PARNELL, M.P.



HE general outline of the organization of Mr. Parnell is favourable. There appears to be a good proportion between the face and body. There is a high degree of the vital and motive temperaments, which favour physical action and a sharp, penetrating mind. His



head is especially high, which favours an elevated cast of mind, also manliness, pride, moral sense, and a general feeling of humanity. He cannot very well live a low, selfish life, or devote himself to inferior pleasures. Whether distinctly religious or not cannot be determined; but there is a strong moral strata in his mental operations, and he possesses by nature strong feelings of reverence and regard

for the superior and sacred, joined to a great amount of will-power, determination, perseverance, and even patience. Benevolence is also large, which gives humanity, a sympathetic state of mind, taking into account the happiness of others as well as his own. He is somewhat philanthropic in the form of his head; he is unusually high from the root of the nose to the commencement of the growth of hair on the top of the head. Such an organization indicates considerable loftiness, and general goodwill toward mankind. He has got a full share of base of brain from ear to ear, giving force, executiveness, and capacity to go through with trials and difficulties. He has even a high degree of pluck, if required to stand his ground in the midst of danger. He has not much timidity and irresolution, and only a fair amount of restraining power and prudence; but his prudence is more the result of judgment and moral sense than of his organ of Cautiousness. The crown of his head being high gives him consciousness of his own importance, and a desire to exert a strong, personal influence; and he is not wanting in capacity and disposition to take the lead, and be the master spirit; in fact, he is in his element at the head, guiding and controlling others. His social brain may be full in development, but he has more of the kind of sociability coming from the moral qualities than from mere domestic affection and attachment to family, though he is not wanting in the latter; still the geniality of his nature is the result of his strong sympathy, reverence, and hope.

His intellectual powers appear to be more those that lead to reflection, to analysis, and capacity to take advantage of circumstances, and make the most out of them. His tendency is to concentrate and condense, and to present his ideas in as direct a form as possible. He is particularly intuitive, and quick to discern character and the motives of others. He is in his element when dealing with peculiar dispositions, for he delights to play on the human mind.

His perceptive faculties are fair, but not great. He should be more known for his powers of thought and reason than for observation; and his memory is greatly aided by the law of association, one thing bringing to mind another. His ideas of Weight, Colour, and Order, are quite correct, disposing him to be methodical. He has taste with reference to works of art. Language is rather large; he has a full command of words, and when animated he will show no deficiency in speech; but he has more capacity to think than to talk, and has more ideas than language in which to express them; hence he would be more forcible and condensed in his style

of talking than wordy and copious. He has very good powers to systematize, arrange, and do things according to rules. The strong points of his character are his will, determination, ambition, desire to have authority and responsibility, reverence and respect for what he values as sacred and superior, kindness and sympathy, power of analysis, intuition, and discernment of truth, joined to the faculty to arrange and systematize his ideas. His success depends in a great degree upon his patience, perseverance, and capacity to take advantage of circumstances and make the most of them. He will not necessarily abuse privileges placed in his hands; but he will have due reference to the general good. His intellect is more available than that of most men.

The combined effect of his various qualities is to give him more than common sense of power, ambition, will, and determination. Few men exert their power with less effort. This arises in a large measure from the little friction there is in his organization, from his great insight and forecast, and from his ability to conceal his thoughts or intentions until the right moment—that is, until they are quite matured, and people are waiting in anxiety to hear them. He is aided in the maturing of his plans by his great imagination, by his constructive power, and by his instinctive knowledge of men, and quick insight into character. He seldom misjudges a man, or expects of him more than he can do. Few men are so ‘balanced’ in respect to their powers, so capable of self-control, and consequently of controlling others, or so cool and collected in times of emergency.

Since his first appearance in public life up to the present time, Mr. Parnell has been so constantly before the public, and his acts so constantly the subject of public discussion, that any attempt to give his biography would be to write what is in everybody’s mind.

KINDNESS will creep where it cannot go, will accomplish that by imperceptible methods—being its own lever, fulcrum, and power—which force could never achieve. Have you not seen in the woods, in a late autumn morning, a poor fungus or mushroom—a plant without any solidity, nay, that seems nothing but a soft mush or jelly—by its constant, total, and inconceivably gentle pushing, manage to break its way through the frosty ground, and actually to lift a hard crust on its head? It is the symbol of the power of kindness.—EMERSON.

PHRENOLOGY IN THE FORUM.

IT is a curious fact that at the very time that the *Daily News* is condemning phrenology, *sans phrase*, there are such increasing evidences of a revival of interest in the subject that the *Family Doctor* has found it worth while to open its pages to a discussion on the subject. We heartily congratulate our contemporary on its courage and its disregard of the sneers of the ignorant and of the prejudiced. In the number of March 20th, there is a very interesting letter by Mr. Thos. Wilson, of Belfast. He says: "As a non-professional person, unacquainted with anatomy or physiology, I have occasionally studied phrenology during the last fifteen years"; and then proceeds to say: "The delineations of character from my own head, by several professional phrenologists, have been very correct, especially that by L. N. Fowler, which was so very accurate even in minute particulars as to be startling. Notwithstanding all this, I have seen cases which have shaken my confidence in at least part of the system."

Mr. Wilson formulates his doubts as follows:

"According to the phrenologists, the organs of the reasoning faculties Causality and Comparison are relatively smaller in children's heads than the organs of the perceptive faculties, Individuality, etc., and children are observers and do not become reasoners until the upper part of the forehead is developed, when they become adults. That the observing faculties in children are relatively more powerful than their reasoning faculties there can be no doubt; but that the lower parts of children's foreheads, where the supposed organs of perception are located, are more fully developed than their temples does not seem to be borne out by facts. Sir William Hamilton maintained the very reverse—that children's foreheads are always more fully developed at the temples and upper portion, where the supposed organs of reflection are located by the phrenologists. By my own observation of heads, I have almost invariably found it to be as Sir W. Hamilton has said."

Mr. Wilson appears to be labouring under a misapprehension. The experienced phrenologist does not affirm that the reasoning faculties in children are relatively smaller than the perceptive faculties. What he does say is that the perceptive come into activity first; and they do so for this reason, that to reflect you must have something to reflect upon: hence, reflection is a development dependent on the accumulation of experience (of perception). Moreover, although the organ of Causality is slow in coming into active operation in

children, yet there is a great deal more potential reasoning in children than they are usually given credit for. It is, however, analogical reasoning, the outcome of Comparison, which is very often a large and active development in children. Another thing that inexperienced observers may be deceived in is this: that in consequence of the size of the child's head, Ideality and even Wit may be mistaken for Causality. The two former are of very early development in childhood, and they subserve an exceedingly useful purpose; awaking interest, as they do, through imagination and amusement. Finally, there is yet another consideration which Mr. Wilson has perhaps not taken fully into account, and that is the absence in children of the frontal sinus, in consequence of which the lower part of the forehead is less prominent than it becomes in adults. So that, as a matter of fact, there is not so much difference in the relative development of the parts of the brain in children and adults as would appear on the surface. This is a circumstance that, in estimating power, should never be lost sight of.

There is another observation in Mr. Wilson's letter which calls for remark.

He says: "Mr. Gladstone's forehead is of this type, being very large in the perceptive region and much smaller in the reflective, rounded off at Causality. Yet his planning and reasoning powers surpass those of other men whose foreheads are massive and square at the temples." And again: "Darwin had a forehead remarkably full in the perceptive region, but scarcely up to the average in the upper part. According to phrenology he should have been a wonderful and accurate observer, and a poor reasoner and theoriser."

As a matter of fact we are able to affirm from actual personal observation, that Mr. Gladstone's forehead shows a distinctly large manifestation of Causality, although that organ is relatively smaller than his immense Comparison. In regard to Darwin, although he had immensely large perceptive faculties, which caused the reflectives to appear small, yet, in fact, they were large in development. But their strength lay in Comparison; in other words, in the analogical, inductive reasoning faculty; and Mr. Darwin's reasoning was essentially of that character.

We have thought it worth while to devote these remarks to Mr. Wilson's letter, because he evidently approaches the subject with an open mind to judge it on its merits and without prejudice.

The *Family Doctor* of April 10th contains two letters on the subject of Phrenology, one of them, by George H. J.

Dutton, President of the Nottingham and District Phrenological Society, being a very able reply to Mr. Wilson's letter above referred to; the other is by a Mr. W. G. Ansell. This latter gentleman is evidently an earnest student of Phrenology; but, like most others, he has fallen across some difficulties in his investigations that have 'given him pause.' In his letter he takes exception to the common definitions of Veneration, and compares it with what he finds in life. He says: "According to a magnificent bust and to all the pictures I had seen of him, Voltaire, the great French sceptic, was *large* in Veneration, the size of that organ being exceeded only by his organ of Firmness, which was *very large*." Mr. Ansell probably labours under a mistake here. So far as our memory serves, the busts of Voltaire we have seen in Paris represent the great sceptic as being deficient in Veneration. But in any case, we do not find that busts and engraved portraits are much to go by, from the fact that the artists, not being phrenologists, fail to indicate depressions and prominences on the head that have no significance to them, and which offend their artistic eye.

Mr. Ansell then proceeds:—

"I had a lengthy argument upon this subject with a professional phrenologist, who endeavoured to explain away the apparent anomaly, with, however, but ill-success; for one day, happening to meet Mr. Charles Bradlaugh in the Law Courts, at Westminster, I was astonished to note that that gentleman possessed the phrenological organ of Veneration in a *very large* degree; in fact (I have his picture before me as I write), he has a cranium which, for the powerful development of the religious and moral sentiments, might well be envied (from a phrenological point of view) by his Grace the Archbishop of Canterbury, and the late deeply lamented Lord Shaftesbury."

The writer is here labouring under a distinct misapprehension. Mr. Bradlaugh has not a large organ of Veneration. On the contrary, while all the other so-called 'religious' organs are large in his head, Veneration is distinctly small. Mr. Fowler, who examined Mr. Bradlaugh's head many years ago, and wrote and published a description of his phrenology (see "Phrenological Delineation of Charles Bradlaugh," reprinted from the PHRENOLOGICAL MAGAZINE for June, 1882), says: "You have not much Veneration; the feeling of adoration, dependence, and respect is defective."

As regards the reference to the Archbishop of Canterbury, and the late Lord Shaftesbury, in all respects except that of Veneration, Mr. Bradlaugh's moral developments are as

favourable as those of the gentlemen named ; and probably an impartial judgment on the three men would recognize that Mr. Bradlaugh had done as much in his way for the moral elevation of the people as either his Grace of Canterbury, or Lord Shaftesbury. If Mr. Bradlaugh had not possessed a large proportion of the brain that tells in the direction of moral power, he could not have obtained the following and exerted the influence he has.

Mr. Ansell appears to have learned neither the proper location of Veneration nor to have got a proper idea of its function. We would recommend him to read the "Manual of Phrenology" (Fowler : price 1s.).

LAWS OF INHERITANCE.

BY NATHAN ALLEN, M.D., LL.D.

IN a sanitary point of view, no subject is so important to human welfare as that of Heredity. Its laws are primary and fundamental. It constitutes the fountain-head of all social improvement. Hygiene and sanitary agencies are important but the *quality of the material or the kind of stock* upon which these operate are still more important.

Within a few years much interest has been awakened with reference to the effect on physical organization transmitted from parents to children, and from one generation to another. As the science of physiology becomes better understood, the inquiry naturally arises, what kind of organization in development, structure, and function, is best, and what makes the difference? Then, in the matter of disease and health, some individuals and families are always feeble and sickly, while others scarcely ever complain or incur much sickness. They may be equally exposed, and take the same care, but there is all this difference.

One of the first steps in improvement is to inquire into the causes of existing evils. This is especially necessary in all matters pertaining to science. Wherever we find in nature certain differences we should inquire what are the laws that produce them. In all the products of nature, and the changes to which they are subjected, there are fixed relations. In nature's operations there is no chance or irregularity, but settled, fixed relations, though we may not always understand them. Such has always been the history of science.

In all sanitary work there are two distinct fields of observation—one that pertains to the causes and prevention of

diseases that arise external to the body, and the other to those diseases, or predispositions to disease, which are inherited. There are also weaknesses, or liabilities to disease included in the same class. In the former are found those diseases traced directly to bad ventilation, impure water, improper food, too much or too little exercise, carelessness in clothing, exposures to infections and contagious diseases, &c. In the latter field is found a large class of inherited diseases—the germs, the predispositions, the liabilities that are transmitted. In the work of sanitary reform, too much attention has been devoted to the external field, and not enough to physical organization itself. The more this whole subject is investigated, the more importance shall we attach to those great underlying laws of *heredity*. To this feature in the work of sanitary improvement we would call special attention. The fact that there is a class known as hereditary diseases is admitted by the oldest medical writers.

In the early history of Greece and Rome we find frequent reference by different writers to the resemblance between children and parent, and occasionally mention is made that certain diseases were transmitted. But near the close of the last century, when a correct knowledge of the anatomy of the body in a diseased state was discovered by dissection, the *causes* of diseases became far better understood. The study of pathology has thrown a vast amount of light upon this subject. When this study is pursued with more particular reference to the physical qualities transmitted from parent to child, the laws of inheritance and human responsibility will be far better understood than they now are. The symptoms of some diseases, such as scrofula, syphilis, and consumption, are so positively marked that their transmission cannot be called in question. These may be transmitted in the blood or in the form of tubercular deposit. Several diseases near akin to scrofula, such as rickets, cancer and malignant tumours, are thought to have an hereditary origin. Also gout, erysipelas and rheumatism arise more or less from the same source.

But there is a still larger class of diseases where the seeds or germs are transmitted, requiring only time or occasions for development; or where the defect is in the organization itself, so that under certain circumstances, or exposed to certain influences, diseases of structure or function will inevitably be generated. In books, these are denominated constitutional or predisposing causes. The fact is well established that in case of a great predominance of any parts or organs of the body, a certain class of diseases are more

likely to follow. If the brain and nerves greatly predominate over other tissues, neuralgia and affections of the head will follow. So fixed is this relation between organization and disease, that the particular class of diseases to which an individual is liable may be predicated beforehand. The reason why diseases originating from hereditary sources—and we add also the laws of inheritance—are not better understood is because we have no typical or normal standard of physical humanity. The causes and prevention of disease have been altogether too much studied outside of the body, and not enough in those *agencies* that are constitutional and inherited. If we had constantly set before us a universal law, or, in other words, a normal standard of organization, it would aid us to understand far better many things about the human system.

Now, has not nature established such a standard? Is there not abundant evidence of it? We might furnish a volume in proof and illustration of the doctrine, but must be content in suggesting here only a few points. If there is one type or organization found in nature better than another, may there not be one better than all others? If, in a single instance, or in a number of cases, we find a law or laws of heredity established, does it not imply that there may be a general law or some standard from which they originate, and by which they can all be tested and classified?

This normal standard of physiology is nothing more or less than a general law of health, of longevity, the greatest amount of happiness, of human achievement and of what lies at the foundation of all these, the *law of increase*. It is based upon the perfectness of structure and function; or, in other words, that every organ in the human body should be perfect in structure and that each should perform its legitimate functions in harmony with others. Taking this, then, as a standard, we have a guide or type by which all changes in organization may be tested.

This law applies not only to the human race, but extends throughout the whole animal and vegetable creation. But nowhere in nature do we find perfect human standards—only approximations towards them—the deviations being almost endless in variety. As ‘like begets like’—here comes in the law of *heredity*—and as two distinct agents are concerned in the union, the hereditary effects become more varied and complicated. If the organization of both agents or parents was perfect or very near alike, we should find the law of likeness or resemblance more generally exemplified in their offspring. But in this union of the sexes, the results depend much upon several conditions—such as age, mutual adapta-

tion, the health, the physical and mental state of the parties. There are also some other conditions which modify this law of human increase, such as food, climate, exercise, &c., though these are mostly external, and exert their influence after the birth of the offspring.

It may seem at the first thought, in the blending and mixing up of so many dissimilar qualities, that weaknesses, defects, or diseases, could not easily be traced from child to parent or through successive generations. It may be difficult in some cases, but then in proportion as these deviations or peculiarities are marked or predominant in organization, they are more likely to be transmitted, and perhaps in an intensified form.

The question may be asked, if this hereditary influence extends to every internal organ, and to every tissue in the system? It undoubtedly does, even to all parts of the brain. Thus the ground-work of mental qualities, moral sentiments, propensities, social and domestic attachments transmitted.

It will be observed that the most prominent feature in this normal standard is *harmony* or *balance* of organization. Every organ in such case is capable of doing its own work easily, in the best possible manner, and in the performance of its functions it does not interfere with or hinder others.

This is the secret of good health and long life. With such a standard, the 'wear and tear,' or the demands which nature makes to support life, and carry on its operations, comes upon all the organs alike.

In some respects the body may be compared to a perfect machine, made up of many complicated parts. How different is the working or running of such a machine from one imperfectly constructed and unequally balanced in its parts! The one seldom needs repairs, the other constantly. The one will last, as it were, for an age; the other is entirely worn out in a short time. But in the human body we have something more than mere *mechanism*—we have an organized living being, with the most delicate and complicated parts wonderfully exposed, and when once radically injured, or broken down, they cannot easily be repaired.

Taking this normal standard as a guide, we see that wherever there are extreme developments—where a certain organ, or class of organs, are relatively too large or too small, causing a want of balance or harmony of action in the system,—there must be, in the very nature of the case, far greater liability to disease. For wherever these abnormal developments are carried to extremes, nature's laws are more frequently violated, and hence arise some of the most fruitful

sources of disease. It is in this imperfect, ill-balanced organization where we find not only the greatest amount of sickness, but that which is most obstinate in treatment and fatal in its results.

It is a well established fact in pathology that whenever any part or organ in the system becomes diseased, other parts or organs in close proximity, or through sympathy, are soon affected, thus extending the disease. Sometimes, if the part affected is important, or is a vital organ, it may be sufficient to cause death, perhaps suddenly; whereas, large parts of the body are comparatively sound, or so little affected that the individual might, as far as these parts were concerned, have lived many years, if not to a good old age.

On the other hand, the greater is this harmony or balance of organization, or the nearer one approximates to this normal physiological standard, we find not only less disease, but far greater power in nature to throw off or resist disease. The fact is well known to physicians that there is a surprising difference in patients as to what are called 'the recuperative powers of nature.' This difference in vitality arises, in a great measure, from the source here mentioned.

The primary object of hygiene is the prevention of disease; but how or where can it be so effectually prevented, or upon so large a scale, as by a proper observance of hereditary laws? By applying hygiene or sanitary agencies in the matter of ventilation, drainage, pure water, &c., we only cut off some of the branches of this upas tree; but by strictly observing hereditary laws, we eradicate or destroy the roots of disease. It is much easier to dry up the springs or cleanse the fountain than to check or purify large flowing streams filled with feculent matter. While more and more attention should be given to sanitary agencies, those fruitful sources of disease *within the body*, arising from violation of physical laws, should not be overlooked.

Within a few years much interest has been manifested in the laws of heredity. The subject has been discussed in books, in journals, and by the daily press. All admit, in general terms, its importance. Some consider it as not only the most prolific source of disease and insanity, but that it constitutes a primary cause of much of the pauperism and crime of the present day. And what is significant, those who have given it the most thought and consideration attach to it the greatest importance.

If the hereditary influences already brought to light seem to possess so much value, may not these agencies, when better and more fully understood, possess a value and an

importance that has never been conceived? What is needed for this purpose more than anything else, is some general law or principle as a guide—a normal standard, perfect in itself and universal in its application. Nature has, we believe, established such a standard, with agencies and conditions which can be understood and applied. It will be found that man has a far greater control over his health and life than has been generally supposed.

Near the close of the last century attempts were made to improve the quality of domestic animals. In process of time it was found by experiments that great improvements could thus be made; and, by following up these measures, the most surprising changes have been effected in almost every class of domestic animals. For a century or more have these improvements been carried on, and never more successfully than at the present time. All the results reached go to show that these changes are governed by law, and that there must be in respect to the animal creation a general law or a normal standard of organization.

The same physical laws that govern the animal kingdom apply also to man, under different conditions. Man is a free moral agent, governed by reason, not instinct. He is accountable directly to his Creator for the use of all his powers. He is accountable, moreover, for what he *might be*, as well as for what he is. God has wisely ordained the family institution for the best interests of the race. While accountability to his Creator and duties to the family and his fellow-men are paramount, they do not annul or suspend physiological laws. With these two objects in view, the observance of these laws on the part of man becomes more important and sacred.

This physiological standard has a wide range of application. It helps us to explain some things which have been difficult to understand. It throws much light upon genius in its varied developments, upon great versatility of talent, upon marked eccentricities of character, upon insanity in its almost endless forms, etc.; also upon the defective classes, as the blind, the deaf and dumb, the idiotic and feeble-minded. By a careful examination of all these anomalous cases, in searching for the causes and comparing them with one general standard, we may obtain valuable information.

The 'intermarriage of relations,' in its good and bad results, has puzzled many writers; but its peculiarities and apparent contradictions can in this way be very satisfactorily explained. Closely connected with this topic are two others, designated 'cross-breeding' and 'breeding in and in,' the peculiarities

of which can thus be explained. This normal standard will enable us to understand better the physical peculiarities and differences of people belonging to different tribes, races, and nations ; and, also, some singular differences or changes in population, in its increase and decrease ; in its birth and death-rate, and other things.

The greatest blessing an individual can have in this world is a sound, healthy, well-balanced constitution, which can be obtained only from sound, healthy parents. On the other hand, the greatest misfortune that can befall one, is to inherit a body feeble, ill-balanced, and predisposed to disease. No language can describe the advantages and disadvantages which, from this one source, must attend these two persons through life. Whether we consult the interests of the individual or of the community at large, there is no knowledge, in a worldly point of view, so important or so valuable as that of the laws of inheritance. It is not only the privilege but the duty of the medical profession to investigate these laws and reduce them to some system.

PHRENOLOGY FOR CHILDREN.

THE SEMI-INTELLECTUAL AND LITERARY GROUP.

This group comprises Eventuality, Time, Tune, and Language.

EVENTUALITY.

(a) Definition.—(b) Location.—(c) In what way do children show out this faculty?—(d) What is its natural language?—(e) How can it be cultivated?

(a) Nellie, can you tell the class what this faculty means? “I think so. The word itself half explains its connection with events. It makes you conscious of what is going on ; it gives one a memory of facts collected by the group of faculties we have just studied ; it gives a love for stories, all kinds of news, past and present.”

(b) Who can tell me where it is situated? “Let me tell,” said impatient little Rob. “It is placed where no one can pass it without noticing it, in the very centre of the forehead, above Individuality.”

(c) Good, Rob. Now you all know how you show out this faculty everywhere you go. As very little children you used to tease mother and auntie when you went to bed and when you got up in the morning for, “A story, please ; do tell me

a story." As you are now growing older, you begin to read the newspapers out loud to grandpa: when you learn all about the kings and queens; the battles abroad; the weather reports; the political news; and reports of lectures, concerts, &c. In this way you store your minds with much useful information, and with care you can learn an easy style of entertaining company, by talking about what you have read. By hearing stories told you, you are saved much of the drudgery that many experience in studying exhaustive histories.

(*d*) Its natural office is to recall an event when you want to relate it. Many who have it small are continually forgetting just what they want to remember; and though they may be great readers, still it is a trouble to them to recall names, dates, and minutiae. Such persons have to make notes of what they read, hear, and see, then commit them verbatim. This method takes time, and has to be undertaken as a duty more than as a pleasure. It is better by far to read less, and impress what you read on your minds at the time, than to learn by any circuitous method.

(*e*) Cultivate your poor memories by relating every day incidents that have happened while you have been away from home, at school, or in the street; and try and fasten one thing at least on your mind every day. Some ancient tribes used to hand down the history of their families and achievements for generation after generation, by simply telling their deeds to their children, who, in their turn passed down the history; for they had no written histories in those days. Learn to look over your thoughts and deeds at the end of each day, and count it as one day lost—like the Roman emperor did—if you cannot recall one good deed done.

TIME.

(*a*) Definition.—(*b*) Location.—(*c*) What does this faculty do for us?—(*d*) Is it worth our attention?—(*e*) Do animals show it?

(*a*) The definition of Time is a sense of duration; lapse of time; musical measure and rhythm; memory of dates; memory of when things occurred.

(*b*) It is located next to Locality, above Colour.

(*c*) It makes punctual girls and boys of you, and when you grow older it will make you exact in keeping your appointments. It will help you to recall past events even to the week and day they occurred. Some have wonderful memories for giving the exact dates when special events took place. Some have it so small, they are always behind hand. They

are generally in a hurry. It is bad enough to find a person with it small in private life, but when you come across a public character, who is always late when he enters the pulpit, or commences a lecture, or opens his school or shop; when the engine-driver allows the train to start a few minutes late, or the town clock is slow, then it is distressing not only to the man himself, but to scores of other people also. Some people keep their time-piece in their heads, so to speak. They never need to carry a watch; they reckon time as it passes. Musicians need this faculty. Think for a moment of five hundred instruments ajar for want of time—one a little behind, and one a little ahead; one very much behind, another very much ahead. For good dancers it is also essential.

(*d*) How disorderly everything would get were there not a time as well as a place for things. The occasion has much to do with how we exercise Time. When we are spending the evening with some one we love, we allow the time to slip by without comment; not so with a formal call. Children out at play seldom remember how the time passes; but let them be sent on an errand when they want to do something else, and they do not let the grass grow under their feet one minute. It is most decidedly worth your attention and care.

(*e*) Yes; some animals always know when it is milking-time. Dogs know their masters' time for walking to town in the morning; so do some horses that get right away in the far corner of the field, and refuse to be caught for a long while; others stand by the gate ready to be harnessed.

TUNE.

(*a*) Definition.—(*b*) Location.—(*c*) How do children show different taste in music?—(*d*) What animals show this faculty?—(*e*) Can children be taught to cultivate this faculty while young?—(*f*) What nations take special care to cultivate it?

(*a*) The definition of this faculty is—sense of sound in music, speaking, reading, and ability to distinguish the difference between a great variety of sounds.

(*b*) The location of Tune is on each side of the head, outward from Time, on the corner of the eyebrow.

(*c*) Children show a great difference in their ability to exercise this faculty on various instruments, in various ways. John has a great liking for the drum; Robert for the organ; Alice for the violin; while Louie sings very sweetly, and Mary plays on the piano. This is to be accounted for by several reasons. Temperament has considerable influence

upon the exercise of this mental quality, while other faculties have a wonderful effect upon it, in drawing out all the various sentiments connected with melody and harmony, and the keenness of recognizing sounds. It is remarkable how clever children sometimes are in detecting the sound of a certain footstep ; the sound of a friend's voice, etc.

(*d*) Numbers of birds have their different songs and ways of producing sounds ; few so beautifully as the nightingale and the lark. Children, you should study the habits of animals, for from them you may learn much useful knowledge which you would gain in no other way. That is my reason for discovering whenever I can, what is appropriate to our subject in them.

(*e*) Yes ; children can learn music while quite young, and in fact they should do so as opportunity affords ; for it is then that they get over the drudgery of learning the mechanical parts, and the little fingers become accustomed to move about quickly and with ease instead of slowly and clumsily, as is the case when the first lessons are learnt later on.

(*f*) The Germans, Italians, and Swedes are more talented in music than the French, American, Russian, or English ; and what is more, parents and teachers in Germany and Italy are careful in teaching their children the proper use of music. Their lessons, games, and exercises, are done in musical time and appropriate melody.

Children, do not shirk your musical practice because you feel discouraged that you are not all Mozarts at eight years of age. The steady practice will do you more good than you imagine, in more ways than one. Cultivate your voices also in reading, and imitate the sweet tones you hear when others speak. Everyone likes to hear a melodious voice, but I never knew a person say he enjoyed listening to a harsh uncultivated one. Examine for yourselves the pictures and busts of all our eminent musicians, and then compare them with those whom you know have no musical perception, and you will thus learn the correct position of this faculty.

LANGUAGE.

(*a*) Definition.—(*b*) Location.—(*c*) Have children much of this faculty?—(*d*) What is the necessity for using it carefully?—(*e*) How do some persons show it?—(*f*) Why must you restrain and guard against using it too much?—(*g*) How must it be cultivated when small?

(*a*) The definition of Language is ability to put words together ; power to communicate thoughts and ideas.

(b) The location of it is in the plate of the under-part of the eye.

(c) Children generally have considerable of this faculty. Everything new that they see they want to exclaim about, ask questions about, and draw attention to. But children use their voices before they have learned to say Papa and Mamma. There is therefore a baby language which conveys the meaning of the little one to the mother. Many children wonder why their favourite dogs or cats cannot talk like they do; but if we study these animals' ways, we find that their bark or mew—as the case may be—express delight, anxiety, hunger, distress, joy, or welcome, as the occasion requires; so their language is distinct and intelligible to any one who understands their habits. Let any one who attempts to address a mass meeting of children be warned before hand that they possess large Language and cannot easily be kept quiet, not from a want of respect, but simply to gratify the desire to talk, and hear their own voices. Some children are constantly whispering in school. The organ of Language is very active in such, or they would keep all they had to say until school was over.

(d) You ought to make Language a study in order that you may learn how to appropriately clothe your thoughts and ideas, and so as to speak distinctly, that no one need ask you a second time, "What did you say?" It is a rare gift when inherited, and one that is being thought more of in the present day, when public speaking is such a craze.

(e) It is curious to listen to how some people talk when in company. One man will absorb the attention of all present, yet at the close of an evening has often said but little worth remembering; while on another occasion a person with a keen intellect and talented mind will condense his conversation into ten minutes, and yet say more than his very chatty friend. Some have the power to express in writing what they fail to do orally. Some persons can learn a language and understand the science of it, but they cannot imitate the foreign accents; they are able to translate, but cannot make themselves understood if they attempt to pronounce it. Tune, you will see, works much in harmony with this faculty, and assists it very considerably.

(f) When very large, it may become troublesome to others. You, my children, may not notice that you talk too much, but when mother says, "Do be quiet a little while, there's a dear," try and carry out her wish. When you talk, inform your mind about what you see and about what you do at the same time.

(g) If you have but little Language, always sit in a corner and have nothing to say, when you go out to see your friends, you will neither enjoy yourself nor help others to do so. You must do your share towards entertaining, and begin while you are young to recite and relate facts and stories.

WHAT CONSTITUTES THE WILL ?

NOTHING that can be said to be clear and convincing has to the present time been set forth concerning the will. The theories finding most favour represent the will as an undefined something, having no special location, but simply acting out its intent subject to no restraint from its possessor. The will is said to be that which in every case controls, and in no instance is itself controlled. The writer of this article has always been content to lean to the teachings of Scripture for his bias ; and from that source ventures to differ very materially with most of the existing dogmas, while he hopes to show that his ideas are, at any rate, remarkably like truth.

The Apostle Paul, when writing to the Corinthian Church, supposes a man *having power over his will* (1 Cor. vii. 37). In another place we read of "the *wills* (plural) of the flesh and of the mind" (Eph. ii. 3). Of course there are methods of explaining these passages so that they will not appear to militate seriously against generally received notions ; at the same time it is just possible that they may let in a flood of light upon the subject, if only the truth be sought free from bias.

Look at the word 'propensity.' What is that word but a synonym for will? A man following his propensities acts out his natural bent ; or, in other words, fulfils his own sweet will. On the base thus laid down, that the propensities are the will, it is easy to understand Paul when speaking of a man having power over his will, because it is obvious that he there refers to a man restraining sexual desire or instinct. So also where the wills of the flesh are spoken of, it is clear that Paul is meaning the lusts, desires, or propensities, of the fleshly nature. The view thus far taken, then, has done no violence either to reason or revelation, although it is considerably away from the beaten track.

And if a glance is turned to the facts of human history, what is the truth which everywhere confronts us? Simply this—that every individual man and woman is bent upon acting out his or her nature, following the lead of the

strongest and most controlling propensities and sentiments ; in other words, aiming to do their own sweet wills. This looks wonderfully like the idea that the leading propensities constitute the individual will, and the differences in these propensities, or wills, also correspond with the different learnings and determinations of each character.

That this idea may have full sway, and be understood as making every variety in will corresponding to the facts of individual life, the arbitrary distinction laid down by phrenology between propensities and sentiments must be ignored. Some, we know, are morally inclined ; others are sensually inclined ; and whichever way this inclination tends, that individual can always be easily led ; and at times that inclination is so overwhelmingly strong that the individual swayed by it cannot be turned from his purpose. If that inclination is not the very life and essence of will, what is it ? It is that which decides and sways the character and life, at any rate. It is that which leads and controls it, and has everything to do with making it what it is ; and if that is not will, what can it be ? There are men and women who will to act a noble, true, and manly part ; who have a ready inclination towards everything that is pure and elevating ; who loathe everything that is mean and unfair, and who would rather suffer than act a dishonourable part. This is a truth apart from any religious influences, and is the bias of certain natures, and in exact accordance with their cerebral conformations. On the other hand, there are natures so sensual, debased, and grovelling, that all the influences possible to throw around them, apart from brute-force, will not move them one iota from their sensual longings. In either of these cases, and in the thousand and one grades which fill up all the differences between them, it is will in each case that sways the person and makes the differences.

To my mind this is a complete solution of all difficulty in the matter of will, and is in itself a consistent view of the subject, possessing in an eminent degree the characteristics of truth, inasmuch as it commends itself to every man's conscience. I am a firm believer in the possibility of proving all things, and feel satisfied that when the truth on any subject is clearly apprehended, it will commend itself from its own inherent qualities as being good ; therefore worthy of being held fast. By the same rule, it is my conviction that we may always honestly reject every thought, every dogma, no matter what it refers to, that does not come before us with the qualification of being inherently clear and good. All who will to be saved can be saved ; but those who will

not receive it are in no way forced. The item of personal will decides it. In our Saviour's parable of the sower and his seed, the good ground, *i.e.*, the good and honest hearts, are such as have their wills intent on the pure and the true, who love the good, and seek it honestly. This harmonizes beautifully with the facts of history and the teachings of phrenology; and if so, then will is the controlling propensities or inclinations of the individual.

T. W.

VARIETIES OF GENTLEMEN.

BY J. L. CAPEN, M.D.

THE human mind is limited: by what? Most positively, by the length of that portion of life during which the brain is well nourished and in good health; for while this season lasts, the mind will expand if the environments have been, and still continue to be, favourable. There is a vast difference in the progress of persons in a definite period, and this variety is manifested on the physical organization by many signs. There is a difference in the size of brains, which can be known approximately by the head; and the larger the brain, other things being equal, the greater the speed, in the long run, in mental culture. There is a still greater difference in the quality of brain; and forty ounces of the best quality will make greater progress than sixty ounces of an inferior grade. The most practical and interesting test of quality is the living face. What the physiologist can do, *post mortem*, by chemical analysis, by inspection, or by microscopic examination, is as yet comparatively crude, although not without significance. In the weight of brains he rarely finds a difference of one hundred per cent.; but he discovers a difference in the proportion of water, phosphates, of white and red fats, also a difference in the proportion of gray matter and cell structure to the white fibrous portion. These are suggestive facts, particularly when applied to classes of persons, for in infants there is found the most fluid, and in adults the greatest proportion of phosphates, which are least in the brains of idiots; but we have no intimation that by this method a man of good moderate mind can be known from one of decided talent of the second order, while to the phrenologist, there is very little liability to fail, even in rapid examinations. 'The human face divine' is constructed expressly to complete the diagnosis, to which the head and figure have contributed their measure.

'The mind is not like a blank book,' which can contain

just so much ; for every new idea makes, not only room for more—it creates a demand, and increases the ease with which the additional knowledge may be acquired ; yet this is one view of the case, and the other is equally obvious and important.

The brain demands daily rest ; it can do, day by day, a limited amount of work. If a child have a full burden of studies, and another be added, it must either take from his previous tasks, or break in upon his constitutional power ; and this is equally true of all adults, and of all subjects of thought and emotion—moral and domestic, as well as intellectual. There is a sense, then, in which the mind does resemble a blank book : its limitation is as real, although of a very different nature, and having an element of expansion that suggests infinity.

The minds of some men work with such ease that they are ready to take up any subject, new or old, and can bring to it an unbiased judgment ; while a much larger number can only work in one or a few ways, as though an inferior brain had developed a set of nerve-fibres, connecting nerve-cells in a definite manner, with no double track, and in some cases not even a turnout. Some minds seem most contracted in morals ; some in religion ; some in intellect ; and some in friendship. The man who prayed : “ God bless me, and my wife ; my son John, and his wife ; us four, and no more,” was very seriously hide-bound.

I have known a man to give up business because it was so prosperous ! He was a mechanic, and a good and faithful workman, which brought to him a great many more calls than he could supply with his own hands, and the limited number he could superintend. His little, inferior brain became confused, and he went back to journey-work. This was an unusual case ; but how often we find it more easy to get information from an intelligent passenger than from a conductor, or ticket-agent, who has only learned to point out the way-bill, and to be civil to his employer.

Mankind tend to the formation of classes, parties, societies, and sets. Society organizations are large enough to include all the sympathies and affections of many men. They have not necessarily any ill-will towards outsiders, but they have no regard for them. The extra-judicial decision of Judge Taney—“ The black man has no rights which the white man is bound to respect ”—met the approval of thousands, and the essential spirit of it is approved by thousands more, when the terms are changed so as to protect themselves only. A narrow-minded man does well when he takes good care of

his own without injustice to others; yet he who aims at nothing higher is very sure to fall below even that.

Different occupations affect the development of mind variously; to say nothing of the character that is attracted into them.

The duties of the Protestant clergyman, inasmuch as they require him to consider man's relation to his Creator, tend to enlarge his charity by the exalted character of his standard of comparison; but, on the other hand, when he is not equal to his position, he becomes affected by his elevated isolation until he cannot tolerate any criticism, or scepticism, in regard to his doctrines. A barrister is so hardened to contradiction that it does not make him lose his head. The profession of teaching is regarded very differently by classes and individuals. In communities of moral and intellectual activity it is respected; but where ignorance, brutality, pride, and aristocracy (other than 'Nature's aristocracy'), prevail, teachers are thought a class of servants, and are spoken of as such, even by those who know better and have more respect. A joke that passed between Senators Calhoun and Webster illustrates this principle. On observing a lot of mules passing, Calhoun said: "There go some of your northern constituents." "Yes," said Webster; "going down south to teach school"—that is, going where they will be despised; but where they will, after all, be able to teach.

Teaching attracts an intelligent, humane, and affectionate class of persons, who are improved by their duties, unless they become too laborious, or too long-continued; and it ought to be that all professions having any humane duties should enlarge and warm the affections and sympathies of all their practitioners; and such is their tendency when exerted upon favourable characters. If "the undevout astronomer be mad," may we not say that the unkind physician is a quack, whatever his learning, and that the uncharitable phrenologist is a fraud?

What is a 'gentleman'? I believe this question would be more promptly answered in England than in the United States; but an answer that is too easy is not instructive. I have an indistinct recollection of an answer from some Englishman, who said there was but one gentleman there, and that that was the hog, for everybody else had to work.

When Sir Charles Lyell travelled in this country, he remarked upon the indiscriminate manner of the use of the word. Having occasion to inquire for his trunk, the hotel-keeper said to his clerk: "Where is the *gentleman* who brought in this *man's* trunk?" But Sir Charles, being not only a

gentleman in the society classification, but also a hearty, broad-minded man, took no offence at such blunders. During my first winter in Philadelphia, I engaged an Irishman to clear the side walk of snow. I thought his price too high, and made him an offer, which he accepted. As I had occasion to leave before he had finished, I requested my wife to give him all he had at first asked. The poor man had taken off his hat, and exhibited a very finely-formed forehead and top-head. When the money was handed him, he offered it back, saying that the gentleman had said that it was too much. When told that I had said he should have it because he was so careful and thorough, he took it, and said: "God bless his heart! God bless his heart!" This man gave evidence of belonging to one class of gentleman.

A coloured waiter, in a southern hotel, when asked who a gentleman was on whom he had been waiting, replied: "He was no gemman; I knows a gemman right well. They orders ye about, an swears at ye. That man spoke low, and thanked me." Just before slavery in the United States committed suicide, a Quaker gentleman from Philadelphia took a journey through the slave states. When in Charleston, South Carolina, he observed a man ride up to the post-office, jump off his horse, and sing out to a negro who was passing, "Here, you d—d nigger, hold my horse!" The negro had no doubt about the divine right of the gentleman to rule, and he obeyed accordingly.

In the *Gentleman's Magazine* is a paper from Grant Allen, on a "Thinking Machine." Although the term 'Machine' is not pleasing when applied to the human mind, the title, as a whole, is attractive to a phrenologist, and, if a gentleman be a man of culture, refinement, and moral elevation, that which is written for him ought to be a model in style and sentiment. Certainly there should be no vulgarity, no calling of hard names, no appeal to popular prejudices, and no assumption of superiority not substantiated in the facts or argument. He might, therefore, expect the subject to be so treated that he could take a pleasure in reading it, whether he coincided with the opinions expressed or otherwise; but, instead of the expected gentility, there is an apparent imitation of that class of aspirants for scientific recognition who slur the unpopular, and fear the inquisition of phrenology. There appears to have been an endeavour to apply the principle of Judge Taney's justice to the subject thus: The phrenologist has no rights that a physiologist or his friends are bound to respect—not even to be treated as though the writer were a gentleman!

The gist of the article is—"The brain, as a whole, is the organ of the mind"; and that "there is no organ for the word Canonbury, or for a proper perception of a Mrs. Pollock geranium." He evidently thinks he has said something that conflicts with phrenology; for, in speaking of the opinion he controverts, he says, it "found its fullest and most grotesque outcome in the spurious science of so-called phrenology." Having rung an immense number of changes on 'Dog,' he adds, "Yet all these distinct and unlike dogs would be unhesitatingly classed by most people under the head of Language, and be located by phrenologists, with their clumsy, lumping glibness, in the imaginary 'bump' thereto assigned."

The inaccuracy of the statement as to what the phrenologist would say is excusable, as it is evident he knows very little about it; but he has not complimented the *Gentleman's Magazine* by his style nor his wisdom. The article, as a whole, reminds me of the medical student's criticism of one of his professors—"He had a constipation of ideas, and a diarrhoea of words." The author of the 'Machine' paper appears to be a wordy gentleman, of an order *sui generis*, as he says 'most persons' think one way, while he declares the other to be the right!

It has been said that science recognizes no authority. Has there been a change, or is the article something outside of the scope of science? There are some gentlemen among men of science of a different type—men who can state what they know, and how they have made their discoveries, without any incivility towards those who differ from them; but the sincerity of one's convictions, as well as the breadth of his mind, have an influence. It is often easy to tell the nature of a man's faith by his manners. When he makes an assertion from a clear, intellectual conviction, which he is able to substantiate, and would willingly renounce on discovering its falsity, he is under no temptation to be dogmatic or sensorious; but the favourite theme of the disputant is one of a mysterious character, incomprehensible to everybody, and therefore a safe one for dogmatism.

Conflicting interests will produce a difference in professed opinion, and all parties will attract sympathising members, or the stronger party will draw in the timid, ambitious, or sycophantic; the weaker, the gallant and brave; while in both will be found the morally independent, who are there from honest conviction.

Is honesty an essential trait of a gentleman? Who will take the responsibility to say it is not? A lawyer pleading on a case very much like one just decided, in which he had

the opposite side, was twitted by the opposing counsellor with talking very differently from what he did before. "Well," said he, "I might have been wrong then, but I know I am right now." Who will deny that he might pass for a gentleman?

When a political candidate had been opposed on account of flagrant maleficence, a partisan came to his defence, and declared him to be a gentleman. To this it was retorted, that if he were a gentleman, he was nevertheless a thief. "Then we have," said he (I attempt to quote from memory), "not a 'gentleman and a scholar,' but a gentleman and a thief; and we may have other gentlemen, thus—a gentleman and a gambler; a gentleman and a liar; a gentleman and a burglar; a gentleman and a drunkard, etc."—which suggests very forcibly that moral merit *ought* to be an essential quality of a gentleman.

A gentleman complained to his coal-merchant of the rude character of the labourer he had sent to put in the coal, saying he was "no gentleman." "Well," said the merchant, "I have great difficulty in getting gentlemen to put in coal."

Every man is the better for his ambition to be a gentleman; but the limits of the human mind causes many aspirants to fall short of perfection. *Harper's Weekly* reported a dialogue between dudes. One asked the other how he tied such a nice bow in his cravat. The other replied: "When I ties my cravat, I gives my whole mind to it." Doubtless that was his ideal of a gentleman, and he did well to make such an attainment. Some aspirants rise as high as clothing, and dress in the 'disguise of gentlemen'; some give more attention to manners or language. The society affects some who are gentlemen abroad and boors at home; but I never knew a gentleman at home who was not essentially so everywhere. Wealth deceives some into the opinion that they are gentlemen, or ladies; and the daughter of the smith, on whose land oil had been found, and who dismissed her lover because 'Dad had struck ile,' was one of this class. A *rising* gentleman, however humble his present elevation, even if he be only measured by his cravat, his hair parted in the middle, or his moustache, deserves a degree of respect; but when he is externally complete—patent-leather boots, yellow-kid gloves, silk stove-pipe hat, carefully adjusted on one side, gold-headed walking-stick, so grasped as to display the head, and is met by a large hog coming round the corner, and given a furious backward ride to the disarrangement of all his articles of gentility, while his locomotion is announced by the grunting of the affrighted beast,

his situation commands our profound sympathy. On the other hand, a *descending* gentleman, one who is such by virtue of the eminence of his ancestors in times when brutality made a man great, and robbery made him wealthy, and who has nothing to do but 'lord it over God's creation,' and who lives in dissipation and idleness, is worthy of contempt to a degree only less than that deserved by those who play the sycophant to him in the hope of rising by clinging to a falling trunk.

THE LITTLE BOOKSELLER FITZ.

CHAPTER III.

"WAS IT THE HOT COCKLES?"

"I went home," said the Little Bookseller Fitz, continuing his narrative, "thinking what a day's work I had done. I chuckled to myself, hugged to my heart the pocket-book containing the note, and was generally satisfied with myself and the world at large. We supped on hot cockles that night—hot cockles, Father! Think of that! I went to bed without a thought of care. I dreamed of ould Ireland; and I saw in my dreams the green fields and the golden trees of Cork; I heard the old man who plays the pipes, and saw the girls and boys dance, *more Hibernica*, till my heart was glad and danced with them. But presently the gosoons took themselves and their bare legs off to bed, and the piper went playing away over the hill, the sound of his pipes coming back to me through the twilight, and ending in melancholy—as all things Irish do, I think."

"True, my son; but it shall not be always so!" said the Father, with effusion.

"The Lord make you a great prophet!" said Fitz. "I woke up as melancholy as a gib-cat, and I could not think what had caused it—my dream of Ireland or the hot cockles. I ate my breakfast in the dumps; I could not go for a walk because of the rain——"

"It is always fine weather at church, my son," put in the Father.

Fitz bowed his head in silent acknowledgment of the rebuke, and then, with a merry twinkle in his eyes, said: "Thru, for you, Father, but it always smells of May, and one may even tire of too much spring."

"I shall give you up if you don't amend," said Mr. Murphy.

"So I sat by the fire and moped."

"What did you mope for?"

"Bobby, Margaret's little boy, played on the hearth with his doll. It was in the last stage of decrepitude, and Bobby had alternately fondled and whipped it in the hope of putting a little strength into its limbs and back. Its essential difficulty was of the stomach, where one of Bobby's violent punitive bastinadoes had left a wound,

whence the sustaining bran had rushed out like the life-blood of Homeric heroes. Bobby, after awhile, seemed to be struck with this, and as the boy's notion of ailments was gathered from the talk he heard about him, he said : ' Know 'at dolly 'ants—'ants beef-'teak—eh, Unky? dat 'bout make 'im a' 'ite.' And away he trotted to get a piece of meat from his mother, and presently returned with a bit of raw beef, which he essayed by coaxing and command to get the stomachless inaptitude to eat.

"At another time I should have watched the boy's play, and entered into his efforts and speculations with the zest of a child; but there I sat, glum and mopish. It was so different to my usual habit that Bobby was struck by it, and he presently left the sick doll and approached me, and diagnosing my case through his childish eyes, he said : ' Unky badly—Unky 'ants some beef,' and proffered me the morsel rejected by the doll. I pushed him away.

"That action opened my eyes to my condition. I rose and shook myself. What could it be that had put me in such a mood? I asked myself—the dream or—? Holy Mother! I had it!"

"Was it the hot cockles?"

"It was the five-pound note that had stuck in my conscience and given me indigestion. I had forgotten every bit about it since last night. The remembrance struck me with a shock—not of pleasure, Father. I went about all that day as one with a burden on his back—like Christian in the allegory.

"What a blessed sun it was that waked me on Monday morning! and with what alacrity I hastened to my little shanty! Never before did I take down the Bible with such eagerness as I then grasped the poor woman's ancient volume. I fancied I had seen a name and address in it; and sure enough there they were: 'Anne Biden, 13, Wedlock Street.' So soon as I could get someone to mind the shop for me, I went in search of the woman I had cheated. Wedlock Street was not far away, and I soon found the number; but the Bidens no longer lived there. A neighbour told me they had left some years ago; but where they were now residing she could not inform me. I went back disconsolate. Curiously enough, I had not been in many minutes when a young man entered, and asked for the odd volume of 'Humphrey Clinker,' which I had placed in the window, and priced sixpence. I was surprised by the coincidence the more because I was struck with a certain look in the young man's eye that made me think I must have seen and known him before, although by his speech he seemed to be a foreigner.

"For several days I tried to find where the Bidens lived by inquiring of shop-keepers and others in the neighbourhood of Wedlock Street; but in vain. At length, however, I discovered them through an old election agent, who knew everybody. I could not rush off there and then as I wished to do, but I found time to go in the evening. I took the Bible and the hymn-book with me. The old lady was at home; I told her I had brought her the volumes

back because, having sold the 'Humphrey Clinker' for sixpence, and seeing that that was the sum I had valued the three volumes at, I considered that I could afford to return her the Bible and the hymn-book, especially as she seemed to put so much store upon them.

"'But,' said she, 'you gave me five shillings for them.'

"'Madam,' said I, 'you must look upon the four and sixpence as a sum I was induced to give you by a text I cast my eyes on when I looked through the pages of your Bible.'

"She again expressed her thanks, and went on to tell me about her troubles. The family consisted of herself, her daughter, and her daughter's husband, and their two children. She had a son, too, but he was away. The house was very bare, everything but the absolute necessities of life having been sold or pawned to get bread. What she told me let me to a large extent into the secret of the family's misfortunes. Her son-in-law and daughter, who were both mill-hands, and when in work capable of earning a good deal of money, were unthrifty to a fault. Like the Cigal in the fable, they danced and sang when the summer of plenty was at hand, never thinking that the morrow of winter and want would presently follow. She herself earned a little by occasional nursing, but she had had very little to do of late. This decided me on the course I should pursue. So, saying that some money had been placed in my hands to help those in need, I handed her another five shillings, and bade her be sure and come to me should she find herself in urgent need. Then I went back to my shop feeling a little better. For why? Because I had circumvintid the dæmon that had timented me so divilishly," he concluded, returning to his Irish brogue, as he invariably did when he got into a humorous vein.

"Well, and what was the sequel?" asked Mr. Murphy.

"Well, the sequel was that I paid the old woman her 'fiver' back in charity, and fifteen shillings to boot."

"And you did not tell her about the five-pound note?"

"No!"

"Why?"

"Wait a bit, honey, and I'll tell ye all. But, in the first place, I must inform you that five or six years ago a youth used to come into my shop and spend his pocket-money on books, which he would, after reading them, bring back and exchange for others, making up the difference of price, when there was any, out of his pocket. He was a quiet lad, who seemed to have a penchant for tales of mystery, for magic, and things of that kind. I well remember how pleased he was with William Godwin's 'Lives of the Necromancers,' and how he pored over Deleuse's 'Animal Magnetism.' I often wondered what he was, until one evening when he came in he told me he was a booking-clerk in a factory, and was earning eight shillings a week. He said he did not like his position—I wonder who could!—and expressed a desire to get into something that would enable him to travel and see the world. He was a very shy youth, and it was

difficult to get him to talk. Only on one other occasion did I surprise him into conversation, and then I was astonished at the amount of his knowledge of what are called the occult sciences, necromancy, legerdemain, etc. I suggested whether it would not be more profitable for him to study the real sciences; but he did not reply, and shortly afterwards I lost sight of him.

"Well, after the peculiar expression in the eye of the stranger who bought the 'Humphrey Clinker' had bothered me for nearly a week, something unexpectedly called this youth to my mind, and the instant I recollected him I recognized his expression as identical with that which had struck me in the purchaser of Smollet's novel. Could they be the same? Hardly, I thought, seeing that the latter, from his accent, and the style and cut of his beard and mustache, appeared to be French. Anyway, the resemblance was very striking, and I could not help thinking about it, and recalling the friendly glance, as I thought, that the stranger cast about the shop when he came in for the book.

"At the end of the week, on Saturday evening, I called on Mrs. Biden, thinking that another dole of my spurious charity might be needed. The old lady was not in, so I sat and chatted with the daughter till she should return, as the latter said she would not be long. Presently she arrived, holding the corner of her black shawl over her mouth and nostrils, so that she need not breathe the thick fog—being somewhat asthmatical. At the sight of her I jumped as if I'd been shot."

"What did you jump for?" asked Mr. Murphy.

"Because she was the very 'spit' of the young man who bought the 'Humphrey Clinker.' The colour of the hair, the shape of the nose, the expression of the eye—they were the same in both."

"Singular: well?"

"Well, in the course of our subsequent conversation, I asked the good woman if she had not told me she had a son. Yes, she said, she had. She was now seated by the fire, and as she spoke she took up the corner of her white apron and began to fold and pleat it as though about to make a hem; but I saw that she did it unconsciously, because her eyes were fixed on the fire. When a woman sews, she thinks; and so when she gets her thinking-cap on, her fingers instinctively fall to going through the operation of sewing. That, however, is an observation by the way."

"Well?"

"You have got a great many 'wells' to-night, Father. That's about the hundredth since I began my narrative."

"Beware of exaggeration, Patrick Fitzpatrick—and above all beware of punning. Remember there's no place for punsters in Kingdom Come."

"Then, bedad, your Riverence, ye'll have to be standing a long while at the gate picking up the words ye have whittled to bits; for it was from you I learnt the habit."

"Ah, we are all poor witlings, my son, and much in need of

amendment ! But get on with your story. You have all the vices of a weekly periodical : you break off just when you are most needed to go on, and you pad when you should be full of matter. What further did the good woman tell you about her son ? ”

“ She said : ‘ Poor boy ! he will be twenty-two next month, if he lives ! ’

“ ‘ Then,’ said I, ‘ you do not know where he is ? ’

“ ‘ No,’ she replied ; ‘ he left home without so much as saying “ good-bye,” and we have neither seen nor heard anything of him since. He was a bright, clever boy ; but he took to studying magic, and all kinds of black arts, on the sly, and there was no doing anything with him.’

“ ‘ Was that the reason he left you ? ’ I asked.

“ ‘ No,’ she answered ; ‘ we thought he took something he should not : it was a five-pound note—his father’s share in the inheritance of an uncle, and it was put aside to pay the rent, and one or two small accounts, and somebody took it. It may not have been him, poor boy, and I hope it wasn’t ; but appearances were sadly against him, and he took a pet and went off. He was such a headstrong boy ! ’

“ ‘ And mother is so headstrong, too,’ put in the daughter.

“ ‘ Perhaps I was a little too hasty,’ said the mother, weeping ; ‘ God forgive me ! I fear the boy is dead, and I shall never see him more.’ ”

“ Did you tell her then about the five-pound note in the Bible ? ” asked Mr. Murphy.

“ No ; I could not bring myself to make the confession then. Among my other vices, Father, is that of superstition, and I could not help thinking—so strangely had things turned out—that something providential was going to come out of the affair. So I decided that I would first try to find the young man—the purchaser of the ‘ Humphrey Clinker.’ ”

“ It would be odd if he should turn out to be her own son,” remarked Father Murphy.

CHAPTER IV.

SIGNOR VIDENI.

The little bookseller and Father Murphy sat talking together until it was time to shut up shop. The priest then took his leave, and Fitz presently put up the shutters, locked the door, and hurried home as if walking for a wager. He arrived there powdered all over with snow, which was falling in small grains, rather than in flakes, the night being frosty, with a fierce breeze blowing. Fitz had a notion that overcoat and gloves were effeminate, and all the provision against the weather that he would stoop to was to pull his cap down over his ears and turn up the collar of his coat and button himself well up. Hence he arrived home with his large hands and ears red with cold, and his face blue. He had no sooner crossed the threshold than he was aware of a goodly savour that made his

mouth water. His sister Margaret ran out to meet him, and helped to brush the snow off his coat, while he shook it from his ears and hair.

"You've got an appetising smell there, Margaret," he said, sniffing the air. "What is it?"

"Guess," said Margaret.

"Tripe?"

"No; try again."

"I can't; what is it?"

"Steak-and-kidney pie."

"Steak-and-kidney pie!" exclaimed Fitz, who seemed to be trying to make as big eyes as his sister's, who had an interesting face, with a pair of large brown orbs. "Whatever has made you commit that extravagance?"

"I have had a great piece of luck."

"In what way? Has Bobby found another purse with a farthing in it?" asked Fitz, with a grin.

"No, indeed! But you need not be so sarcastic about the purse and the farthing; it might just as easily have had a sovereign in it as a farthing; and you may say what you like, Bobby is lucky. But guess whst has happened?"

"Two conundrums in an evening is too much," replied Fitz.

"Well, then, what do you say to some new lodgers?"

"You don't mean it!"

"I do; it's a young married couple, and they've got a baby a few months old. I've only seen the husband; but if she's as nice as he is, they will be pleasant people to have with us. I think he must be a foreigner, because he speaks with an accent, and he did not beat me down a bit, although I put on a shilling on purpose to take off. Nine shillings I asked; and he took the rooms at once, and paid a week in advance."

"Do you think his intellects are all right, Maggie?" asked Fitz.

"Why do you ask that?"

"Because it's such an extraordinary thing—a lodger to come here and take the rooms, and give you your own price without demur—in advance too; and be nice into the bargain!"

"Nice-looking, I meant!"

"Nice-looking, then: that makes matters worse, if anything; they are generally such a patched and seedy lot that find us out—patched and seedy not only in outward appearance, but in moral character. There's generally something left out of their decalogue: a table or two are missing. And they certainly don't commit the sin of making a likeness of their Maker when they look in the mirror—at least, I hope not."

"Fitz!" (objurgatingly.)

"Are you sure you observed no sign of weakness about him?"

"No; I noticed nothing peculiar, except that I think he must wax his mustache."

"Wax his mustache! What more do you want? That's the

sign of the baste—sure. No honest man ever waxes his mustache—any more than he waxes his conscience to give it stiffening. You will find he has false teeth, false hair, perhaps a false eye—false everything. As to his wife——”

“Patrick!”

“You know you have had them before. You would have done better to send them farther.”

“Well, it’s not yet too late: shall I tell them when they come that we can’t take them in?”

“What, send them to find fresh lodgings at this hour of the night, and in such weather? Why, you would not turn out that wooden mannikin of Bobby’s—or womankin, whichever it is—on such a night?”

“I should think not indeed!”

“And yet you would send away this poor little baby, presumably of flesh and blood, that you say your new lodgers have!”

“I don’t want to send the poor thing away, nor its parents either; I thought you wished it.”

“By no means; the mischief is done now; but I want you to understand what you will have to put up with.”

“What?”

“They’ll expect you to wait upon them hand and foot, all hours of the day, and most hours of the night; and sooner or later they will leave you without paying, or else they will confuse the meum and tuum, and go away with what they shouldn’t. If they do not do either of these things, they will one day come to you and weep piteously, and plenteously too, and tell you how badly things have gone with them; and they will propose to leave their all with you in pawn for what they owe: to wit, the well-filled trunk. And, of course, tender-hearted little thing that you are, you will consent, and they will go; and after awhile, when you have got tired of waiting to see or hear something of the good people, you will open the precious trunk, and find in it a treasure of bricks.”

“You are for ever harping on that man Chuddlekin.”

“And divil a bit of a dacent tune I get out of him, with all my harping.”

“Then I’d leave it off.”

“How can I? Didn’t the thief used to sit there and talk books to me by the hour, and profess the greatest admiration for my learning, and brag about the way in which he burned the midnight oil over his beloved books? It was midnight tallow, by the way, and farthing dips at that!”

“You shouldn’t have let him take you in.”

“You expect a man to be infallible. Didn’t he get at you through Bobby—and aren’t my books my Bobbies? And didn’t he blather about his fondness for his ‘precious tomes,’ as he called them, and promise that one day I should see them, and he would get me to give my opinion upon them, because he would value my opinion on his books above any other body’s? The rascal!”

And he laughing in his sleeve at me all the while, and thinking what a precious mug I was! And to think I could never smoke him, although I was so often struck with the number of parcels of long octavos he brought in and carried so carefully up to his room: long octavos—bricks! And you, Maggie—although here all the time, attending to all his wants with a more than step-motherly care, and noting each change of aspect, to a demi-semi shade in the tint of his nose or cheek, as a farmer would note the meteorological changes of the sky—and you, I say, observing him as you did, and reporting these barometrical changes—to think that you should not have drawn an inference from those most striking metamorphoses in his external appearance—his going out large and rotund, and coming back within an hour or so thin and flaccid: that you should not have drawn an inference, I say!”

“You know I am not good at drawing such things.”

“Bedad, I ought to know; especially where a lazy, good-for-nothing man is concerned. How is it that you women always take to and pet and lay yourselves out upon such vagabonds? I never could have induced any woman, not if I had used all the arts, airs, and devices of which I am capable, to devote half the time and attention to me that you gave to that scamp, Chuddlekin. What is the reason?”

“It’s maybe because you can do too much for yourself. But I must get the supper on the table, and not be wasting my time chattering like this. They will be here directly.”

Margaret had barely got the cloth on the table, and the plates and knives and forks laid, before a knock was heard at the door, and the shuffling of feet on the doorstep.

“There they are!” exclaimed the little woman, running to let them in.

Fitz pushed his feet nearer to the fire, and considered whether it was worth his while to put himself about over a couple of individuals of the species lodger, possibly Chuddlekins, who would upset the house for a few days, and then quit them, as so many others had done, leaving behind them some shattered furniture, and a sense of shattered fragments of the law. The remembrance of his late struggle with the dæmon, however, was very present to him, and he repulsed the suggestion with an emphatic, “Down, baste!” and rose to see if he could give a hand with the luggage, or otherwise assist. A step towards the door brought him face to face with a man wearing a large felt hat, and muffled up in a long, military-looking cloak, bearing a child in his arms. After him came a very pretty young woman; she seemed no more than a girl, and had a pair of eyes like stars, the most beautiful, Fitz thought, he had ever seen. Behind them came a man with a trunk on his shoulder. The bookseller helped him to lower it to the floor. When this had been done, and Fitz turned round again and confronted the male lodger, he had handed the baby to its mother, and was busy taking some change from his pocket to pay the porter.

His face was now visible, and Fitz was surprised to find that it was no other than his acquaintance of a few days back—the purchaser of the ‘Humphrey Clinker.’ He started: at the same moment the stranger recognized him: holding out his hand, he said, with a smile that lifted his waxed moustache, and showed some very white teeth—

“We are old acquaintances, I think.”

“It cannot be Mrs. Biden’s son with that accent,” said Fitz to himself. Then he replied: “Yes; you came into my shop in the Narford Road, just five weeks ago, and bought the second volume of Smollett’s ‘Humphrey Clinker,’ in extra calf, gilt, for sixpence.”

“I called again after that, but you were not in.”

“I did not know that,” replied Fitz.

“It was late one afternoon; but these visits were not my first acquaintance with your shop,” replied the other.

“Ah, then he is the youth, as I thought at first,” Fitz concluded. As he made this observation, his eye fell upon a name painted on the lid of the trunk, which still stood, end up, by the door: it was ‘Signor Videni’; and the little bookseller’s heart fell, for he thought, “He’s not the widow’s son, after all.”

Replying to the signor’s remark, he said: “No?”—interrogatively, and as one knowing what the answer would be, and not caring greatly because it was not the one he wanted.

“No; I had been in your shop many times before.”

“Indeed!”

“Yes; very often; it is some years ago, however, and, in any case, I don’t suppose you would remember me.”

“I think I do,” replied Fitz, delaying a piece of meat that he held on his fork ready to put into his mouth; for they had by this time got to work on the steak-and-kidney pie. “Were you not the youth who used to come and buy volumes of me, and exchange them for others when you had done with them—chiefly on magic, legerdemain, and the black arts generally?”

“I was,” responded the new lodger, smiling, and giving a twirl to his mustache. “How did you manage to recognize me again?”

Fitz told him, adding that he should have identified him at once but for his foreign accent. “You must have been abroad a good deal,” he remarked.

“No,” replied the signor, with a smile; “I have not been out of the country; but I became acquainted with a French family while I was yet a youth, and for six years I was an intimate member of that family-circle. From its younger members, and from one of them in particular (looking across the table to his beautiful wife), I learnt to speak its language with an ease and fluency I could not excel in my mother-tongue; while the head of the family taught me the profession I now practise—that of a prestidigitator. That is why you find me speaking with an accent—that, and the fact that it aids me in my calling to be taken for a foreigner. A prestidigitator is not without honour, save in his own country. I have only been in Manchester a few weeks,” he continued, after a pause;

"I came to fill a three-months' engagement, and, curiously enough, in passing your shop, the first day I was here, I thought I recognized an old friend in the 'Humphrey Clinker' I saw in your window, and at once entered and bought it."

"And did you find it the friend you expected?" asked Fitz, with eagerness.

"Yes," replied the prestidigitator, playing with his mustache; "I found the name of an intimate friend inside the cover. It was that which made me pay a visit to your shop a second time."

"Why?"

"Because," said the young man, biting the end of his mustache, and gazing fixedly upon his plate—"because there is something so sad in the dispersal of books: they are such kindly household friends, and when sold fetch so little, that they are generally the last things to be parted with in a time of need; hence I thought," continued the signor, very deliberately, although with some huskiness of voice—"I feared some misfortune must have befallen my friends. I tried to find them; but they had removed from the house in which they had formerly lived, and all my efforts to trace them were in vain. In my great desire to find them, it occurred to me that you might possibly know the address of the person who sold you the book."

"I do," replied Fitz; "it was a poor woman that sold it to me; she does not reside very far from here."

As the little bookseller said this, he carefully noted the new lodger, who, on looking up, betrayed, as Fitz thought, a moist shimmer along the lower edge of his eyelids. He seemed to make an effort to speak, but did not succeed, and the bookseller went on—

"Her name is Biden"—

Signor Videni gripped his knife very hard, and seemed to be looking through his plate.

"And she has a son and a daughter"—

The signor had now got his mustache between his teeth again, and seemed as though he would bite the end of it off.

"The son is about your age; but he left home some five or six years ago, in a fit of unjust anger against his mother, and has given no sign since, although it has nearly broken her heart."

"It was not a fit of unjust anger!" exclaimed the prestidigitator, striking his hand upon the table so violently that the empty plates and dishes rattled again.

"You are the son then?" cried Fitz, jumping up, and seizing the other's hand. "I thought so!"

"Yes; I am he; but my indignation was not unjust. I may have been wrong to keep away so long, and to give no sign; but unjust? No! Imagine that I was accused of stealing a five-pound note—I!"

As he said this, the young man struck his hand upon his breast.

"That was a mistake," replied the Little Bookseller Fitz; "the note has now been found."

"Found!" cried the young man. "Where?"

Fitz told the lodgers the story of the old Bible; and while he was

doing so, Margaret knew nothing better to do than to throw a shawl over her head and go and fetch Mrs. Biden, who resided but a street or two away, coaxing her with the story of a wonderful baby to be seen, and perhaps to be nursed. They dropped in just as Fitz had finished his narrative, and it need hardly be said that there was an affecting little tableaux; to which Margaret—perhaps the least interested in this singular denouement of the little tragi-comedy—contributed no inconsiderable quota of the tears.

There is little more to add. The next morning, being Sunday, Fitz found his way to church, and after service took occasion to see the worthy Father, to whom he wished to communicate the sequel to the story of the five-pound note. Having listened to the narration of the previous night's incident, Mr. Murphy said, putting his hand on the little bookseller's shoulder—

“Well, my son, and do you think it is still all a jest?”

“No,” replied Fitz, with a moist twinkle in his eye; “it is no jest: the little sparrows do not fall unseen and unthought of.”

THE END.

Book Notices.

Curieuse. By Joseph Peladan. (Paris: LIBRAIRIE DE LA PRESSE, Rue Taitbout.) This is the second of a series of works in which the author intends to portray the mental decomposition of the Latin races. In the work under notice he shows the unfathomable depths of immorality, of vice, and of crime to which a degenerate people may fall, and stigmatises them with the fearless energy of an honest man. And yet he is actuated by no mere misanthropy. His soul is deeply stirred within him by the horrible abyss into which he plunges with his readers; he loves man, and would fain see in him a more worthy image of the Creator. But, alas! how different the reality! “*Curieuse*” is a woman whose very innocence leads her to doubt the existence of such deep sin as that which is sapping the foundations of society. The author's ideal man—in whom are blended the artist, the *savant*, and the man of letters—wishing to keep her pure, undertakes to do so by inspiring her with a deep disgust of her fellow-creatures and their wickedness. To attain this end, he leads her, disguised in male attire, into men's haunts—the café, the club, the theatre; into the resorts of thieves and murderers, into dens of shame and misery; and after creating in her soul a profound horror of every human being, he gradually leads her to weep over the perversity of mankind, and to fervently pray unto the Almighty that He will have mercy upon His miserable creatures. M. Peladan is not an unworthy disciple of that great master, Balzac; but he is tainted with that realism of which M. Zola is the high priest. He is no mean art critic, and perhaps one of the best scenes in the book is that in which he shows some of the pigmies of

our generation freely discussing the merits of such giants as Michael Angelo, Titian, and Raphael. There is some pedantry in M. Peladan's choice of words, and in his frequent use of archaisms, but his mastery of language is incontestable. He lashes contemporary vice with the vigour of a Juvenal, and *unguibus et morsu*, he fearlessly tears asunder the flimsy veil which modern society tries to throw over its iniquities. "Curieuse" is the work of an ardent Catholic, desirous of doing good; but Paris, in its immoral aspects, is so faithfully portrayed that the reader may possibly ask himself whether the end justifies the means, and whether, by revealing so much hidden sin, the author will not defeat rather than secure the object he has in view.

Ralph Waldo Emerson. By Oliver Wendell Holmes. (KEGAN PAUL, TRENCH, & Co.) The life of the brave and gentle Seer of Concord could not have been better told than by his old friend, 'The Autocrat of the Breakfast Table.' Dr. Holmes, as a biographer, had the advantage not only of lifelong intimate friendship, but of intellectual affinity and a natural sympathy with the kindly and penetrating genius of the philosopher, the poet, the lay preacher, whose written and spoken words, whatever may be the future critical estimation of their place in literature, exercised so wide and deep an influence over the minds of the best and noblest of his contemporaries. Emerson had the double spirit of the Old World and the New; the cultivated and general refinement of the one with the boldness and independence of the other. He had the poet's depth of feeling, the philosophic insight and tolerance, the religious instinct, the adventurous eagerness and confidence of a new race of thinkers and intellectual explorers. Above all, he had the supreme indulgence of the highest natures, and the supreme equanimity. All the natural traits of his character, as represented in his origin and career, are noted with sincere and affectionate discernment by the brilliant writer who in these fascinating pages has divined the secret of a beautiful life in its perfect sincerity, its freedom from prejudice, its entire simplicity. It is needless to add that Dr. Holmes has performed a grateful office with the tact and skill of a practised hand, and, what is more and better, with the respect and reverence of a loyal and true heart.

How much lies in laughter: the cipher-key, wherewith we decipher the whole man! Some men wear an everlasting barren simper; in the smile of others lies a cold glitter as of ice; the fewest are able to laugh what can be called laughing, but only sniff and titter from the throat outwards; or, at best, produce some whiffing, husky cachinnation, as if they were laughing through wool; of none such comes good. The man who cannot laugh is not only fit for treasons, stratagems, and spoils, but his whole life is already a treason and a stratagem.—THOMAS CARLYLE.

Health Hints.

PRIVATE cleanliness is a matter of public interest. Wherever dirt and filth are allowed to accumulate, the enemies of health come together, and plague and pestilence follow. It does not matter whether the dirt consists in decaying matter on the surface of the ground, or in a cesspool, or whether it is distributed in unwashed particles over the surface or in the pores of the human body. In the latter case it is rather more dangerous, since a clean person may escape all injury from contagion, while a system not fortified by cleanliness is liable to the attacks of disease. The majority of human kind, both in the city and country, are imperfectly washed. Some people do not bathe once a month, and it is also a fact, that many pass through a whole season without a bath, and possibly have never been completely immersed. The results are found in a predisposition to disease. The unwashed skin is incapable of discharging its natural and healthy functions, and the interrupted action of the pores of the skin which throw off so much of the waste of the system, fosters and doubles their morbid tendency. This danger to health may not be evident at first, but with each neglect of the means of cleanliness it becomes greater, until it is no longer possible to ward off the attacks of disease.

Facts and Gossip.

WE are pleased to see that someone has taken up the question of the improper use of mesmerism—that is, the turning it to account as a matter of amusement and entertainment. The Committee of the Manchester and Salford Sanitary Association has drawn up a statement in this regard which cannot be too widely known. It is signed by A. Ransome, M.A., M.D., F.R.S., Chairman; A. Emrys-Jones, M.D., and T. C. Abbot, Hon. Secs.

THE Committee say: “Exhibitions of the phenomena of mesmerism have become very frequent of late, and many people have been trying experiments in private with reference to the same matter. It appears to the Committee of the Sanitary Association very important that public attention should be called to the dangers arising out of such tampering with the highly-organized and sensitive nervous system of many people. It is possible that in some cases trickery may be made subservient in some of the exhibitions in question; but, without entering into the difficult and still obscure physiology of the mesmeric state, it will be sufficient to point out

that in this condition, when really attained, the will of the subject is for the time in abeyance, and his actions and even his sensations and his ideas are entirely under the control of the person operating.

“By frequent repetitions of the operation the submission to this influence becomes more facile and its action is intensified. Moreover, there appears to be developed a liking for the mesmerised state, so that the subjects present themselves willingly for experiment, and it becomes quite easy for persons, in no way connected with the first operator, to throw these persons into a condition such that they are entirely under their power, in which they cannot resist any indignity, and can be made to commit any act, however outrageous, at the command of almost any persons who may choose to assert imperiously such power. It will readily be seen how dangerous is such a condition, not only to the subjects themselves, but also to the public at large. Women especially, for their own sakes, should be warned never to permit themselves to be placed in danger of submitting their will to this paralysing influence, seeing that they may become the slaves not only of the first operator but of other less scrupulous persons. Men also should remember that they may become unconscious instruments of designing persons, and that they may be made to perpetrate even crimes whilst in a state of partial unconsciousness.”

ON another page we publish a letter from the Secretary of the Birmingham Phrenological Society. We understand that this is not the only society of the kind in Birmingham. We are also glad to see that societies are springing up on every side, thus attesting the fact that phrenology is very far from being dead, or even moribund. We shall be pleased to hear from other societies, either in the Three Kingdoms or the Colonies.

THERE has for a long time been a strong desire to form a society in London. The subject has been more than once mooted in these pages; but for some reason or other the idea has never been carried to an issue. The question has again come to the front, and we hope that the right spirits will now find a means of coming together, discuss the subject, and set a society afloat for the investigation and dissemination of phrenology. Any person desirous of joining such a society, either as corresponding or other member, would oblige by sending his or her name and address, with suggestions, to Mr. A. T. Story, Editor of the PHRENOLOGICAL MAGAZINE.

A GOOD deal may be learned from the paper on “Rest and Repair in London Life,” contributed by Dr. Robson Roose to the current number of the *Fortnightly*: chiefly the fact that the last word of science on hygiene does not materially differ from its first. Moderation in all things is the only universal rule; to be supplemented in individual cases by the knowledge which every sensible man ought

to have of his own wants and capacities. Generally, however, Dr. Roose believes in early rising and early dining. "Seven o'clock is quite late enough"; also half an hour's rest before sitting down to table is for digestive reasons desirable. As to diet, "the increased use of vegetables and of fish is a salutary change, combined as it often is with a diminished consumption of meat." A ride on horseback is recommended as the best form of exercise for those whose minds are constantly at work.

As the demand for the phrenological delineation of the character of Lord R. Churchill has been so great that it has been found necessary to reprint it from the MAGAZINE, it is now to be obtained; price 1d.

THE anti-tobacco people ought to have their attention called to the fact that 'tobacco-blindness' is becoming quite a common affliction. At present there are several persons being treated for it at one London hospital. It first takes the form of 'colour-blindness'; the sufferers who have smoked themselves into this condition being quite unable to distinguish the colour of a piece of red cloth held up before them. That is the popular medical test, though there is also a more scientific one. Eventually the victim to 'tobacco-blindness' sometimes loses his eyesight altogether. Although smoking is to a large extent the cause of the malady, and so gives it its name, heavy drinking is also partly responsible. Unless the smoking and drinking go together, the 'tobacco-blindness' is not serious. A proof of this is, that if a doctor has a case of it in hand, he always insists on abstinence, when, as a rule, the sufferer gradually regains his sight.

M. MATHIEU DUVAL read a paper at the last meeting of the French Anthropological Society on Gambetta's brain. The allowance of that organ possessed by the great demagogue was decidedly below the average, as the examination which his brain underwent after his death revealed. It was found to weigh only 1,161 grammes; and bears, therefore, no comparison with such a brain as Cromwell's, which weighed 2,000 grammes, or Cuvier's, which weighed 1,829 grammes. The peculiarity of Gambetta's brain, M. Duval stated, was that it was particularly well-developed in that portion of its structure where most undersized brains are found to be defective—that is, in the third frontal circumvolution. The folds in this portion of it exhibited a quite uncommon richness and variety of complication. M. Duval concluded by pointing out the support which the peculiarity of structure and configuration noted in this case gives a well-known theory of Broca, who localized the oratorical faculty in the third frontal circumvolution.

COLOUR-BLINDNESS is an interesting infirmity among many people. In this country and others, where transportation is carried to such a high degree of perfectness, and in which so much depends upon signals by coloured lights, it becomes a very important affliction.

There are some interesting features of this disease present among the people of India. Notwithstanding the exceeding beauty and variedness of the coloured textile fabrics, dyes, and pottery made by these people, a reliable Englishman, resident in India for twenty-three years, bears witness to the fact that there are comparatively few among the millions of India's inhabitants in whom the sense of colour perception is well-defined. This is especially noticed in the poorly educated, and, in fact, their total sense of sight is poorly developed. It is difficult for them to thread a needle, or to distinguish between the top and bottom of a picture.

A CORRESPONDENT asks what is the 'Life Line'? Draw a line from the external orbit of the os frontis to the centre of the spinal protuberance of the os occipitis; then measure from the meatus auditorius externus up to this line. The measurement gives the depth of that portion of the brain devoted specially to sustaining and conserving life. The average is about three quarters of an inch; the minimum in adults half an inch, and the maximum one and a quarter inches. With half an inch only one has very slight hold on life, and is not likely to reach the age of forty years. Three fourths of an inch gives a probability of sixty to seventy years; an inch, eighty to ninety years, and an inch and a quarter, hundred to hundred and ten years, or more.

Correspondence.

THE BIRMINGHAM PHRENOLOGICAL SOCIETY.

To the Editor of THE PHRENOLOGICAL MAGAZINE.

It was in the winter of 1883 that the elements of the above society, generally known as the B. P. & M. S. (Birmingham Phrenological and Mesmeric Society), were brought together. The well-known lecturer, Professor M. Moores, of Bingley, Yorks, had been delivering a course of lectures in this town, and had offered to conduct a small and select class of phrenological students, at his rooms in the vicinity. The success attending this little movement induced those who had participated in it to form themselves into a Society for the Study of Mental Science, and it was arranged that a meeting should be held in one of the Birmingham restaurants to consider the best means of carrying this resolution into effect. A committee and chairman having been elected, the meeting took place in due course, the code of rules presented by the committee being accepted with certain amendments. It was decided that, for the present, our weekly meetings should be held at the house of our present and valuable secretary. This was about the end of May, 1884.

We began with 'Combe on Phrenology,' and 'Bovee Dodds on Animal Magnetism.' These we pulled to pieces and criticised with

the ardour and earnestness which became us as investigators. Then we set on to examine heads, in our elementary way, pointing out the locality of the organs, and stating their relative development in our several heads. We then commenced to classify the organs, and to consider the results pertaining to the development of one class over another in the same head. We ran along "like a new wheel-barrow with the wheel greased," as Sam Weller says.

To facilitate the attendance of the majority of the members we removed our quarters to Bull Street Coffee House—a more central position—then, on account of an increase of membership, to Priory Rooms. It was here that we held our first annual meeting, June 8th, 1885, which, in spite of a continuous rainfall, was well attended, and favourably noticed in the daily papers.

Our present quarters are at the Temperance Restaurant, Temple Street—our meetings take place weekly, as hitherto, and the society is fairly represented. Our programme consists of readings from the standard authors upon phrenology, physiology, physiognomy, and mesmerism; original papers by the members, and practical delineations of character; and it is here to be noted that some of the lady members are by no means the least active or proficient in this respect. Occasionally we are favoured by an encouraging word from our experienced president, accompanied oftentimes by a present of some busts of noted characters, sketches, pamphlets, essays, etc. The present number of our society is about sixty-five members, and of these about thirty may be considered honorary.

This is our short and simple history, which, by way of introduction to the readers of the MAGAZINE, I have thought it necessary to introduce before we avail ourselves of the Editor's kind offer to give a monthly extract of our minutes. There are some original heads in our society, and you may expect some original ideas, I promise you.

WALTER R. OLD, Chairman.

Birmingham, April 8th, 1886.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

D. A. K. (Dumfries).—This boy has a fine organization and a good head. It is well developed in the moral region, and exceptionally well represented in the intellectual. He will, if carefully trained and educated, make a clever man. He will be better fitted

for a profession, for art, or for the Church, than for ordinary business. He is exceedingly kind-hearted and sympathetic, and will want to be engaged in moral work. He will make a good scholar; already begins to learn well, and is quite a fluent and original talker; is most affectionate, and will as a man be of a loving and domestic disposition. He is not selfish, and will not be self-seeking and avaricious unless badly trained. He will possess considerable energy, and not a little imagination and dialectic ability.

W. L. (Frome).—This photograph indicates rather a strong head, with some weak points. The temperament is one that tends to dissatisfaction, and a disposition to criticise and find fault. But it also stimulates to work. The moral brain seems irregular in development. There is considerable imagination, a good deal of originality of thought, some wit and humour, and uncommon constructive power. The talking faculty is not so great; he is better fitted for writing than for speaking. Possesses considerable literary ability, and some power for art; is not lacking in will, perseverance, and determination, and will probably make his way by sheer resolution and hard work. He needs to be careful not to become cross-grained, crotchety, and cynical. He is a fairly good observer; has an excellent idea of forms, sizes, and shapes; is quite orderly and methodical, and has more than common ability for calculation; would make a good architect, engineer, surveyor, builder, or contractor. His memory, though defective in some respects, is on the whole fairly good.

A. S. (Leeds).—This young lady has all the indications of possessing a strong vital organization, which will give her a powerful hold on life, great capacity to enjoy life, and the disposition to take it easily. She does not fret and chafe as many do. She is content to enjoy what she has, and to wait and hope for something better. She has a good appetite, and enjoys her food, and generally it does her good. She has great capacity for enjoyment, and to make herself agreeable to those about her. She is capable of making a good housekeeper, or a good business woman. Her intellect leads her to think, plan, and devise ways and means. She is not so much of a close observer, and has not a first-class memory in all things. Her moral brain is well represented, as is also the social. She is naturally good-tempered, pleased to make others happy about her, and inclined to serve and make herself useful, especially among those who recognize her worth and her efforts.

J. H. L. (Bradford).—You are best adapted for some out-door labour of a physical nature. You have a strong physical organization, and because of that you need plenty of exercise. You are fitted for agriculture, for raising stock, for contracting for works, and such like. You appear to have a good moral brain; are religiously inclined, good-natured, and sympathetic, and rather spiritually-minded; but you may not always be able to control your passions and impulses, so as to live a perfectly regular and consistent life.

You have a fair amount of intellect, but are more especially given to observation and reflection. You have a good many original ideas, and you like to travel, and see new places, in order to get new views of life. You are not much of a speaker; you think more than you talk, and are more noted for saying a great deal in a few words than for much talking. You are affectionate, fond of home, and very devoted to children. You have some musical gift, and should have a fair singing voice.

J. H. (Otley).—This photograph indicates a very irregular development of the head, and in consequence some oddity and eccentricity of character. There appears to be some lack of steadiness of will, a tendency to waver, and a deficiency of perseverance. The moral brain is irregular in development. There seems to be a want of Veneration, and hence he is not of a very devotional and worshipful disposition. Nor does he appear to be very sympathetic, and so he may at times appear hard and unfeeling. His intellect is developed chiefly in the perceptive range. He is fond of going about to see, hear, and examine things. He remembers, too, fairly well what he sees, and has an odd way of telling what he has seen, and describing things and men. But what he observes does not lead to much thought. He is short in respect to original thought, when life to himself becomes dull. He has some constructive ability, and is apparently best fitted to doing something that requires the faculty to make and adapt one thing to another, as a builder, carpenter, etc. He tells extraordinary stories; is very old-fashioned, full of talk, but not very polite, etc.

F. P. C.—This young lady is destined to live long, and to enjoy life as she goes along. She is not easily upset, and, provided she gets a good sort of husband, she will take more pleasure out of life than most people. She needs for a suitable mate an industrious, good-tempered man, and with that she will be satisfied. She is good-natured herself, and not easily ruffled. She will make an affectionate, hard-working, and sociable companion. She is not particularly intellectual, but she possesses good common sense, and is well qualified to make a careful and cheerful housekeeper. Her hair is so thick that it is impossible to judge of her moral brain. She seems to possess plenty of energy, push, life, and vitality, and will live through what would kill the majority of women.

P. A. B. (Grimsby).—You have a very distinct intellect, but will fall short of what you promised as a lad from want of Destructiveness. You must energize yourself more, and mix with those who will call out this quality. You appear to have constructive ability, also large Causality and Comparison, which will make you quite desirous of investigating subjects, analysing, and mentally pulling to pieces everything you see and hear, and of inventing and applying the ideas you possess. You have also some versatility of talent, but the trouble will be for you to apply your mind sufficiently on one thing long enough to be thorough.

THE Phrenological Magazine.

JUNE, 1886.

HENRY WARD BEECHER.



R. BEECHER has naturally a remarkable degree of vital power, animal life, warm arterial blood, excellent digestion, and very good circulation of the blood. When excited, the blood rushes quickly to his brain, but, the neck being large, the blood readily returns to its normal condition, so that, though organically he is liable to apoplexy, yet, by leading a temperate life and obeying physiological laws, he can live to old age, and enjoy a greater degree of health than the majority of men. He has not only a healthy vital system, but a very strong muscular and osseous framework. These indications give him remarkable tenacity of constitution, and very great powers of physical endurance. They also give him so much recuperative power, that he can sustain extraordinary mental exertion, and, though exhausted for the time being, he soon rallies and is as vigorous as ever. There is not one man in a million who has such a favourable organization for continued healthy mental labour as he has.

The sympathy between his brain and body is so great that one aids the other, to such a degree, that both will wear out together. He is very emotional, and easily impressed by both internal feelings and external influences. He has great magnetic force, is full of electricity, and consequently he imparts life and vivacity to every word he utters, whether in public or private. He impresses and controls the minds of his hearers without making an effort to do so, for his utterances are like sparks that kindle a fire in the souls of those who listen to him.

I measured him around the chest, in Manchester, in 1863, and found that his chest had enlarged three inches from what it was when I measured it in New York in 1860. His brain is large, and I found that this had increased about an inch in circumference between 1860 and 1863. I also noticed that

several organs of the brain had changed since I first examined his brain forty years since. These organs are Self-esteem, Veneration, and Causality. They are now prominent as compared with the other organs, and these have been called into active exercise in his daily life, and have not only been apparent in his character, but the organs have increased in size.

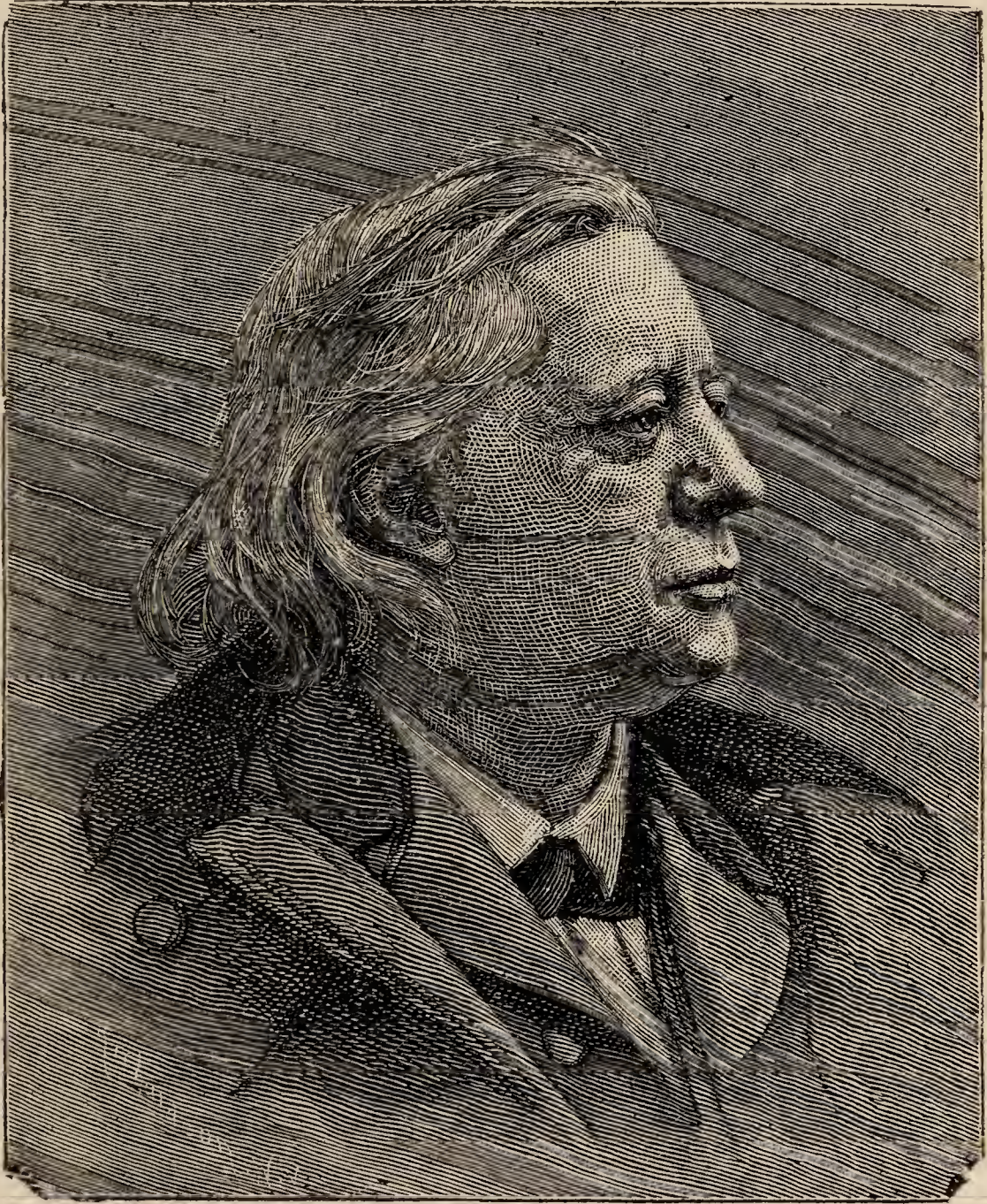
His perceptive faculties are fully developed. Individuality is very large, giving him great power of observation, and knowledge of external objects, as well as perception of things in their details. *Language* is *very large*, giving him a knowledge of words and power to express his thoughts and feelings with great facility, as well as felicity. Order is large, and enables him to arrange his thoughts and systematise his ideas. Form and Size are large, which, combined with Colour and Ideality, give him a great appreciation and admiration of paintings, statuary, flowers, and architecture.

Alimentiveness is large, giving him an excellent appetite, enabling him to take sufficient nourishment to sustain his great and continuous mental efforts. Destructiveness is not prominent, and exerts only a subordinate influence, while Combaticiveness is active and large, and gives him the love of debate and power to overcome obstacles in his way. It would be better if Destructiveness were larger, to exert a modifying influence over his very prominent Benevolence, which at times gains the ascendancy.

The social faculties are fully developed, especially the organs of Friendship, Philoprogenitiveness, and Inhabitativeness. These are sufficiently active to make him one of the most affectionate type of men. He is in his element when surrounded by friends and children, and is capable of being most devotedly attached to his home and country. Amativeness is fully developed, but is not a predominant faculty, and it would not become a ruling power while the moral faculties are kept in constant exercise.

Approbativeness is large, and is a powerful stimulant, for it makes him desirous of excelling in his efforts, and of accomplishing what he undertakes in the best possible manner. Self-esteem is fully developed. In his youth this organ was moderate, and did not exercise due influence in his character. With his strong social and sympathetic nature, he was not sufficiently dignified, but the influences of the increased development of the organ have been more apparent within the past few years. Firmness is large, and in times of emergency he is equal to the occasion, but under ordinary circumstances he is mild, pliable, and easy in his

disposition. Conscientiousness is full, and exerts a controlling influence, but it is not of that kind that would make him rigid, dogmatic, and sectarian, like John Knox and Calvin. Hope is very large, and stimulates him most powerfully to look on the bright side of all subjects. But, with his strong vital temperament, if there should be a reaction, he would despond most fearfully. In his normal condition, he is



buoyant, hopeful, vivacious, and full of delightful anticipations. Spirituality and Veneration were rather defective many years since, but in 1863 I found that these organs had increased by two degrees, and he has become more devotional and spiritual-minded, yet he has always been *unique* in the manifestation of his religious sentiments, and has not followed closely in the footsteps of the past, nor does he bow down to old preconceived opinions and stereotyped formulæ. He has believed more in the spirit than the letter of the law ;

and while retaining all the essential elements of the creeds of his school, yet in his great humanitarian soul he has thrown aside all contracted tenets that he thought were of minor importance. Benevolence is very large. It is the most powerful organ in his brain, and has a monopolizing influence over his character, mellowing his actions, and making him one of the 'greatest philanthropists of the age. It tinges his religion, theology, and philosophy; and in the absence of Acquisitiveness, which is small, he frequently does more than obey the Golden Rule; for he is constantly benefiting others more than he demands that they should benefit him. Ideality and Sublimity are large, giving breadth and expansiveness to his mind, enabling him to amplify, magnify, embellish, and make glowing descriptions. He has all the attributes of the true poet, and clothes his ideas in the most beautiful imagery. Causality is large, and helps him to comprehend principles—to think, argue, originate, and explain his ideas in a lucid manner; but Comparison is the largest and most influential of his intellectual faculties. His forehead is like that of Socrates in this respect. This conformation gives him an extraordinary facility in comparing, analyzing, describing, illustrating by the use of simile and metaphor. I have rarely found this organ larger than in his head. Imitation is also very large, and he has a most perfect command over his audience when he mimics and represents life under different phases. Had he devoted himself to the stage he would have made an actor of the first type. I was asked to examine the head of a gentleman many years ago, in my office in New York, and to have my eyes bandaged. I consented, and gave a glowing description, for I found that it was no ordinary head. Among other things, I said the gentleman would make an excellent clown for a circus; for he had uncommon powers of wit, language, and imitation, and could keep any company alive with his outbursts of natural merriment. I said also he would be a noted man, and would occupy a prominent position in society, in a moral and intellectual channel. When the bandage was removed from my eyes, I was surprised to see Mr. Beecher, whom I supposed was still in Illinois, for it was before he had a church in Brooklyn.

Acquisitiveness is one of his smallest organs, and he has always manifested the greatest generosity, and has encouraged his church to contribute to the necessities of poorer churches and societies. Though he can command the highest prices for his lectures and writings, yet he is not a sordid or miserly man, and will not be likely to accumulate a fortune, even

though he should earn one. Secretiveness is also small, and he is too confiding, too open-hearted and trusting. Cautiousness is not large enough to give suspicion or distrust of others, hence he is at times too liable to speak and act from the impulse of the moment. He is too liable to over-estimate the honest intentions of others, and to feel more indebted to them than necessary. It would be very easy, if he had occasion to confide in designing people, for him to open his heart too freely for his own good. It is his nature to think evil of none, and it would take more to convince him of the dishonesty of those about him than for many.

In summing up his chief leading qualities of organization ; he has warm, arterial blood, quick circulation, excellent digestive power, healthy secretions, a highly susceptible, active nervous system, a brain of good quality, and of volume more than ordinary, a warm, strong, social, sympathetic, refined, imaginative nature, unusual powers of language, comparison, intuition, perception of truth, a brilliant imagination, a large, liberal, untrammelled mind, great mental scope and comprehension. His greatest hold on the human mind is through the exercise of his sympathies, which extend through all grades of society ; while his greatest weaknesses are his excessive liberality, open-heartedness, confiding disposition, and unselfishness. He has the talents to make him the most noted preacher of the age. I know of no living public man who has so many attributes, combined in so felicitous a manner, that rightly exercised will give him a pre-eminent place in history.

I cannot conceive that, with his Christian life, he should sin as he has been charged ; but would rather believe that ten men would swear falsely than that he should have fallen from his moral pinnacle, and trust that time will prove this to be the case, and that he will out-live this slander, and imputation of evil, and have for many years a brilliant and useful career.

The above delineation was written by Mr. Fowler some years ago.—ED. *P. M.*

SIZE OF BRAIN AS A MEASURE OF POWER.

THAT "size is a measure of power" is a law, everywhere seen, affecting organic nature. When we gaze upon a noted rower or athlete, his large and powerful-looking muscles arrest our attention ; the workman at the forge shows muscles hardly less strong and enduring than the material which he works. And all will acknowledge that two men of health

and outward conditions the same, the one having the larger muscles will be the stronger.

From the muscles, let us look at things in every-day life ; and is not the same law applicable here ? The thick rope is used where the greatest tension is ; the same with the massive iron supports in a heavy building. Again, if quality be the same, are not the larger animals more powerful than the smaller ? the giant than the dwarf ? Who has not noticed the powerful cart-horse, as it drags its heavy load through the streets, and compared its massive build with that of the sleek race-horse ?

This same law is true of the nerves ; let us examine one pair—the olfactory nerves—and we find in man they are not one quarter the size of those of the horse ; while in the ox, which requires a more powerful smell, it not being equally domesticated as the horse, and oftener sent into the fields to shift for itself, they are still larger ; and in the hog, which has frequently to find its food, when covered with rubbish, thus needing great power of smell, these nerves are of increased size ; whilst in the dog, which has a stronger sense of smell than any other animal, they are further developed in size, showing that the larger the nerve the more powerful its function.

This law governing the nerves, is it not to be extended to the 'head-office' of the nervous system—the brain ? Most assuredly it is ; such an anomaly could not exist as that which, though true in its several parts, was false respecting their fountain-head. Is not the child's brain smaller, and its mental capacity weaker, than the adult ?

Again, compare the brain of an idiot with that possessed by one intellectually strong, and we find the lower the mental power the smaller the brain. Darwin's followers have investigated this with great zeal and ardour in respect to evolution, and all have arrived at the same conclusion—viz., "that the larger brain indicates the greater intellect." Let us take a few instances, judging the size in three ways—(a) Weight ; (b) Volume ; (c) Measurement. The average weight of the European brain (male) is about 49 ozs. ; but as the power of mind decreases the size diminishes also, until we come to those almost void of intellect, having only 20 ozs., or less. Professor Owen gives a case of an idiot, aged twenty-two, in whom the brain weighed only 13.22 ozs. Professor Marshall speaks of one in which the weight of the brain was but 8.5 ozs. ; but in this case the idiot was only twelve years old. Professor Theile mentions another, aged twenty-six, in which the brain weight was as low as 10.6 ozs. (Bastian's "Brain as

an Organ of the Mind"). Now reverse our inquiry, and we notice, the greater the mental power the heavier the brain: Cuvier's weighed 64.5 ozs.; Abercrombie's 63 ozs.; Spurzheim's about 55.5 ozs.; and the same with all powerful and master minds. It must not be understood that men, who are but brilliant in one way, are those referred to as 'powerful and master minds.' An average head only may be possessed by one who is more apt at one thing—music, for instance—than one with a somewhat more massive brain, the former having greater activity; but the deep, powerful thinker, the leader in the senate, the energetic commander, the determined explorer, and men who have risen from comparatively humble circumstances—these men have large brains—these men are truly powerful—as Agassiz, Bacon, Darwin, Adams, Burke, Napoleon, Washington, Franklin, Burns; but why enumerate more, when their name is legion?

From the foregoing statements, we find the powerful minds having brains of the greatest weight; some 15 or 16 ozs. above the average; while the lower the brain bulk the more idiotic is the possessor. Scëmmering declared that "he scarcely ever weighed a brain of 4 lbs."; whilst no European with brain of less than 37 ozs. has been anything but feeble in mental power.

As regards volume, we find the human brain differing from 1,900 cubic centimetres (a c.c. about one-seventeenth of a cubic inch) to 1,200 c.c., according to intelligence. Dr. Aveling gives ten cases of microcephali—Greek, *mikros*, small; *kephalē*, head—designated by Carl Vogt as 'ape-men,' whose volume of brain was considerably below 1,000 c.c.; of these beings it may be said, although born of human parents, they are incapable of speech, unteachable, their size of brain, and consequently intelligence, being sometimes inferior to apes. One of these, named Marguerite Mæhler, aged thirty-three, having only 296 c.c. in volume (Darwin made easy).

Measurement (horizontal circumference just escaping eyebrows). Although this method of estimation is not quite so accurate as the two former plans—owing to some heads being higher than others—yet we shall again find 'size of brain as a measure of power' satisfactorily demonstrated.

The average measurement of a male head is 22 inches; idiots below this. Dr. Gall remarked, "a head not measuring more than 14 inches in circumference was always idiotic"; but I venture to say, that one not more than 18 inches will be greatly deficient in mental power; while, on the hand, the measurement of all heads noted for great power of mind has been considerably above the average size. Napoleon's

head was 24 inches in circumference ; Franklin's and Webster's over 24 inches.

Again, if size of brain gives us any standard as to power, we shall expect to find animals with the most powerful minds having the largest brains. No doubt the greatest intellectual capacity is to be found in man ; for if it were not so the lower animals would speedily burst their bonds of subjugation ; also that mental power becomes lower as we proceed through the orders of birds, reptiles, and fishes. In estimating the weight of the brain, of course it is essential it should be compared with the weight of the body ; although there are but two animals—the elephant and the whale—having larger brain, irrespective of weight of body. The brain of the elephant being three times as large as man's, and the whale's nearly twice as large. But when we think of the gigantic size of these animals, in comparison with man, the size of the brain becomes insignificant ; besides, this massive bulk is not so much in the case of the cerebrum—*e.g.*, the seat of the intellectual faculties—as in the size and weight of the various minor parts, especially in connection with the origin of the cerebral nerves.

The following figures, given by Dr. Aveling, show clearly the preponderance of brain power in man : “In the human race the average ratio of body weight to brain is as 36 to 1 ; in mammalia, 186 to 1 ; in birds, 212 to 1 ; in reptiles, 1,321 to 1 ; in fishes, 5,628 to 1.” The objector may, however, say, is it not a fact that small mammalia, and birds, low in the scale of mental capacity, have brains bearing a greater ratio to the weight of their bodies than many of the larger and more powerful-minded animals. Let us look at this, and we may ask of what are the brains of these smaller animals principally composed ?—not the brain proper, but mostly of the origin of the nerves of pure sensation, and those of the spinal cord, which are as numerous as in the larger animals. These must necessarily occupy a considerable bulk. The same may be said of small birds.

Now compare the human brain with the higher mammalia, and we find the brain of the ape bears a smaller ratio to its body than in man ; the dog (averaging different breeds), the proportion between body and brain is as 120 to 1 ; in the horse, 450 to 1 ; sheep, 750 to 1 ; ox, 800 to 1. Again, taking the ratio of body to brain, bulk for bulk, the brain of the horse is not one-twelfth as large as the human ; the ox one-twentieth. Sœmmering writes : “The largest horse's brain I have examined is scarcely more than one-half the size of the smallest which I have seen in an adult man.”

I will conclude this part in the words of G. H. Lewis : " A survey of the vertebrate classes discloses a remarkable correspondence between the size and development of the cerebrum and the energy and variety of mental manifestations. As we pass from fishes and reptiles to birds, and from birds to mammals, and in mammals from the less intelligent to the more intelligent, we notice a decided increase in cerebral development. It is a legitimate inference that the one is in some correspondence with the other " (Physiology of Common Life).

Apply this same law to nations, and what do we find ?—powerful, energetic nations exceeding weaker ones in size of brain, and invariably, when brought into collision with them, overcoming them. The Teutonic head is larger than the Celtic, which latter race first occupied Europe, but were driven by the former into the mountainous parts, where it was not worth while to follow them. The heads of the Australian aborigines are considerably smaller than the English head, and mental power is proportionately weaker. The average European head is to the average Hindoo as the head of a man to that of a boy ; and hence the conquest and subjection of one hundred millions of the latter by thirty thousand of the former.

" Are we, then, to conclude that differences in mental power have no intimate connection with the comparative volume of the brain ? We cannot draw such inferences, because the highest and most civilized races of men exceed in the average of their cranial capacity the lowest races ; the European brain, for example, being larger than that of the negro, . . . and those apes, on the other hand, which approach nearest to man in form and volume of their brain, being more intelligent than the Lemurs, or still lower divisions of the mammalia, such as the Rodents and Marsupials, which have smaller brains." Sir Charles Lyell (*Antiquity of Man*).

This is equally true of the different parts or organs of the brain, the larger phrenological divisions being more powerful than the smaller ; thus the negro has smaller reflective organs than the European, and the reasoning capacity is proportionately weaker.

The general law, then, being " the size of the organ indicates its power," we naturally ask, are there no modifying conditions or circumstances ? for it is known that some men having large heads have merely been conspicuous in the want of intellect. Upon examination, it will be found there are certain restrictions, which may be classified as—(a)

Quality; (*b*) Health; (*c*) Exercise; (*d*) Environment; (*e*) Education; (*f*) Age. We will briefly look at each of these.

(*a*) Quality. It has long been known that different brains are unlike as to activity and power of determination; in other words, they differ in quality. These differences of mental constitution are called temperaments; of which there are three—(1) Vital; (2) Motive; (3) Mental. The vital temperament indicates impetuosity, impulsiveness, enthusiasm, great endurance of fatigue, practicability, and more availability than profundity—externally, such a one has a round head, thick neck, large nostrils, florid complexion, forehead broad, region of the eye-brows prominent, broad shoulders, etc. The motive is applied to those who are forcible, thorough-going, firm, and having strong passions when aroused. Its decided predominance is accompanied by a tall figure, Roman nose, high-cheek bones, bass voice, hard flesh, dark hair and eyes, etc.

The mental temperament distinguishes those who have a superiority of mind over body, intenseness, rapidity of thought, great activity, and excitability. Persons who possess this temperament have sharp noses, small stature, small bones, quickness of motion, fine hair, etc. We rarely find people having but one of these temperaments; frequently the whole three, in a greater or less degree, are to be observed in one person. But a well-balanced mental constitution is most favourable to power and greatness.

It has been stated that one of the differences of quality is activity: this is frequently confounded with power; they are not, however, synonymous terms; for power, in whatever degree possessed, is capability of feeling, thinking, perceiving, or acting; whilst activity is the exercise of power, or action of the organ, with more or less intensity. To confuse these, then, is to mistake cause for effect. Hence, though size is essential to power, it is not necessary for activity.

(*b*) Health is another consideration; for if the body is weak, sick, or exhausted, the mind is equally so. To have mental vigour, we must first have bodily strength; in other words, "A sound mind in a sound body."

(*c*) Exercise is also important; for this law is of universal application to all animals, a muscle or nerve being increased in this way: hence, two persons of equal brain, the one who has more judiciously exercised it will manifest the greater degree of power. Over-working, however, injures the brain.

(*d*) Environment, and (*e*) Education. These two conditions are but extensions of exercise; but they play an important part respecting capacity. Environment—which term

is used in reference to society or surroundings—tends greatly to stimulate or depress mental power; and education acts in a similar manner.

(*f*) Age must also be taken into consideration in estimating the weight of the brain; for this decreases after the age of forty, and in a greater degree from fifty to sixty; thus, in the case of some powerful-minded men who have exceeded seventy years, the brain weight has been little above the average; as in the case of Grote, the historian, whose brain weighed only 49 $\frac{3}{4}$ ozs. when seventy-six years old.

After the foregoing statements, the question arises—What legitimate deduction can be drawn from this essay? We have seen that the general law—"the size of brain is a measure of power"—has certain modifications in connection with it. The only conclusion it is possible to arrive at is that which may be termed the phrenological *cæteris paribus*, or "*other things being equal*, the size of brain is the measure of power."

And is anything to be learned from this doctrine of size as a gauge of power? At first we may be inclined to say nay; and even some, with small heads, may say, "It is no use trying to be mentally great and powerful." But look deeper into it, and we find one of the grandest conceptions of life—the greatest consolation to the one with but limited intellectual calibre. You ask, how? and the answer comes—you have seen that quality of brain is as important as quantity, and also the mental capacity is weakened by want of exercise, abuse of health laws, etc. Now reverse this, and although the quantity of brain may be only average, yet by exercise, society, etc., you may bring every part of your brain into its greatest function; and not only so, but exercise will keep constantly further developing your mental faculties. And what will be the result? If you do not then become a truly master mind, yet, by indomitable perseverance, you will form a glorious star in the intellectual heavens for future generations to gaze upon with wonder, and say, "He truly made himself great."

There is, however, another consideration—that of posterity; for nature compels us not only to live for ourselves, but also for our children. And what can be a more glorious ideal than that, in trying to increase our own mental powers, not only we, but coming ages, may benefit thereby.

We have only to glance at our own nation, for the last thousand years, to see how the reasoning powers have been developed; but why should we not strive with greater zeal to increase likewise the moral and social faculties, so as to

hasten on the time when 'humanity' shall be fully understood, and war among nations terminated for ever? Should the one with but average size brain, then, despair? Rather let him strive, not only for mental greatness, for his own benefit, but also the far nobler conception, to make coming ages wiser and better. Then will it be said with greater truth, "How marvellous! how wonderful! how like a God!"

A. G. H.

CHOICE OF PURSUITS.

ON Tuesday evening, March 2nd, a lecture was delivered by Mr. Fowler in the Mechanics' Hall, Darlington, on the above subject. The lecturer said he had come to talk to his audience that night upon the choice of pursuits, the developments of character, and the unfolding of the mind in different directions. It must be understood, to begin with, that the mind was somewhat like a rosebud: it gradually unfolded. The mind of a child was like a little rosebud, which took the sun and the nourishment and the moisture necessary to make a plant grow, in order that the bud might swell and develop so that the outer leaves gradually opened, leaving room for the second leaves to open, and the third row of leaves to expand, so that by-and-by there was a full-blown rose. You could not always tell what the rose was going to be until it was blown. Now, there was a little child in a family. No one knew the real power of that child, to see it as a child, unless the physiologist, or the phrenologist, could throw some light upon the subject. But give that child nourishment of the right kind, mental and physical; give it proper training; give it all the chances for development of that mind which, like the bud, was now beginning to develop itself, and you began to see a Moses, a Joshua, a David, or some other man of distinction. Every man who was distinguished, or had been distinguished, was a little baby once, and did not know A from B. Young people should use every means possible to know all about themselves. Their thoughts should be directed to themselves. It should be their study to analyze their minds, to watch the tendencies of the mind, and they should ask themselves, "What am I, every day? What are my strongest desires? With whom and where do I enjoy myself the most?" This was self-examination. Some people never stopped to think of these things—never seemed to want to improve themselves morally and religiously. Now, if young people would only, instead of

allowing their youthful frivolity to take possession of their minds, come at times to seriously think about their powers, they might know a great deal more about themselves than they did. Some English people were very much like some people they had in America. There was a man there distinguished for playing chess. He was going to study law, because the idea was that in proportion as he was successful in playing chess, he would be successful in being a reasoner, and therefore as a lawyer. Now this was one of the greatest mistakes that could be made. If a man was successful in playing chess, all you could say about him was that he would be a successful man in playing chess; he would not necessarily be a good lawyer, or a good parson, because he was a good chess-player. If a young man wanted to be a good lawyer, he must study law, and give himself to it, and discipline the mind to the mastery of it. We cannot transfer our education in one department to another, so we must educate ourselves specially in the thing in which we wished to excel.

Young people should depend on themselves as much as possible; they should not, in any study they were prosecuting, rely too much on this teacher, or that professor, and say, "Oh, I know I can't work this out; I will wait and ask the master." Let him do their thinking for them, and work out this or that problem for them, which they might have worked out for themselves, and they had weakened themselves by allowing him to do it for them. If the master knew it, why could not they know it? It was your thinking that made a man of you, not somebody else's thinking for you. If your mind was simply open for the teacher to turn his knowledge into, and as it were fill up the gap, what had you learnt about the subject? You had simply stood there and listened; but if you went to work, and studied and worked up the subject for yourself, you developed all your powers by the thinking. It was difficult to get young people to understand what this study and thinking for themselves really was. It was not so much the knowledge that they got every time, but it was the amount of energy and vigour and discipline that they put into what they studied. What profited the amount of work they did, if they had to go to the teacher every time they were in a difficulty, to get the matter explained and worked out by him? Go to the master if his assistance was necessary; but let it be a necessity. Think of the Prince Napoleon, who had ever so many masters, and ever so many aids, and was bolstered up all round, and had some one to tell him everything he knew. He knew it

because his teacher told him. But if he had thought it out for himself, he would have known it because he had found it out for himself, and because he had mastered it thoroughly for himself.

Young minds were continually running over the whole field of thought. They seemed to think about stars, about chemistry, and geology, and a great many other things, and wanted to become efficient and perfect in them all at once. Young people were liable to be in great haste. He knew men who went into business with their gloves on, and thought they could succeed in business if they went to it without experience and without working themselves up; but if you wanted to get into a position you must begin at the bottom, and work gradually to the top. These young sprigs of humanity did not want to begin at the bottom, but at the top; and, as a result, they worked down. They were in too great a hurry to advance in the world. A legitimate development was the best; this doing things by steam or electricity was not always the best, because some important mistakes were made which would not be made if we were not in too great a hurry.

A legitimate development—a legitimate unfolding of the mind—what did he mean by that? At the present day our children were required to study a good deal more than seemed to some of us right. Now they were pushed and pushed, and every means was taken to get them to study a little faster and a little more. Perhaps the teacher got a little emolument by it. The teacher had the advantage in proportion as the pupils graduated on a higher scale. The legitimate mode of drilling the children was too slow, and their tender brains were urged too hard, in order that the master might derive a higher remuneration. The consequence was that those children that made the most advancement in school were the first to drop off. He went into a school once, and the teacher asked him if he would like to examine some of the pupils. She brought to him a girl of about ten to twelve years of age, and he examined her head, and he said he was sorry for her. The teacher replied that the girl was the cleverest in the school, and she (the teacher) was so proud of her that she always, when any one came to the school, brought her forward to show her abilities. He replied: "I am still more sorry. Her chest is now twenty-two inches in circumference. That is about two inches smaller than it ought to be in a girl of her age. She has a small body, and her brain is largely developed; and here you are pushing her all the time, to her own injury. Does she

always come to school?" The teacher said: "She stops out sometimes, and I bring her back when she gets well." He said to the girl: "You had better get out of this school, and run about the fields, and climb the trees and fences, if you want to, and when you are a few years older you can go to school. As sure as you keep coming to this school, you will have to stop out more and more frequently, because your health fails, and by-and-by you will not be able to come at all." The poor child cried, and I said to her: "But you see it, don't you, that you are working your brain too hard, and using it up too fast, and that you are ill in consequence, and take longer and longer to get well every time you are laid up, because your brain wants repose?"

Very few commissioners and committees of schools took these things into account. They wanted children to study so much, whether they were able or not, and so arrangements were made accordingly, instead of the children being made to study according to their capacities. This was a fast age, and we had a great many young old men and women, prematurely developed; there was no permanent success in this mode of education. If a boy committed a lesson easily to mind, he forgot it easily too. When a boy had to study hard—when it was right down hard work for him to get hold of his lesson, it stuck to him.

If you wanted a better memory, then, give attention. The more attention you gave the brighter memory would you have. There were certain names you could not remember. There was a name that he had heard over and over for years, and still not been able to recall; but he succeeded in fixing it on his mind by associating it with something else. If you did that you would find that you would easily remember names. There was a town he had been in the habit of visiting for many years—Grantham—and it was only lately that he had been able to recollect its name. He had so associated the name in his mind that he could now easily recall it. Some names it was hard to associate with anything—Rush-ton, for instance. He knew a person of that name, and could never call it to mind; and he had to be introduced to the man every time he saw him. Since then he (the lecturer) had adopted the plan of repeating the man's name as much as possible when talking to him, and by that means he kept the name in mind. So in other things, we could have better memories if we paid proper attention. Boys that learnt so easily were liable to forget. If they had good memory, and no understanding of what they studied, then their study was not likely to do them much good. They might pass an

examination, and pass with the highest honours, but still, if they had not disciplined the mind so as to thoroughly enter into the spirit of what they learnt, it would be of little use to them in business; for they simply had minds that could commit to memory without understanding.

Some minds were much slower in development than others. You saw a bright and a dull boy in the same school." One boy with a high degree of mind, sharp, intense, and wide-awake, took an idea at once; another boy you had to tell twice before he got your idea. There was a boy who, when asked to multiply eighteen figures by eighteen figures, would give you the result in three minutes, and not put down a single figure. There was a clear head. It was not every one who had such a clear head as to do that. He had no impediment in his way. He had a clear, clean nervous system, that allowed the electricity to pass through the wires without hindrance. That boy was so successful in answering questions put to him by mathematicians that on one occasion he had been answering them for an hour or so, and the last thing he did was this multiplying eighteen figures by eighteen figures.

Mr. Fowler, here exhibiting a portrait of a boy, said that lad, when asked who was his father, where was his home, would reply: "Dunno." He did not know he had any. "Where do you sleep?" was asked of him. "I sleep in the boxes and in the barrels in the street," he answered. "Where do you get your food?" "Why, I pick it up from amongst the stuff that is brought out of the middens before they are emptied." "How do you get your clothing?" "Oh, people will give me something to wear rather than see me naked." This was the way that boy had been going on. His mind had not been cultured, and he was left to fight his way through the world as he could.

The lecturer then exhibited the portrait of another boy, and said that boy was so eager for knowledge that his mother would say: "Child, you have studied enough. Lay down your book; I want you to run down to that tree there, and back again." She knew the boy was killing himself with over-study, and she had sense enough to know she had a clever child, and must try to keep him alive. There were some people who had very clever children, but could not keep them alive. But they got over that difficulty by saying it was the providence of God to take them into the other world. No such thing. It would be the providence of God that every child should die that natural death which it would die if it lived properly.

Let it be borne in mind there was no permanent success without an effort and without difficulty ; and some had to study harder than others, to give more attention than others, because some had thicker skins than others had. Some people had such a thick skin that if they examined it with a magnifying glass they would see that they had really a tendency to a rhinoceros kind of skin. The nerves of some people came to the surface ; and we were more easily impressed where the skin was thin and the nerves came to the surface. The hearing was more acute, the sight was quicker, the mind acted more readily, and the electricity passed through the brain with less impediment. Those boys that had slow minds, and low heads, and thick skins, and more stomach than brain, needed to be educated accordingly. We had got to take them as they were, and train them according to their capacity ; and that was what some of the teachers had got to find out. It would not do to place two children on the same bench, in the same class, and expect that they must of necessity do equally well ; for this was impossible unless they were similar in capacity.

Some boys were spoilt in their education by the present system. John had successfully climbed to the head of his class, and, of course, he was a guide to the teacher in setting the lessons. The teacher thought all the other boys ought to be equal to John ; and John could get through four pages, therefore William could, or he ought to be flogged ; so four pages were given to John and four to William ; and to-morrow John had done his four pages, and William his one and a half. Well, they were pushed through, and required to take the next lesson, and the next lesson ; and while one was getting the good of the lessons, the other was getting only half the advantage of them through not understanding them. The slow boy, William, ought not to be put into the same class with the quick boy, John, but into a class with other slow boys, so that he might be more encouraged. "But," the teacher said, "we can't afford that. We have many hundred pupils, and we push them along as fast as we can, so as to make as much money as possible." Hence our children were so poorly educated, because there were so many that were pushed into classes where it was impossible for them to get their lessons.

Some boys were anxious to do one thing only, and thought that in doing this they had achieved enough. Disraeli was not satisfied to do one thing. He wrote a very clever work, and most people would have been content with the reputation of writing it. But that did not satisfy him, he wrote another,

and another, and then he was not satisfied. And he worked for thirty years to become Prime Minister, because that was the climax, the top step, to which a man could attain in this country. When he reached that he was satisfied. When a boy was content with doing one thing cleverly it only showed he had a rather contracted mind. He (Mr. Fowler) found a boy in Grimsby who was ambitious to be at the head of everything; and so he was. He was now some sixteen years of age, and two or three years ago he began to ride the bicycle; and it was not long before he shot ahead of all the bicyclists in the country. He was just the same in his writing and in his figuring; in all that he attempted to do. He excelled in all. There was spirit, there was life, there was energy, there was perseverance, there was patient investigation.

HYPNOTISM.

REMARKABLE MEDICAL EXPERIMENTS IN NANCY, FRANCE.

IN the *Revista Contemporanea* for July, 1885, published at Madrid, there is an article on hypnotism containing some extraordinary statements concerning the recent medical use made of the hypnotic or mesmeric slumber. For some time past, it is stated, mesmerism has been used in Paris to save from inanition those demented ones who refuse to take any nourishment. The patients are mesmerized and then commanded to eat. Those who would not have touched food under any other circumstances, while in the mesmeric state eat whatever is given them.

It is in Nancy, however, that most surprising results have been obtained. Mr. Focachon, a pharmacist in Chormes-sur-Moselle, after having studied in the clinic of Dr. Liebault in Nancy, devoted himself for more than two years to a series of continuous and methodical experiments of various kinds. There is one of these which deserves particular attention. Elise N——, 39 years old, had been suffering since the age of 15 from attacks of hysterical epilepsy, which recurred from three to five times a month. Mr. Focachon succeeded in subjecting her to somnambulism, and, by means of simple passes, caused the attacks to become less frequent, and finally disappear altogether. In gratitude for her radical cure Elise consented to submit herself to various experiments in the interest of science. Focachon devoted himself to the investigation of the problem whether, with the aid of mesmerism, the physical condition of a person

might be modified, and to discover direct material proofs of the influence.

During the slumber into which Elise was thrown, Mr. Focachon, by the power of his will, succeeded in affecting the action of the heart, diminishing by six the number of pulsations in a minute, and augmenting them by more than twenty. Dr. Beaunis, professor of physiology, made this observation by means of the esphygniograph in the laboratory of the medical faculty at Nancy, in the presence of Messrs. Liebault, Liegeois, and Rene, the last being chief of the physiological department. This curious observation was communicated to the Biological Society last year by Mr. Beaunis.

But here is what is truly marvellous. The same person, Elise N——, having complained of an acute pain in her side, Mr. Focachon decided to make her imagine that, in order to cure her, a plaster was to be applied. "A plaster will be applied to the spot where the pain is," said Focachon "do not touch it. It will burn you a little and produce blisters, but to-morrow you will feel no more pain there." As a matter of fact, nothing at all was applied, and the plaster was fictitious. But, notwithstanding, the following day, on the spot where the plaster was said to be applied, there was to be seen a thick blister full of matter; and the pain had disappeared.

A short time afterwards the ingenious experimenter resorted to the same proceeding to relieve his subject of a neuralgic pain in the right clavicular region. By means of a simple verbal affirmation made during the slumber, burns were produced exactly corresponding to those which would have been caused by the application of a pair of incandescent pincers. These burns left real scarifications.

These facts having been communicated to Dr. Liebault and other experimenters, they manifested to Focachon their desire to witness the same under conditions which would offer the greatest possible guarantee of exactness and ready demonstration. Focachon decided to take his subject to Nancy, where Dr. Liebault resided. Dr. Bernheim selected as the place for the production of the blister a spot on the shoulder which the patient could not easily touch with her hands. The experiment was delayed on account of Dr. Bernheim having to pass all the morning in the hospital, so that on the same day the effects could not be attained. Focachon and Liebault watched the sleep of the subject until 5.30 in the afternoon, not taking their eyes from her for a single moment. During the day the mesmeric process was often repeated. At 5.30 they proceeded to the verification

of the effects in the presence of Messrs. Bernheim, Liegeois, and Dumont, the latter at the head of the department of physics in the medical faculty. A reddish tint was observed surrounding the spot previously selected, and at various points there was a darker colour. Elise complained of a burning sensation, and attempted to rub her shoulder against the furniture, but was prevented. This experiment was interrupted on account of Focachon having to return to Charmes. This not being entirely convincing, it was desired to repeat it under better conditions. Notwithstanding, on the following day Dr. Liebault received a telegram from Focachon, followed by a letter containing a certificate from Dr. Chevreux of Charmes, affirming the existence of a vesiculous spot on the shoulder of the subject. The spot was sensitive to the touch, which caused pain, and the part of the garment in contact with the place contained a purulent liquid. It would have been taken for a small burn.

The somnambulist not having been watched during the night of her return to Charmes, it was decided to make a new test. Then, the 12th of last May, Focachon took his subject to Nancy again. Elise was put to sleep at 11 o'clock in the morning. Several pieces of thin paper were affixed securely to her shoulder. This was done by Mr. Liegeois with the object of fixing the attention of the subject more completely on the idea of a plaster, and to avoid all pretext of a fraud. During the slumber three mesmeric operations were performed, each of a few minutes' duration. Elise spent the night in a habitation prepared for the purpose. On the following day, the paper, which had remained intact, was removed in the presence of the various persons interested in the experiment. The following document was drawn up by Dr. Beaunis, professor of physiology at Nancy: "May 12th, 1885, at 11 in the morning, Mr. Focachon put Elise N—— to sleep in the presence of Messrs. Beaunis, Bernheim, Liebault, etc. During the slumber eight little squares of gummed paper were affixed to the shoulder, under the pretense that it was a plaster. The paper was sustained with diachylon and a compress. Elise was left in this state all the day, being awakened at the time necessary for eating. She was watched all the time. At night Mr. Focachon impressed her that she was not to awaken until 7 the next morning, which she did. The following day, at 8.15, Mr. Focachon removed the papers in presence of Messrs. Beaunis, Bernheim, Liebault, Liegeois, etc. We noted that the papers had not been disturbed. On being removed the place presented the following aspect: A rectangular space of four by five centi-

metres was seen with the epidermis thickened and presenting a yellowish white colour; the epidermis was not broken, and there was no blister; it presented, in a word, the aspect and character of the period immediately preceding the blister proper. This region was surrounded by a zone of intense red, inflamed; it was a centimetre wide. These facts being ascertained, a dry compress was put on the place, that the skin might be examined later. At 1.30 of the same day it had the same aspect as in the morning." The document was signed by Professors Beaunis, Bernheim, Liebault, Liegeois, Simon, Laurent, and Brulard. Two days afterwards Focachon announced to Liebault that on his return to Charmes, the same day in which the document was signed, he observed and photographed at 4 in the afternoon, on the same place where it was observed that a blister was forming, five pustules. The 13th a thick and milky matter exuded. This ended the experiment.

GAMBETTA'S BRAIN.

IN its issue of April the 19th the *Daily News* contained the following:—

"Conformably with the practice in vogue of investigating the peculiarities of form and structure presented by the brains of famous men, that of M. Gambetta has duly been examined by MM. Duval and Chudinski. The report of these experts was read at a meeting of the Anthropological Society of Paris. We await details of weight and other essential particulars, but certain facts already brought to light regarding Gambetta's cerebrum verify in a remarkable fashion some of the latest deductions of physiology regarding the functions of the brain. We find the observers recounting, firstly, the high development of the speech-centre in the third left frontal region. Nor was this portion of the statesman's brain found to be merely well developed. It actually exhibited a double folding or reduplication in this area, indicating an exceptionally active disposition as far as eloquence and command of language were concerned—qualities these for which Gambetta, of all men, was markedly distinguished. The Parisian *savants* tell us that in the brains of Wulfert, the lawyer, and Huber, the philosopher, both remarkable for their rhetorical ability, the convolution already noted was singularly developed, and was more wavy and more complex than in ordinary brains. In these cases, however, there was no double fold, as in the brain of Gambetta, which in other

respects showed certain peculiarities of development. In the forehead region—admittedly the seat of the highest intellectual powers—the statesman's brains showed complexities of folding, associated with great diagrammatic regularity. Altogether, the examination in question is of a highly interesting character, proving, as it does, the fact that evidences of genius and ability are not left unrecorded on the organ of mind. How far training and education may modify brain structure is as yet a moot point of science. One thing, however, is certain—namely, that it is quality and not quantity of brain matter which primarily dominates the world. That a large brain may be associated with low intellectual powers is a proved fact. Given a large brain-mass, and a high quality of structure, derived from an educated ancestry or from a sound stock in other respects, and we find represented the conditions which subdue all things to the will of the individual, which control the destinies of nations, and which revolutionize the world of letters, art, or science."

"Second thoughts," it is said, "are best," and the Editor of the *Daily News* gives a short leader on April 19th on Gambetta's brain, which qualifies, if it does not controvert, his first dogmatic utterance as to phrenology. The style and tone of this second article present marked contrasts to his first inconclusive platitudes. There is greater logical sequence, more exact reasoning, in the latter affirmative article than in the former negative, shallow, groundless objections. The first leader indicates a brain gifted with a well-developed perceptive region, giving quick observation and perceptive power, but not equally good powers of reflection or sound judgment. This is illustrated in his political articles, as well as in his philosophic expositions. He knows little or nothing of practical phrenology, and had to rely on men who are as ignorant as himself in this respect, and cites their experiments on inert dead matter for proof of the vital, living function of distinct portions of the brain-mass, known to have distinct and special functions. The living dog is better than the dead lion; and the manifestation of passion, emotion, talent, or genius, harmonizing with organization, is far more convincing than any amount of galvanic disturbance of dead matter.

The Editor of the *Daily News* possesses the facility of seizing upon apt words and telling phrases; but there is an absence of the profound, analytical power which formerly pervaded the leader-columns of the *Daily News*. In reasoning he is often loose and inaccurate; and hence he is not

well qualified for the analyses of mental functions and their physical organization. To such a mental combination, the relation between organization and the power of manifestation must appear absurd, when he has never tested the truth of these conditions by practical experience.

The position of the 'Speech-centre' in the frontal region agrees with Dr. Gall's discovery of the organ of Language. When he found the organ largely developed it gave a prominence to the eye, by pressing it forward, or downward, as in the case of Dr. Johnson, author of *Rasselas*, and compiler of the great English Dictionary, Gambetta, and others.

It is said in the above leader that in Gambetta the organ of Language ('Speech-centre') was not only "well developed, it actually exhibited a double folding, or reduplication, in the area, indicating an exceptionally active disposition as far as eloquence of language were concerned."

This is the teaching of phrenology, and establishes the relation between form, locality, function, and capability. Phrenologists admit that, "One thing is certain, that it is quality and not quantity of brain-matter which primarily dominates the world. That a large brain-mass may be associated with low intellectual powers is a proved fact. Given a large brain-mass, and a high quality of structure, derived from an educated ancestry or from a sound stock in other respects, and we find represented the conditions which subdue all things to the will of the individual, which control the destiny of nations, and which revolutionize the world of letters, art, or science."

In this article the great leading principles of phrenology are admitted, and the facts and arguments of the second leader controvert the rash and inconclusive absurdities of the first article by the Editor of the *Daily News*. Before he again flouts and gibes at phrenology, let him demonstrate his own wisdom, by appealing to nature, and test the relations between form, capacity, and character. E. T. CRAIG.

PHRENOLOGY FOR CHILDREN.

THE REFLECTIVE, REASONING, AND INTUITIVE GROUP. THIS group comprises—Causality, Comparison, Human Nature, and Agreeableness. When studying the Perceptive group we found, if you remember, how useful were its faculties for seeing and observing natural phenomena and experiments. Now, as we pass to the range above, we shall

find, I think, the Reflective group quite as interesting, if not more so, and equally important. We will first study—

CAUSALITY.

(a) Definition.—(b) Location.—(c) In what way do children show it?—(d) How is it a guide to the mind?—(e) What examples can you give of a large development of it?—(f) What examples when small?—(g) How can it be cultivated?—(h) What men were known to have it large?—(i) Do animals show reason?

(a) The definition of Causality is power to think, plan, theorize, and understand the relation of cause to effect.

(b) Its location is in the upper part of the forehead, on each side of Comparison.

(c) You children show this faculty when you ask questions all day long. Many of you suppose it is sufficient for you to see what is going on around you, in which case the eyes and the perceptive faculties alone would be sufficient. There are, however, many things that are hidden from your sight that need to be explained in order to be understood, which you will realize if you think a minute. Causality has therefore to be called upon to find out these hidden things. Some of you learn more by asking questions to gratify your curiosity than by taking the trouble either to observe or find out through books about general facts.

(d) It is a guide to your minds through your reason rather than through your experience. Charlie was tempted to put his finger on a piece of red-hot coal to see how hot it really was; but after thinking a minute decided it was probably too near the fire for him to touch without blistering his finger. It was large Causality that made him stop to consider how much heat there was in the fire, and it ultimately guided him in the matter.

(e) Minnie is a very good example of large Causality. She seldom does anything without asking her mother or teacher “Why must I do so and so?” “Do tell me just this one thing!” Boys, watch your school-mate in a room full of machinery, and you will find that his Causality will trace out all the practical parts and uses of nearly everything he sees. With it large you will find girls and boys will make abstract original thinkers, schemers, planners, and good speakers and writers; for such minds are never at rest. Many boys, however, develop so active an organ of Causality, that they grow up with such far-fetched ideas and so many schemes that they cannot possibly reduce them to practical purposes; such characters need to cultivate practical common sense. With Constructiveness large, they show an inventive talent, and

their ideas go to help that faculty. Nature is full of illustrations of the wonderful Divine thoughtfulness in constructing, planning, and arranging all things for our material use. Some of you boys are very fond of chemistry, mathematics, and all kinds of intricate subjects; hence you delight in using your Causality to inquire into them. Your parents say you never tire of asking questions in order to get at the origin and first causes of things. You all know what faculty helped Sir Isaac Newton to make his wonderful yet simple discovery of the principle of gravitation. You remember, perhaps, being told how, as he saw the apple drop to the ground, he began to wonder why it fell straight down. The same faculty made him reason that there was a special attraction, which he called gravitation, which made everything that was thrown up in the air, or that was heavier than air, fall to the ground. It was Causality that helped him to discover that light which was supposed to consist of one primary colour really contained seven.

(*f*) Children who have a small organ of Causality never trouble themselves to think what gives the bright light to the candle, or why they have the sun to give heat and light by day, and the silvery moon to light the heavens by night; or why it is that big steamers sail on the top of the water, while stones, and human bodies sink to the bottom. The boy with small Causality never stops to think why his kite that has a hole in it will not soar as high as his brother's, which is a perfect one. He only perceives the fact, but has to get some one else to reason out the cause. When Causality is small, a person is not capable of forming a sound judgment on anything, and has narrow views, and cannot plan, nor think deeply on philosophical subjects.

(*g*) It can be cultivated—first, by paying strict attention to the causes of everything; second, by planning ahead; third, by thinking out a subject thoroughly in order to get at the origin of it; fourth, by mingling with those who have it largely developed.

(*h*) Most of the ancient philosophers were examples of large Causality. In more modern times, Benjamin Franklin, Gall, Cuvier, Spurzheim, Daniel Webster, Herbert Spencer, and scores of others we might mention, are prominent examples. "No man," says Mr. Fowler, "but one with the originality which is given by the large development of Causality would ever have thought of putting lightning in a bottle, or of drawing lightning from the clouds, as Franklin did."

(*i*) Yes; animals show a kind of sagacity which almost

amounts to reason. If you study the habits of animals closely, children, you will find among the bee tribe a wonderful forethought in everything they do, especially in the arrangement of their wax for housing their honey and supporting their homes. Darwin mentions many curious things about the sagacity of animals which illustrate this intuitive sagacity, that so strongly resembles our reasoning power.

COMPARISON.

(*a*) Definition.—(*b*) Location.—(*c*) How does Comparison work with other faculties?—(*d*) How does it help the memory?—(*e*) It is an important faculty to cultivate. Why?—(*f*) How can we show too much of this faculty?—(*g*) Who show this faculty specially large?

(*a*) The definition of Comparison is ability to draw comparisons, discriminate, illustrate, and explain, and to trace the resemblance of one thing to another; ability to classify, analyze, and criticise minutely.

(*b*) It is located in the centre of the forehead, above Eventuality, and between the two organs of Causality.

(*c*) Comparison helps us in many ways with other faculties. Every faculty more or less compares the things connected with its own peculiar character; for instance—Order compares an untidy room with a well-arranged one; Eventuality compares stories, facts, and events; Tune compares sounds and melodies; Weight compares the light and heavy loads; but Comparison is the only faculty that discovers differences in generalities, and unexpected resemblances, and all kinds of natural phenomena. It works with the perceptive faculties—and especially with Causality, and most particularly with Human Nature—to criticise opposite points in character. With Constructiveness it classifies and closely examines the different parts of a watch; in large mechanical works it compares one kind of machinery with another. It works with all the faculties that are interested in the exact sciences—such as botany, chemistry—in which nice deductions have to be made. It works with Benevolence, Acquisitiveness, and Conscientiousness, and compares the need to give with the amount offered.

(*d*) It helps the memory, recalling everything by a connecting link or illustration. The New Testament is full of metaphors. You know that order is one of Nature's first laws, and that there is a resemblance, a connection, and a similarity, as well as a difference, an opposition, and variation in things. You gather many leaves off one tree, and think they are all alike at first; but your Comparison soon

points out differences of the minutest kind. In the same way, your Comparison sees the connecting link between the lowest and the highest of God's creatures. You find it easy with the aid of this faculty to compare animals of one class, and describe what you see alike in them, and the use they are to one another. Many of you know that heat expands and cold contracts; if you have never noticed an illustration of this, watch the tea-kettle boil over. A sunbeam shining upon a dewdrop will show you its rainbow tints. Comparison sees this; it also understands that hot air is lighter than cold; hence the top of the room is always hotter than the floor. This is experienced by any one who is hanging pictures or decorating the walls of a room; therefore ventilators are put near the ceiling. It is Causality that asks all the questions about things; while Comparison puts the reasons together, draws inferences, and points out harmonies and incongruities, and impresses the memory with peculiarities.

(*e*) It is very important that all you children should cultivate and improve this faculty, and not allow your minds to be indifferent to the great variety of characteristics in people and in nature.

(*f*) The only way we can show too much of this faculty is by being too critical and fault-finding, and by always pointing out the defects and inconsistencies of others with too much distinctness, and too little charity. With Mirthfulness and Combateness large a boy will become very sarcastic and cutting in his remarks, and unless he possess refined instincts in regard to other people's feelings he will be liable to wound and hurt them.

(*g*) We find Comparison large in all naturalists and botanists; as illustrated by Darwin and Linnæus, in most of our leading thinkers and writers. In barristers it is specially prominent, also in many of our celebrated divines—as in Canon Farrar, Chalmers, Spurgeon, and others. Poets like Moore are remarkable for the way in which they use metaphors.

HUMAN NATURE..

(*a*) Definition.—(*b*) Location.—(*c*) How does this faculty help us?—(*d*) In whom must it be large?—(*e*) In what way do we sometimes show an excess of it?—(*f*) How can it be cultivated and restrained?

(*a*) The definition of Human Nature is intuition, sagacity, power to read the character and motives of others correctly from first impressions.

(*b*) It is located between Benevolence and Comparison.

(c) It helps us to form impressions about the characters of our friends, or any one, in fact. Intuitively we know whether we can trust a person or not, without quite knowing why. Human Nature gives us this perception. While Causality is reasoning about a thing, Human Nature has arrived at a correct conclusion by another method. It helps us by taking a positive delight in reading and penetrating the thoughts of others. It gives us foresight into the future, and enables us to say and do the right thing at the right time. A little girl was playing on the line at the end of her father's garden, just beyond the curve where he was working as pointsman. She had wandered further than she was aware, in search of flowers on the bank; but she knew her way all about the neighbourhood, and being such a cautious child her mother was never anxious about her. She came to a place where some workmen had been mending the line. They had just gone to dinner, and had carelessly left one of their heaviest tools on a portion of the line, and two heavy pieces of iron. The child spied these, and, half out of curiosity, went to see what was on the top of the rails. She attempted to remove them; but, finding she could only lift the tool away, she thought a minute on what she had better do. She was too far from her father to make him hear her cry for help, and every minute she expected the up train, which was generally full of passengers. She did not hesitate, but took off her red handkerchief which was round her neck, and ran along the line to meet the train, crying, Stop! stop! stop! Soon the train came steadily along. It was the engine-driver's habit to look out sharply before turning the curve, and to blow his whistle, so he could not hear the trembling voice; but the wee bit of red something waving in the distance, carried by a little mite of humanity, made him remark to his stoker: "Something's up on the line; must slacken the speed." He soon came up to the child, who was by this time panting for breath. He stopped his train by his power-brake, got down from his engine, and took the child in his arms. She told him as well as she could what was the matter, and he took her up with him into his engine. He then moved slowly on to the spot where the obstruction was, removed it, and asked her where he should put her down. When the train arrived at N——, the driver told his story of the brave little girl who had saved his train from disaster. Now, children, what faculties did this child use? Some children would have been so frightened they would have sat down and cried, if they had even had the sense to see the danger; but this child showed several prominent qualities worthy of copying. "I

should think," replied James, "she showed Causality and Courage, but most of all Intuition, which gave her the sagacity to do the right thing at the right moment." You are right in your guess, James; and I want you all to use all the Intuition you possess in times of danger.

(*d*) It must be large in generals, detectives, phrenologists, and doctors.

(*e*) Human Nature, with Comparison large, will be liable to make a person too critical, suspicious; too disposed to pry into and scan the concerns of others, and too fond of predicting events.

(*f*) It can be cultivated when small by studying the motives of others, also by reading the signs of the times more thoroughly, and by the cultivation of tact. It may be restrained when excessive by cultivating a greater confidence in others, and by making more allowances for their defects.

AGREEABLENESS.

(*a*) Definition.—(*b*) Location.—(*c*) What use is this faculty to us in company?—(*d*) How do children behave without this faculty being fully developed?—(*e*) How must it be cultivated?—(*f*) Who must have it large?—(*g*) How does it act when large?

(*a*) The definition of Agreeableness is youthfulness, blandness, amiability, pleasantness, pliability of manner, and suavity.

(*b*) It is located behind Imitation and Causality, on each side of Human Nature.

(*c*) It makes us genial and pliable in company.

(*d*) Without much of this faculty children show a repulsive manner; do not conciliate their school-fellows; never try to point out the good traits of their friends, and cannot hide their feelings even when they feel put out. They cannot smooth things over, or give "the soft answer that turneth away wrath." In company, if things do not please them, they go in the corner and sulk, and will not do their part towards entertaining others. I hope there are few children of this description. If you know of any with small Agreeableness, do help them to cultivate it.

(*e*) It can be cultivated by being more polite and affable.

(*f*) Doctors need it large to make their patients forget their ailments; teachers need it to adapt their methods of instruction to different minds; parents need it to make the machinery of home-life go easily; and children need it to make them agreeable to their brothers and sisters—in fact, every one needs it to get on well in life, and to make the rough edges smooth.

(g) Children with it large always get on wherever they go. They are always liked and welcomed by a large number of friends. They know how to say a thing that will please and gratify their mates, and, in short, always sugar-coat their pills.

DRESS REFORM.

AN ARTICLE FOR LADIES, BY RUTH WHITTIER.

WHAT is the *modus operandi* of the members of the Rational Dress Reform? we have been asked. It is simply this, that the supporters of it are desirous of recognizing the joy of perfect freedom of movement. They are also helping many to say farewell to the restrictions of Paris modistes; who, by the way, seem to make woman's form their last, instead of allowing it to be their first, guide. Lady Harberton, as the recognized head of this liberation society, is doing her utmost to make her reformatory ideas artistic and popular. We personally rejoice over the adoption of the common-sense views of this reform concerning women's dress, as from our own experience for some time past, we can testify to the healthiness and convenience of their principles. If, however, any one expects to find eccentricity of costume among the examples of this rational reform, he or she, as the case may be, will be doomed to disappointment.

The principal motives for this innovation are—first, convenience; secondly, light weight; thirdly, evenly distributed weight; fourthly, freedom of movement; fifthly, moderation in style. These simple points stand out conspicuously against large and awkward bustles, tight-laced stays, high heels, crippling dolmans—that make one think of the clipped wings of a butterfly,—large crinolines, and low-neck dresses.

It is wonderful how much martyrdom some ladies will suffer in order that they may produce a certain effect; deeming no sacrifice too great when gratifying the demands of fashion. Others have been equally bold and courageous in the opposite extreme, believing firmly in the vain idea, that they were doing good in the carrying out of their reform; such was the case with the supporters of the Bloomer Costume, which attracted some attention a few years ago in America, as well as in the streets of London. A happy providence spared us from the adoption of an outward garment so unbecoming, so ungraceful, and at the same time so severely masculine. It may be, however, that the outcome of this extreme idea has been, that more practical study has

been given to female attire from a scientific point of view. The result arrived at in consequence is an important consideration—that the body should be clothed evenly in all parts; and the best way of doing this, is by wearing light woollen materials.

Stays are conspicuous only by their absence, and just here one is tempted to stop and give a few detailed observations, concerning this article of dress; but the object of the present article is to mention all the general points in the dress reform, rather than to enlarge upon any one point specially. We must, however, say this much, that many ladies have told us that they “cannot possibly sit up straight without supports,” and are sure they cannot carry their heavy draperies without the aid of stays. This is perfectly clear to every sensible woman’s mind, but why should the hips be so laden when there is a wise alternative? Perhaps, when the principle of the equal distribution of weight in dress is thoroughly and universally understood, which prevents the over-burdening of any one part of the body, ladies will then realize the freedom of unconstricted garments, and the joy that follows that freedom, while their hips will be relieved of heavy skirt-bands. Some ladies admit they lace tight to please their gentlemen friends. This is an absurd mistake, and one which will never repay the injury done to themselves and their children. If any one succeeds in gaining attention by thus making their waists smaller than nature’s model, she can never expect to gain common sense, respect, or true admiration. Every such enthusiast should make a study of the Venus de Milo, instead of the waspish waist of the Parisian Belle. Said one gentleman of an eighteen-inch waist—which ought to have been at least twenty-two—What a figure! How can she eat, walk, or breathe with any comfort? The Germans, Dutch, and many of the Eastern women have curious customs of tightly bandaging the limbs of their babies in swaddling clothes; the Swiss also bind up the limbs of their infants and carry them on their backs, while the Chinese cramp the supple bones of their little daughters’ feet, thinking they will be unfit to go into society when they are young ladies, unless their feet are subjected to this confinement while young. These customs strike English ladies as being absurd and ridiculous, yet they are preferable to the prevailing custom in our own lands of compressing the vital organs and injuring health by tight-lacing. Still, it is a fact that more common-sense views are being accepted now, on a more purely physiological basis, and we are glad to recognize Miss Willard’s words on this very point. She says, “When women, now old, tell me of

the brass stomachers and terrific high heels worn by their grandmothers, and that in their own youth they 'strung their corsets,' by making a fulcrum of the bed-post and pulling with all their might and main, I breathe freer, methaphorically speaking, and think some women at least are coming to their senses, and keep urging the introduction of hygiene as a special study in all branches of the public schools. If the laws of God that seek the health of the body were obeyed by but a single generation, the next would be physically beautiful."

Clothing is much warmer in winter, and cooler in summer, when it fits so easily that the body is not cramped in any way by it; and sensible persons know that there is much more grace and beauty in a natural shape, and in the free use of the limbs, than in the distorted squeezed-up waist, the high shoulders, and the stiff and awkward movements that steel and whalebone produce.

It is easy to see what must happen from insane folly like this. The lungs become gradually smaller and weaker from the constant pressure upon them, and so cannot take in air enough to make the blood freely circulate in a healthy way. The health weakened, the body is made liable to disease; and when a common cold is taken that would not affect a person in ordinary health, the poor squeezed-up lungs and compressed ribs are not able to bear up against it, and the fatal disease of consumption often follows.

Clothing is always too tight when it prevents the lungs from stretching to their natural extent every time they take a breath, and when it hinders the free circulation of the blood. Some seem to suppose there is ample room inside their bodies to enable them to draw themselves in, and although they are conscious of becoming gradually smaller round the waist, they do not stop to think they are strapping their ribs over their heart and lungs, liver, kidneys, and stomach, contracting and throwing them out of shape to such a degree that the protecting ribs are actually made to grow upon the soft and more delicate parts below.

The custom of low-necked dresses is interfered with by the laws of health which require the body to be clothed with an equal regard to temperature. A doctor remarked not long ago that "the evening costume of perhaps the majority of ladies is, in fact, a curious satire. In this dress, the neck, the shoulders, and upper half of the chest and back are absolutely unclothed, or are protected by a fragment of clothing, called a shoulder-strap. But while the upper part of the body is left in its primitive condition, upon the rest of the frame the

clothing is bestowed with grotesque profusion. Layer upon layer of raiment is lavished as covering for this part. These layers are augmented by a train, containing material enough to clothe a number of children; and if we recall the primary purposes of clothes, this aspect of a lady in full dress presents inconsistencies that could hardly be more exaggerated than they are." Then he adds, "But putting aside this occasional form of dress it must be owned that even the every-day costume does not always carry out what, I think, may be fairly considered to be one of the original objects of clothing."

When exercise is taken in a gymnasium, on the tennis-ground, or when rowing, or walking long distances, the great necessity to breathe deeply makes it imperative to have freedom in all parts alike.

It may be added here, that special dresses are allowed for gymnastic work, and are always appreciated by the wearers. Why should there be any objection to the introduction of appropriate alterations in the style of dresses for tennis, business, and walking tours? Miss Ada S. Ballin has delivered some practical lectures on dress for ladies and children, and we gladly recognize her sensible ideas on this subject.

By studying this question of dress from a physiological aspect, and having had several hundreds of children of various ages under our personal care in gymnasiums, we have at last arranged a hygienic bodice, which it will be found is so constructed as to give just the freedom and support that a physiological stay should have. We should also here like to mention the recently patented "Good-Sense Stays," which contains no stiff bones, and are exceedingly simple.

One more essential article of dress is the reversible boot, which is in some respects preferable to the anatomical boot so highly spoken of by some. The latter require to be very carefully made from a special and individual last, otherwise they are exceedingly uncomfortable, and a foot that has been accustomed to pressure in one part or another will not readily accommodate itself to a boot that flattens the foot into a natural shape, hence we advise any one who tries them to give them a good trial before they cast them aside.

The reversible boots, however, avoid at once the evils of the Parisian heel and toe, as well as the uncomfortable feeling of the anatomical boots, and remain a blessing as long as they are wearable. Ladies would do well to be advised to try them, and not torture their spines any longer by tilting themselves up on an ill-fitting boot. Deformed feet are by no means uncommon in England. "If one studies the shape of a well-formed foot, it will be observed

that it gradually increases in width from the heel to the toes, and that the widest part of the under-surface of the foot is represented by a line drawn across the roots of the toes, or across the part known as the tread of the foot. It will be noticed also that when the sole is planted firmly upon the ground, the heel, the 'balls' of the toes, and the outer border of the foot are practically upon the same level, and touch the ground in an almost even line. The instep, or arch of the foot, involves the inner part of the sole, and the completeness of this arch adds considerably to the graceful outline of the member. On the other hand, the fashionable shoe tapers off gradually from the heel to the toes, and terminates in front in a point. That is as nearly as possible the very opposite to the normal foot outline."

The evil of thus compressing the broadest part results in troublesome corns. Were the tarsus and metatarsus bones, which form the arch of the foot and the toes, as firm as the heel-bones, boots would then have to be made the size of the natural foot; but it is because the former are flexible that they so easily become cramped and misplaced. In the normal foot the great toe is on a line with the sole, while the fashionable boots, as worn at the present day, squeeze its outline into a point, but you do not find a beautifully-shaped foot as the result, nor is the walk of a lady who possesses such feet as graceful as if no pressure were made.

The heel should be straight, and on a line with the back of the boot, with a breadth of an inch and a half. Ladies would do well to copy the patterns of gentlemen's heels more closely than they do their felt hats or cut and material of tailor-made jackets. All these things go to make up an hygienic and practical costume for ladies who desire health for themselves and children, instead of weakness and disease.

The "one thousand three hundred women of Wigan" have worked for years in their convenient and healthy costumes; and a strong and healthy set of women they are too; yet we do not see why their dress should be thought improper because they have adopted the divided style of costume, which until quite recently has been allowed to pass without comment, because of its practical common-sense purpose for the work they had to do. Surely if there is now an organized society to advance the merits of the divided skirt among ladies who have no laborious occupations, it cannot be considered inconsistent to hope that these industrious and energetic women will still be able to continue their occupations in the costumes that experience has proved to be the best for them.

The reform in dress should begin in the right place. Those who feel inclined to criticise hygienic dresses should study the rudimentary elements upon which physiology and anatomy are based, and we feel sure when these subjects are more thoroughly understood, that a stronger desire will emanate from the coming generations in regard to dress reform, versus fashion. Any information regarding patterns mentioned in the above article will be gladly given, on application to the PHRENOLOGICAL MAGAZINE Office.

THE STREET MUSICIAN.

I HAVE often wondered that the subject of street musicians has not more frequently attracted the attention of the describers and illustrators of our modern every-day life. What a wealth of material there is in it! What variety of character it presents! And how great the influence it has upon our every-day lives for good or ill! Imagine a state of society wherein none but the very best of musicians discoursed their sweet strains: no hurdy-gurdies, no 'nigger' minstrels. And then, on the other hand, imagine one without any musicians at all. Such a state would be one of pure savagery: civilization came in with the street musician.

I well remember the first time I made the acquaintance of one of these Orpheuses of the kerb-stone. It was in a far-away rural village—sweet Caverton of the plain! And the player—a middle-aged man of thoughtful mien, dressed in sober, though dusty and threadbare, black—came creeping slowly along by the side of the road, blowing his soul and all the wind he could muster into a cornopean. I followed him the length of the village, hanging, figuratively speaking, on the mouth of his instrument, whence trickled the tear-like drops of his condensed breath. I imagined at the time that the thing wept in sympathy, so sorrowful was the tune that he played. I have learned better since.

My next recollection in connection with street minstrelsy is of trombones and other brazen things, but chiefly trombones. One or two of the performers had blackened their faces; and it seemed to be part of their programme to frighten timid women and children (and they undoubtedly did frighten me). No wonder I have never liked the trombone: and indeed it has been a marvel to me how any man of brains could sit down to invent such an instrument. But of course it did not require brains,—any more than it does to play the thing. If a player on the trombone should happen

to have brains, to begin with, he would surely blow them away ere he had been long at it.

I am not as a rule an admirer of any brass instrument ; although I make due allowance for the pleasant appeal to the ear made by the concord of many brazen instruments when softened by the tender reed. Personally, I would willingly go back to the time just before the invention of the first musical instrument of brass—ere the German band existed even in thought. At that time shepherds played on oaten straws (vide Spencer, Milton, and others), and no doubt they played for gain as well as to their flames. I do not know exactly what an oaten-straw instrument is like ; but I imagine it would be a sweetly tender thing to play in the streets—easily shut out by drawing the curtains, or let in by throwing up the sash. Hence, in spite of my ignorance, I have a great weakness for the oaten straw.

In like manner I have a tenderness for the sackbut, psaltry, and dulcimer ; and I have had the sound of the timbrel in my ears ever since I learned that Miriam sounded that instrument aloud ‘o’er Egypt’s dark sea’—that is, somewhere in the region of De Lessep’s ditch. The timbrel, I should think, would not be a good instrument for London streets, any more than would the fog-horn. I am not at all sure, as will have been perceived, that I know precisely what these ancient instruments were like ; but that makes no matter : you can love a thing so much better when there is a good wide margin of ignorance as to its nature and capabilities. This is particularly the case in respect to women.

I once imagined that I knew what the dulcimer was. Having read in Coleridge’s poem of the ‘lady with a dulcimer,’ I inferred that it was something sweetly poetical, at least ; but in the Revised Version (of the Scriptures, that is), I find a marginal note giving dulcimer as ‘bagpipe’ : since reading which I have been quite disillusioned in regard to the poet’s lady.

But I am wandering away from my text : and yet, I presume, musicians of the itinerant guild performed on the sackbut, psaltry, dulcimer, etc., in the streets of Jerusalem. I can imagine the scene, and the concerted music of the sackbut and the timbrel, and all the rest of them ; and the dark-eyed Hebrew maidens dancing thereto. Josephus——. But why quote the authority of the old historian in a question of black-eyed dancing-girls ? They are alike in all ages, and need not the support of learned authors. One does not need a commentary to the eating of a peach.

I have rarely seen the cornopean in London streets : it

seems to have gone out of date as a kerb-stone instrument ; perhaps the cornet-à-piston has taken its place. I am sorry for it ; because a lusty cornet-player cannot possibly present the interesting and even romantic figure my early cornopean-player did. For one thing, your cornet-player must stand still and blow as if he were going to burst his cheeks ; then he gets red in the face, and his ears seem to stick out so prodigiously ; all which is so unlike the player of the cornopean, who shuffles steadily along, apparently intent on nothing but his instrument and the notes he is blowing out of it, but really glancing from side to side, out of the corners of his eyes, to see if perchance any small change were coming in exchange for his notes.

But there are idiosyncracies peculiar to the performers on every different instrument ; and therein lies one of the most interesting features of street minstrelsy. I have noticed, for instance, that the cornet-player always seems by preference to plant himself in front of the house or shop next to a tavern. This may be a fancy on my part ; but I have observed the fact so often that it seems to me sufficiently well established. You don't observe that this kind of performer, as a rule, collects much money. The reason may be found in the fact that he is generally native to the soil, sober-minded, and not given to frivolity, like the exotic organ-grinder (of whom anon).

As a note by the way, I may mention, too, the circumstance that neither your cornet-player nor your trombone-blower has much sense of humour. I believe the solo performers on these instruments are always English. I never yet came across an Irish or Scotch performer on either. In fact, as a rule, your Scotchman plays nothing but the bagpipes. I have heard, however, that some are addicted to the comb ; and there is a tradition that Scotchmen have been great on fiddles : but in this respect I speak entirely from hearsay. The Irish love the violin, and they make fine players on that instrument ; but then your Hibernian easily becomes an adept in playing on any finely-attuned instrument, especially that instrument of human passion and emotion—the heart,—and he is not afraid of putting in the discords either.

But to return to the cornet : I have observed that performers on this instrument and the trombone do not keep in the profession for life, or, perhaps I should say, for long ; in other words, you do not meet the same faces year after year, as you do in the case of some instrumentalists. It is different with the flautist : the rule seems to be, once a flautist always a flautist. Flautists, too, appear to be the meekest spirited

of men. I always imagine they are hen-pecked. Why, otherwise, should they so invariably choose the hour at which other mortals think of bed and rest to take their walks abroad and wail at tavern doors? It may be, of course, that experience has taught them that no one pays for flute-music till the wit is out.

I was once eye-witness of an amusing and at the same time pathetic incident in an East-End thoroughfare, in which a poor flautist was the chief actor. It happened one bleak night in December. The streets were almost deserted, and a bitter wind was driving down the streets, carrying everything before it. Few people were about, the hour being near the top of the clock. Nevertheless, a wretched flute-player, despite the wind, was trying to blow a few coppers from the pockets of the chance wayfarers. He seemed to be in the last stage of consumption; his long black coat was pinned across his throat in a way that suggested his shirtless condition, while on his face was written a whole jeremiad of woe. Although he blew into his pipe with all the might he could command, yet he produced no sound. The other blower of wind was too strong for him; his fierce gusts seemed to be blown through and through him, and with such searching keenness that the wonder was how the soul of him was not blown clean out of his lean anatomy.

Presently a big, lusty, well-favoured man came along; he observed curiously for a minute or two the poor flautist's efforts to raise the wind; then, quietly taking the instrument out of his hands, applied to it his own lips, at the same time signing to the poor fellow to go before and hold the hat. He did so; whereupon the worthy citizen commenced to blow out such a liquid flood of melody that every passer-by stood and listened, and every listener put his hand into his pocket and cast his maravedi into the reversed head-cover. Thus they went the length of the street. Then the rubicund Orpheus returned the flute to its owner, wished him a good-night and a better supper, and turned to go. But the poor fluter, grateful for his unexpected windfall, gently detained his benefactor, and, thinking he was in the profession, proposed to divide with him the results of their joint efforts; but the stranger would not hear of it, and hastened quickly away; the other meanwhile delaying his much-needed supper to look after him with dimming eyes.

WE should always keep a corner of our heads open and free, that we may make room for the opinions of our friends. Let us have heart and head and hospitality.—JOURBET.

Correspondence.

THE PROPOSED PHRENOLOGICAL SOCIETY.

The paragraph inserted in our last issue suggesting the formation of a Phrenological Society has brought forth a number of replies from persons willing to join such a Society. Several of the letters contain valuable suggestions. We give a couple of them :—

To the Editor of THE PHRENOLOGICAL MAGAZINE.

SIR,—With reference to the proposed Phrenological Society of London, notice of which appears in the May PHRENOLOGICAL MAGAZINE, I have much pleasure in submitting my name for membership.

Without question such a Society should be started and maintained, and, for my part, I would far rather see the scheme originate from Imperial Buildings than from any other centre.

Quâ suggestions : 1st.—I should say the plan should be well ventilated in the pages of the MAGAZINE, and that periodical eventually should give the transactions of the Society.

2nd.—Arrangements should be made to hold a Preliminary Meeting at some central place as soon as possible. The expenses of advertising, etc., of the same, could be covered by a 'collection.'

3rd.—A Committee should be formed, and those persons wishing to join the Society, who have not sent in their names, might then be enrolled as members.

4th.—All the offices held should be honorary, so that the funds arising from subscriptions, etc., could be devoted entirely to the extension of phrenological science.

5th.—The meetings should consist of lectures, discussions, and original papers, by members and others.

6th.—A Prize Fund might be started : Professor Fowler would perhaps deliver a lecture for this object, tickets at 1s. each ; and members be asked to take as many as possible to sell among their friends.

7th.—A class for instruction in phrenology should be started in connection with the Society.

The above suggestions are, I think, practical for commencing a Phrenological Society ; but, of course, they might be modified or enlarged according to the degree of interest which may be displayed on the part of those who are interested in the same.

If the scheme *is* carried into effect, I believe I could induce some ladies and gentlemen to become members.

Yours, etc., J. FRANK HUBERT.

30, Stangate Street, S.E., May 1st, 1886.

To the Editor of THE PHRENOLOGICAL MAGAZINE.

SIR,—Having only now noticed the remarks about proposed Society, I hasten to intimate my willingness to become a member,

having more than once spoken to Mr. Fowler on the subject, and at his suggestion promised to write thereon a short letter to the MAGAZINE, which I never did, hoping that the matter would be taken up by more worthy hands. I would now say, after some little experience as a professional phrenologist, that such a Society, ably and strictly conducted, would tend greatly to give those living by the science in quite a respectable way just the amount of authority needed in circles where prejudice still holds sway, although their reason has been convinced. Will endeavour to come up to any preliminary meeting you may call.—Yours, etc., JOHN MCKEAN.

Function Road, Eastbourne, May 13th, 1886.

Book Notices.

In *Your Luck's in Your Hand* (JOHN HOGG), A. R. Craig professes to give the whole secret of what he calls the 'science' of modern palmistry. It is acknowledged that the book is based on the works of Darpentigny and Desbarrolles, the great French authorities. It is, therefore, presumably authoritative; and it is certainly entertaining. A careful student of Mr. Craig's work should make his way successfully through the world, for a glance at the hands of his companions reveals their characters at once. He may be in love with three ladies at once, and may be in doubt which to choose. Then he may learn that "order, arrangement, symmetry, and punctuality reign without tyranny in those dwellings governed by the gentle economists with the square phalange and the small thumbs." But he will avoid the lady with the large thumb—symbol of petticoated despotism—and his choice will probably finally fall upon the young lady with 'square phalanges,' for these denote many excellent qualities. If palmistry has its allurements, 'graphology' is scarcely less fascinating; for this is the method (its professors doubtless call it a 'science') by which one can tell character from handwriting. *A Guide to the Study of Graphology*, by Henry Frith (ROUTLEDGE), is a neat little book explaining the principles. It is illustrated by several examples of handwriting. Mr. Frith maintains that there is a decided connection between chiromancy and handwriting; so that if an adept in graphology sees a man's handwriting, he can not only tell his character but his appearance.

A revised edition of the *Fables of Pilpay, or Bidpai*, "the chief of Indian philosophers," has been issued as a volume of the "Chandos Classics," by FREDERICK WARNE & Co. Apart from the great bibliographical interest of the ancient work, the short stories, presented in the form of fable, will be found infinitely amusing by modern readers. Coming down from the Sanskrit, they have been translated into more languages than any other book, save the Bible; and enjoy great popularity in Persia as well as in every country where Arabic is spoken. Many of La Fontaine's Fables may be traced direct to Pilpay, and an English version of 1570 suggested

several stories to the Elizabethan dramatists. It is a later and improved translation now brought out, with many characteristic illustrations, in the tasteful form of the Chandos series.

Facts and Gossip.

SIR JOHN LUBBOCK'S dog that is learning to read must look to his laurels ; for a dangerous rival has been discovered by Monsieur Victor Meunier, who is writing a book on the subject of the capacity of animals for education. Porthos, the rival in question, is a black poodle, aged six years, a Belgian by birth, but an inhabitant of Paris ; in which city along with his wife and M. Porthos *jeune*, aged six weeks, he honours with his company a worthy wine merchant. Like many other wise dogs, Porthos understands that when a sou is given him he can exchange it for a cake at the baker's. Having got his cake, however, he does not eat it like other dogs, but brings it home to his master to divide into three pieces for the benefit of himself and family. In fact, he seems to do the whole of their catering ; for, if Master Porthos wants milk, the father takes both the money and the milk-can and sets off to fetch it. He is, for all this, no teetotaller, but is ready to deliver a bottle of wine—holding the neck in his mouth and his head high in air—to a constant customer, and duly to bring back its price. His most extraordinary accomplishment, however, is that he can go down to the cellar and fetch a bottle of any kind of wine required. He distinguishes between white wine, red wine with green seal, red wine with yellow seal, red wine in half-bottles, and several other kinds. Porthos, though conscious of his talents, is said to be by no means conceited or overbearing in his demeanour in the presence of inferiors.

Are we going to be a spectacléd nation like the Germans? The number of little people who in the course of a quarter of a century will be, most of them, fathers or mothers, and who are now to be seen wearing spectacles, makes it seem not altogether unlikely. As the phenomenon is of recent date, it is not easy to avoid the suspicion that the School Board has something to do with it ; either in the way of detecting short sight that under the old system would have escaped notice, or else aggravating by high pressure a natural tendency to myopia.

As the merits or demerits of tobacco appear to be coming to the front again for discussion, I think the following question well worthy of attention, viz., how far the injurious effects of tobacco are entailed upon the offspring of smokers? I can myself call to mind several families of my acquaintance who are delicate, and whose fathers were great smokers. The effects of tobacco on the heart and muscular fibre generally are clearly shown in the instances referred to in an annotation which appeared lately in our columns as having been practised years ago for the reduction of hernia and dislocations.

May not the cases which come before the profession daily of delicate hearts in children be traced to this cause?—*Lancet*.

THE preponderance of the female sex in mankind is becoming a more serious question at every census of the Teutonic peoples. It concerned the English alone a short while ago, but the latest returns of the German Empire display that the same causes—whatever they be—are producing the same result there. In 1867 the difference of proportion between the sexes was trifling in Prussia, but year by year it has increased, until, at the present time, there is an excess of more than half a million women. Emigration counts, of course, but German observers are satisfied that it gives no sufficient explanation; and they should know. We find a clue to the mystery, perhaps, in the fact that the discrepancy is greater in towns. Certain philosophers have thought that when parents live miserably they produce more boys on an average; but, however this be, most matrons would incline to credit that, under like circumstances of wretchedness, more girls would survive. We want more facts on this subject, for if emigration be not the cause, it is plain that a rule is working which should be traced out. Is it possible that the fact had been noticed in those countries of the East where population is dense and the means of life scanty?—and if so, does it account in any degree for the practice of destroying female children? Those who believe that all human customs of this sort are due to an instinctive effort to right the balance of Nature, will accept this theory at once.

A TRIBUTE to the fair sex which ought to be more generally acknowledged was the statement of one of the *Oregon's* crew at the recent inquiry that when men were hurrying to get into the boats, on the call of 'women first,' one woman stepped forth from the crowd and said she was in no hurry. Her conduct made the sterner sex ashamed of themselves and probably averted a panic. As a rule these are the kind of actions which are served up to us in nautical drama, and cynics are apt to sneer at them; but here was a case which actually took place on a sinking ship, which is sworn to in a British court by a seaman who appreciated the good effect of it at the time. All honour to this lady, whoever she be.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

D. M. W.—Your brain-power predominates. Your reasoning and

moral brain have the ascendancy. You are liable to be absent-minded, and far-fetched in thought and feeling; are rather too prolific in thought, not sufficiently practical and observing; have great powers to design, originate, block out work, and plan. You take extravagant views of subjects; have rather too much imagination and scope of mind. You need some profession to which you can give your whole mind; are cautious in deciding, but firm, steady, and persevering. Your moral brain is favourably developed, but subject to your reasoning. Strive to think less, look more, and put into practice what you know, and cultivate your social nature.

E. K. (Westmoreland).—You are from a long-lived race; have great tenacity of life, and will not leave this world without a hard struggle, no matter how old. You have great tenacity of mind. You are one of the steady, firm, persevering kind; can be relied upon as keeping your vows; will have great presence of mind in times of danger, and manifest more than ordinary dignity in the presence of dignified people. You have the capacity to take the lead and be responsible; will always be the mistress, not the servant. You have only fear enough to be prudent; will have great courage when it is really called for. You possess a thoroughly practical, scientific, common-sense cast of mind; will be a student of nature all your life. You may be sufficiently social, loving, kind, and pleasant in disposition, yet are always in earnest; do not yield to trifling, but are practical and utilitarian in every sense of the term; would make a good doctor.

A. W. D.—You are always in earnest. You have a great desire to see and experience for yourself; have a practical, mathematical cast of mind, and are particular about everything. You have a strong desire to travel and see the world, and are fond of the study of geography and astronomy; have talents for mechanics and music, especially the latter. You are naturally industrious, and more liable to work too hard, and too much, than not enough. You enjoy being alone; and do not want to be interfered with in your work, thoughts, or opinions. You are very steady, tenacious, and persevering. You mind your own business without interfering with other people's; have self-reliance, and are prepared to take responsibilities, and be the master-spirit. Should have a wife so devotedly in love with you as to think you are right; and one who will readily comply with your wishes.

G. VALLEY.—You have a motive, mental temperament; are naturally active, and delight to be doing. You have a peculiar-shaped head, and a disposition corresponding. You will find it difficult to settle down to any one thing, and stick to it; are rather short of regulating power—like a ship with a too small rudder. You need more caution, circumspection, and forethought. You easily become interested in others, especially the ladies. You are naturally a great talker. Your conversation is too liable to be of the gossiping kind; have an intuitive mind; are direct in your conversation, and

delight to talk about persons and character; must learn to regulate your feelings, and harmonize your powers, for you lack judgment and prudence. You had better be an auctioneer.

P. A.—You have a good development of the superior portion of the brain; are decidedly economical, and very much given to thinking and absent-mindedness; are not sufficiently practical and mindful of what is taking place around you. You are entertaining, and plausible in manner, but rather blunt, and not very appropriate in some of your remarks. You are very emotional, far-fetched in your thoughts, and inclined to dwell upon subjects immaterial and unseen. You have good artistic ability, and capacity to copy, draw, and design. You have great memory of faces and forms, and should devote yourself to some one subject exclusively, and make yourself as perfect in that as possible. Had better follow your strongest inclinations.

F. T. F.—You have a predominance of the mental temperament, with fair motive and vital; are clear-headed, quick of perception, possessed of strong imagination, great ambition, and an elevated tone of mind.

S. J. F.—You have a predominance of the mental and vital temperaments; are highly intellectual; have great capacities for scholarship, and are exceedingly impressible and sympathetic. Have a missionary spirit.

W. A. D.—You have a predominance of the motive and mental temperaments; are very observing, practical, systematic, intuitive, respectful, persevering, independent, and self-relying, with but little fear, vanity, or display.

S. H. R. (Grantham) is very ambitious, anxious to attract attention, mindful of appearance, decidedly social, knowing, and capable of entertaining company, and appreciates attention.

J. R. (Grantham).—You have a practical, scientific turn of mind, and could have made a good doctor; are a plodder, rather absent-minded, very domestic, fond of home, and highly qualified to enjoy life.

D. G. R. (Holloway).—You have by nature a predominance of the motive and mental temperaments; are a hard worker. You have great perseverance and determination of mind, joined to a practical cast of intellect; but have not a good faculty to economize.

S. A. D. (Bishops Stortford).—You have a strong hold on life; are governed by your experiences; are practical in everything, kind, and would make a good nurse; are always in earnest, and no trifler.

COLD words freeze people, and hot words scorch them, and bitter words make them bitter, and wrathful words make them wrathful. Kind words also produce their own image on men's souls; and a beautiful image it is. They smooth, and quiet, and comfort the hearer.—PASCAL.

THE Phrenological Magazine.

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THE DUKE OF ARGYLL



AS a predominance of the mental temperament, with a fair degree of the vital and motive. He must have always been more given to study and thought than to any other employment. He is



organized on a high key ; is exceedingly intense in his mental operations, and capable of great enjoyment and satisfaction, or the reverse. He is liable to let little things disturb him rather too much, for he makes nicer distinctions than

most men do. His head and face are well proportioned, but there appears to be a predominance of the nervous system over the muscular, so that the brain power is greater than the physical power. His form of head is uniform. There appears to be but little discrepancy or unevenness of development of the brain. Few men have more ability to succeed in a variety of callings, with equal success, than he has by nature.

All his impulsive powers are strong; he is full of feeling and emotion; is decidedly a family man, and capable of strong attachments to family and home. He has great executive ability, possessing more than an average amount of spirit, resolution, and efficiency, which would make him sharp in debate, strong as an opponent, and rather irritable when others take the advantage of him. He is not particularly patient, or capable of waiting and allowing things to take their course, but wishes to consummate everything at once.

As a speaker he would be forcible, clear, distinct, and positive, if not rather personal and direct in his style. As a politician he would be very decided and strong in his prejudices for and against; in fact, he would be very distinct and positive in every position he took. He cannot bear contradiction, and may find it difficult to restrain his irritability when opposed. He has great moral power, and his standard of character is more the result of his moral organs than of either his intellect or his social brain; in other words, his standard is the result of his moral consciousness rather than of self-love. He excels many in having more regard for moral law, for truth, obligation, and for sense of the superior and sacred. He cannot be indifferent to consequences, and would be disposed to legislate with reference to abstract right and truth rather than party feeling.

As an author he would be clear in his style of presenting his thoughts, and elevated in his tone of mind. He has strong imagination, great love for beauty and for any work of art that indicates skill and high culture. He is not satisfied with ordinary productions, but is disposed to do his best, and put an artistic finish on what he writes, says, and does. His mind must be much divided between intellectual and moral subjects; for he has a high moral type of brain, which must have a powerful influence on his character, giving tone to his mind; also a strong intellectual tendency, more especially that kind of mind that would lead either to writing or speaking; for he has a thoroughly utilitarian kind of mind, and wishes to know in order to communicate to others, for it affords him as much pleasure to instruct others as to gain

knowledge himself. He cannot keep and hoard his ideas, like a miser, but wishes others to enjoy with him the pleasures of knowing. He is peculiarly acute, sharp, direct, and disposed to concentrate his ideas, and present his thoughts in a condensed form. He is something as Nathan was to David; he wants to point his finger towards his opponent, and say, "Thou art the man." He has great power of analysis and discrimination. When he understands a principle his great desire is to promulgate it, and apply it, and see it in operation. His tendency is to metaphysics, to close reasoning, and to making nice discernments between one thing and another. As an orator he would not be so abundant in the use of language as he would be appropriate and apt in using such words as expressed his meaning in a most precise manner. His emotional nature would enter largely into his subject. At one time sympathy might predominate; at another time vindictiveness, or a disposition to expose error and forcibly present truth.

He is inclined to method, system, and to organization; cannot bear to have anything at loose ends. His conscience appears to be very large, and, with his other moral qualities, would lead him to be very rigid in his ideas of justice, and he would never compromise the truth or try to balance off one thing with another for the sake of peace; but he would stick up for the right through thick and thin.

There is danger as he grows older of his becoming more and more nervous, and of making nicer and still nicer distinctions, so as to lead him to criticise the evils of life and the wrong doings of men, so as to agitate others and make them feel uncomfortable when under the influence of his sharp way of putting things. He is a good type of a man whose moral principles would have the ascendancy, and would allow moral law to take the lead in legislation as well as in other matters.

THE MOTOR-CENTRE CONTROVERSY.

THE 'New Phrenologists' as the experimenters and theorists in motor localization are called, do not appear to be as harmonious as their admirers would have people believe. There seems to be, indeed, more controversy among them with regard to the definite mapping of 'centres,' and their functions, than there was ever among the 'old phrenologists' with regard to the location and function of mental organs. Prof. Ferrier, Dr. Munk, Bennett, and others, have asserted

that the different centres of muscular movement could be definitely localized in certain areas of the brain convolutions, and point to their many experiments with the galvanic electrode upon animals for evidence of their claims.

Professors Goltz, Allen, Yeo, and others, contend against the possibility of such definite localization, and refer to experiments also for confirmation of their attitude in the matter. Goltz experimented on dogs, and appears to have reached conclusions that satisfied him that the large array of physiologists that includes Hitzig, Ferrier, Munk, Lucani, etc., was deceived and that the evidence of experiments is not sufficient for the division of the brain into motor and sensory areas. He declares that "no extirpation of the motor-centres, or of any other portion of gray matter, could cause permanent paralysis to any muscle of the body." Light, says Professor Ferrier, is situated in the angular gyrus. Prof. Goltz has destroyed the angular gyrus on both sides, yet his dog sees. Munk claims to have found the centre for sight in the occipital lobe, disagreeing with Ferrier as to its place in the angular gyrus, and explaining the phenomena he has observed after the destruction of the designated area by saying that "the dog has become soul blind; sensations of light come to his consciousness so that he receives a knowledge of the existence, form, and position of external objects, but he does not know what these mean—this knowledge must be learned anew." The same authority places the centre of hearing in the temporo-sphenoidal lobe, agreeing with Ferrier that the destruction of this centre causes soul-blindness. Munk agrees in principle with the old phrenologists, as he attributes psychic qualities to these brain areas.

At the International Medical Congress which was held in London, in 1881, Professor Goltz appeared with a dog that could see, taste, smell, hear, walk, and run, and yet the centres ascribed to these functions had almost entirely been removed. But Professor Ferrier brought in a donkey on which he had experimented, having removed the motor area from the left hemisphere several months before, and the animal appeared to be in good health, with the exception of paralysis of the muscles on the right side, the movements of which were claimed to relate to the part of the brain that had been destroyed.

If, however, Goltz's dog seemed to bring confusion to the new phrenologists by his muscular conduct, his mental conduct was favourable to the views of the old phrenologists, because he was a very weak-minded animal, quite an imbecile, in fact, in his motions—had lost the meaning and purpose of

actions; was wanting, to use the language of Munk, in soul consciousness.

The 'proof of the pudding' in this matter is to be found in the practical application of the principles derived from observation. In surgery, already, certain results have been obtained that show, beyond cavil, that the theory of motor-centres is of great value. In Paris, Berlin, London, and New York, operations have been made for the removal of diseased parts of the brain, the diagnosis being founded upon certain phases of muscle paralysis, and proving on trial in nearly every case surprisingly accurate. If, for instance, a person be suffering from paralysis of the right arm so that he cannot bend it or raise the hand to the mouth, and it be found upon an examination of his brain that a tumour or abscess exists in the middle part of the ascending frontal convolution of the left hemisphere of the brain, the region in which Ferrier and Hitzig place the centre for such movement, and if after proper removal or treatment of such lesion the patient recovers promptly the use of his arm and hand, would it not be reasonable to think that localization is correct? This is the question that has been answered in the affirmative by the surgical operations of Bennett, Dalton, and others. In this way, too, shall we not reach positive conclusions that will finally silence the demurrers of even a Goltz?—*Phrenological Journal*.

HEREDITY IN INEBRIETY.

BY D. T. CROTHERS, M.D., HARTFORD, CONN.

IN one hundred cases which came under my care, the following facts were prominent. These cases were nearly all in a chronic state, having used spirits to excess from four to twenty years. The facts of their history were obtained from their relatives, and other sources, and were not tabulated unless correct and beyond question. Of this one hundred, twenty-three cases were classed as direct heredities, dating back to parents and grandparents. Nine were children of inebriate or moderate-drinking parents. In four of these cases the father alone drank, and the mother was, in two cases, nervous and consumptive. In two cases both parents drank at meals, but in moderation. In one case both parents were excessive beer-drinkers at times. In two cases the mother used wine to excess. In eight cases the grandfather on the mother's side was an inebriate, and the mothers were nervous, neuralgic, and suffered from various nerve troubles. In three cases both grandparents on both sides were moderate

drinkers. In two cases the grandmothers drank to excess, and in one case both parents were excessive drinkers. In twenty-eight cases of the remaining seventy-seven the inebriety was indirect, that is, traceable to some more remote ancestor, and coming down manifest in other forms of nerve and brain disorder. In ten of these cases some form of insanity had appeared in the parents, and back of them inebriety was prominent. In seven cases consumption had come on in many members of a large family that dated back to inebriate ancestors. Four of these cases had rheumatic parents, and this was a family disease which appeared at a certain time of life, and was traceable to inebriate parents. Two were from idiotic or weak-minded mothers, whose great-grandfathers were excessive users of spirits. One had an epileptic mother, and two had hysteric and choreac parents, who were also drinking people. Twenty-one of the remaining cases were grouped under the name of complex heredities, cases whose ancestors had been defective and degenerate people; such as insane, paralytic, idiotic, epileptic, rheumatic, and consumptive, and also many other forms of nerve and brain degeneration. These cases showed that the defects of the parents were very clearly transferred to the children, and the form in which it appeared was a matter of circumstances and exposure to peculiar temptations. Thus persons whose parents suffered from these or other diseases would fall much sooner, and when they began to drink went down with more precipitation, and were more incurable than others. The insane inebriates come mostly from this class. Of the forty-nine left, fully ten of them had some concealed heredity which could not be determined very accurately. Thus in one hundred cases, taken as they came, without any attempt at selection, over fifty per cent. were the result of alcoholic heredity. The excesses in drink of the parents were transmitted with a terrible certainty to the children. Fully twenty per cent. were the result of other diseases of the same family group, and the ten per cent. of doubtful cases, making over eighty per cent. of these one hundred cases as the result of heredity. Now, the practical question is this: What are the laws and forces which send down over fifty per cent. of the children and grandchildren of inebriates to the grave, on the same line of disease which the fathers passed over? If heredity is the cause, directly and indirectly, of over eighty per cent. of all inebriety, its study is by far the most important of all temperance studies, and everyone interested in the means for the prevention and cure of inebriety should turn to heredity and its laws, for here the solution of this evil

can be found. Here is a realm that awaits exploration, and any one who has a courageous, conscientious conviction of truth, and is willing to enter upon this great search for the facts, which can be gathered from all sides, will find a most fascinating field for his ambition.

CHOICE OF PURSUITS.

(Continuation.)

There was another thing to consider. A boy should begin to examine his mind, and see whether it was high or low in quality, and then seek for a kind of employment as high as his brain would allow. We could elevate ourselves in some kinds of business better than in others, and get along faster too. It was easier to succeed sometimes in a bad cause than in a good one. We did not need to be educated to be bad; we were bad easily enough; we needed to be educated to be good. There were all the passions that sprang from man's animal nature to contend against. There were licentiousness and selfishness, pride, ill-temper, and vindictiveness; and there were our prejudices, which prevented us from thinking charitably of those who differed from us. It required a great deal of control and discipline of mind to keep the passions in subjection, and to act always according to the dictates of the higher qualities.

It was not very hard work to get into a business that did more harm than good. Sometimes a business was left to us. He was examining the head of a splendid young man. He was six feet tall, and weighed 200 pounds. He (the lecturer) said: "You are a splendid young man; you cannot go through this world without obtaining something worthy, if you live up to your organization. What do you do?" He (the lecturer) expected him to say he was something that was in harmony with his organization. "I am a publican," he said. "And you are ashamed of it, he (the lecturer) replied; "I know you are; you don't like to be one; I know." Said the young man: "That is a fact; I do not: but the business was left to me by my father, and I don't know what I can do except carry on the business." "Now," said he (Mr. Fowler), "take my advice. Go home and lock up the whole concern, and never sell another pint of brandy or rum in your life. Your father helped to make a good many drunkards in the neighbourhood, and you are carrying on the same business, and multiplying the drunkards. You can't afford to do that; get out of the business as soon as

you can." The young man replied: "I shall; and I shall leave the country." Another young man came in to him the other day, with a very good moral brain and a religious tendency of mind, and he was a publican. He (the lecturer) asked him if he was satisfied with carrying on such a demoralizing business. Said he: "We need to drink rum; we need to drink brandy." Said he (Mr. Fowler): "You know better; you know it is not a necessity, but you must have some excuse." "Oh, yes," we said, "we need it."

Why, some mothers must give their little baby as soon as born a little brandy in its milk, because the poor thing had had such a hard job to come into the world, and it must have something to revive it. Why, if there was no brandy within a dozen miles what was the poor little baby to do? It would do a great deal better. A very good-looking young lady came to him (Mr. Fowler) to be examined, and one question she asked him was: "How do you think I would do to keep a public-house?" Said he: "You would do very well. You are good-looking, and plenty of young men would come to the bar to look at you. But you want to take out a license to make men drink as much as possible; for the more they drink the more you will succeed." He said to her: "Would you like to have a drunken husband?" She said: "No; I would not like that." "But in proportion as you succeed," said he, "you are making drunken husbands for other women. Now, that is a matter for you to consider." She had never thought of that at all. She did not think of the moral aspect of the matter. And that was the condition of a great many men and women, and he was astonished that in this enlightened England, with so much preaching and praying as there was going on, a woman came and asked if she would not do to be a publican. "Oh," she said, "the consequences would not be my fault." "Yes," he replied, "they would." "Why," said she, "it would be my business only to sell it, and others' business to drink it." "Yes," he said, "but you put the temptations there. Young people should look to the consequences of the business they go into, and ask themselves whether they help or hinder other people by it." "Yes; but I must get a living." "Oh, yes; but you must not get a living at the expense of others. If you do you are a robber. A man throttled another, and pulled his watch out of his pocket, because, the man said, he must have a living. But he had no right to get a living that way."

There were grades in trades and in professions. There were some minds which were adapted only for sweeping the gutter; some only fitted to do the dirtiest work. There were

some people only adapted to be scavengers, and they made capital scavengers. Now it so happened that in proportion as we had good scavengers in society we had the less need for doctors. Scavengers took the place of doctors, and it was not a business for any person to be ashamed of: it was a sanitary necessity, and life was preserved by it, and society would be in a bad state if there were no scavengers at all. We were liable to look down upon some trades as if they were degrading. Well, let us look down upon them if they were immoral, if they had a demoralizing influence, otherwise not. Our capacity for a thing should be our guide in selecting a business, and not its respectability. A woman brought her son to him, and asked him what would be the best thing to put her boy to. He (the lecturer) told her that her son had a beautiful organization for a mechanic, and would make a capital blacksmith. "What! send my son to be a blacksmith," said she. "Well," said he (Mr. Fowler), "if you make anything else of him you will spoil a good blacksmith." "Well," she said, "I am going to make a clergyman of my son. It is the most respectable business there is; besides, it is free from temptation." There was where people were mistaken. A handsome clergyman was more tempted than anybody else in the community. He needed a fresh supply of grace every time he went out. "Well," said she, "he shall be a clergyman." Said he: "What was his father?" "His father was an architect," she replied, "and built the Custom House in New Orleans"—a splendid Custom House—a building manifesting great architectural taste and ability. The son took after his father, and would have done the same, but she wanted to make a clergyman of him because it was respectable. How many clergymen there were in the pulpit because it was respectable! His idea was that if a man wanted to preach so much that he could not help it, then let him be a preacher; but to go and be worked up to be a preacher was a sort of thing that might do for some, but no souls were saved that way.

Some had a special gift for two or more professions; could do one thing about as well as another. The same faculties could be exercised in a variety of ways—in one calling and in another calling. Success depended upon application and activity of mind. A man was trying to make a very complicated machine. His first idea was not his best. His last idea was best. The last line that the artist drew on the painting was the perfecting line, and so with the engraver's work, and so forth. We had to take the first step, and then a second a little higher; the thought on the second stage was a little

higher than the thought on the first stage, and that on the third a little higher than that on the second, and then you get where St. Paul went—to the third heaven—where he saw things which he tells us he could not utter when he came back. A man who could go to the second and the third stage of his ideas could hardly find words to express them. Some of us had ideas that took us out of this world—that did not belong to this world, so to speak, and so we went where these ideas did belong—to the new home. Let it be borne in mind that our last thought was the important one. Let it not be lost sight of. It was the last thought, the last touch, that resulted in perfection. Why, gold had to be dugged for. Who found gold on the surface anywhere? It was almost an unknown thing to find gold on the surface.

Average capacity could be rendered quite sufficient if carefully cultivated. An artist came to him to be examined, and asked him about the size of his organ of Colour. He (Mr. Fowler) replied: "Colour is not quite large in you." "Why," said the artist, "I am quite distinguished in my colours: that is what my paintings are appreciated for." Said he (the lecturer): "Had you this faculty when you first began?" The artist said: "Oh, I was a dunce at colouring; but I was determined to be a good colourist, and I gave my special attention to colours, and now I am what I am by culture." He (Professor Fowler) examined the head of a man last week, and told him: "You are rather poor in figures; you are no great arithmetician." Said he: "That is just exactly what I am distinguished for." "How were you when you began your studies in arithmetic?" said he (Mr. Fowler). Said the man: "I was a dunce in arithmetic; but I was determined to be good at it, and I mastered it." "Then," said he (the lecturer), "don't you know almost any mind can comprehend figures within a million or thousands? You have given your attention to figures all the time, and have got an energetic mind, therefore you have mastered them; but I tell you that, naturally, you have not got the faculty for arithmetic." The man replied: "Naturally, I have not; but by constantly doing it I have got a fair knowledge of it." He (the lecturer) mentioned these things as an encouragement to those who were anxious to encourage a weak faculty. Let them not be discouraged though the organ were only four or five.

What capacities were necessary for a preacher? That depended upon the kind of preacher he was. There was a preacher that stood not in pressing God's work on; he not only preached Jesus Christ, but he lived Jesus Christ, and

exerted the influence of a Jesus Christ over others. When he prayed he was nearer heaven than any one else. He (the lecturer) was afraid they had never gone so far that way.

The reason why we did not have inspiration in prayer was that we did not go far enough. We did not look high enough above ; did not aspire enough ; did not conceive how pure and how great, and how holy and how perfect, the Great Power above us was, and struggle to be like Him. We went through the ceremony, and said : " Oh, yes, I have said my prayers." That was about all it amounted to with some individuals. Mr. Fowler here exhibited a portrait of the Rev. Theodore Parker, of Boston, U.S., who, he observed, was widely known for his ability as a preacher, and was one of the most independent class of thinkers, and remarkable for his powers of investigation, and manifested a great deal of devotional feeling in his prayers ; who was a man of superior culture, and a high moral tone of mind. Mr. Fowler then referred to Dr. Channing, of whom he observed that he preached about one good sermon in a year, his health not allowing him to put his energies into his preaching as he desired. But seldom, remarked the lecturer, was there a man of so much purity of mind—so entirely free from anything of a gross and animal nature. His character was too elevated and refined for that. The lecturer contrasted Theodore Parker with another minister, to whose portrait he pointed. This man, he said, used to take off his coat, roll up his sleeves, take off his cravat, unbutton his collar, and go at it. Sometimes he would stamp on the floor, sometimes he would knock the desk down, and he talked so that you could hear him miles away. " Why," said he, to the lecturer, " I have converted 18,000 souls." He was an insane preacher, as the audience could infer. He became insane, and went to an asylum. He got better, and came back, and went at it again. Well, now he had grown so quiet that you could hardly think it was the same man ; quite subdued, no 'glory hallelujah !' about him. Professor Fowler next referred to Mr. Breckenridge, of Kentucky, as a preacher of the old school, who had been the president of a theological seminary. The audience could infer what his theology was by looking at his portrait. He was always sending people to hell, but very few to heaven ; and he made hell very hot indeed for those who went *there*. He was always criticising young men who had had a little fun or frolic, just as if any man could go through the world without it. There was another old fogey yonder on the wall, who was a foe to all kinds of theatrical performances, and who denounced them as from the devil.

The lecturer then proceeded to make some remarks about doctors and surgeons. He said he was examining the head of a doctor once, and told him he had no capacity for that profession, and he could not subject a patient to severe treatment if necessary. He replied: "That is a fact, and I never ought to have been a doctor. I could not give bitter medicine to people who did not like to take it." Doctors, said the Professor, should have good, practical common sense; the forehead should be well developed, and Veneration, and all the social qualities, should be large; he should be rather a jovial type of man. Doctors could not know too much; the more they knew the better qualified were they for their business. It was astonishing how much a doctor needed to know in order to fill his place properly. The Professor next exhibited the portrait of a woman, who lived in Ohio, he said, and was a capital nurse. People were glad when they could get her into their houses if there was illness. Doctors did not care much if they could only get her. She helped her patients to recovery by her own magnetic power; they got better simply because she could give them the vitality they wanted. She was a slave, and finally her master gave her her freedom. Her mother was a slave, and she earned enough to buy her, and set her free. She had a daughter in slavery, and she bought her daughter, and educated her and clothed her—and she was a busy, successful woman in her department as a nurse. The lecturer then referred to an American surgeon—Dr. E. Mott. He had, said Mr. Fowler, performed some of the most critical experiments and surgical operations that had ever been known to be performed. He had all the perceptive faculties large, and was of an energetic type. There was a difference between him and that man (here Mr. Fowler indicated the portrait of a dentist). The doctor came to his office one day and found his pupil trying to extract a tooth. He had got his coat off, and his foot up, and was trying with all the energy he could to wrench the tooth out; but he tried and tried, and did not get the tooth out after all. The doctor said: "Here, go away from there, let me take hold"; and he wrenched it right out, and it was done with. See what a nose, what a chin, and what a resolution, was there! Why, his hair was so full of electricity it would not lie down. Indicating another portrait, the lecturer said the subject of it was not a very good example of a teacher. If he could not get an idea into a pupil in any other way he would knock it in. He would not have any patience to teach. But he was distinguished as an actor, and he thought he was the greatest

Shakesperean representative in the world. He played in London at one time. Mr. Fowler next indicated Professor N. A. Whisewell, who for twenty-five years had been a teacher, and who said he had never struck a boy during all that time, but had perfect order in his school. He had the capacities for a teacher, Mr. Fowler remarked, and was a successful one.

Mr. Fowler then alluded to the qualifications necessary for an editor, and referred to the portrait of Dr. Dixon, the editor of a New York medical paper called the *Scalpel*. He used, said the lecturer, language in his paper that was in keeping with its name. He delighted in being as severe as he possibly could in castigating others if they failed in any way to come up to his mark as doctors or surgeons. Professor Fowler next passed in review the character of the celebrated orator, Gough, pointing to his portrait, and observing that he had died in harness, working up to the last day of his life, during which, since 1842, he had delivered from 7,000 to 8,000 lectures. Very few men had gone so low into the degradation of intemperance and suffered so much from the horrors of an intemperate life as he had. Very few had achieved such distinction in the oratorical world as he. Few men had exercised their powers of oratory on a greater variety of subjects, and given so many lectures. He was one of the most remarkable of men.

An inventor required great application, great discipline of mind, great earnestness, great firmness and perseverance, great constructive power, great power of observation; great memory, in order to carry the plan of his invention in his mind; great power of comparison, to see the relationship between this, that, and the other; great order, to arrange his ideas so that they should work harmoniously. It required great capacity to be an inventor. It required similar powers to be a machinist. To be an architect it required a finer temperament, and less of the bone-and-muscle kind of man. Painters needed a fine quality of organization, and Order, and Colour, and Ideality, and Form, and Size.

To purchase goods required a good, strong, practical sort of mind, and a knowledge of what was wanted. A reasoning brain was required to understand how to make bargains and to take things into account. Some had a natural faculty for making money; between him and his audience, if a man made a fortune by his own energy, he needed all the conscience he had got to do it honestly. The Professor then pointed to a picture of Jay Gould. This man, he said, had made an independent fortune, and left it to his son. That

son, twenty-four years of age, probably had control of more money than any other man living. That son was a very remarkable son—and he needed to be so in order to fill such a place as his. His father was a very clear-headed man, remarkable for his clearness of mind, his quickness of thought, his power of comprehension. In his business he knew nothing about right and wrong. That was the case with a great many people. As a man in society, he was genial, sociable, and companionable, and, for ought he (the lecturer) knew, he said his prayers as sincerely as anybody. Gould needed such a kind of man as that (pointing to Fish) for his agent. That man, with his broad, low head, could do all the dirty work Gould wanted him to do—lie, or cheat, or do anything else of that nature.

Mr. Fowler concluded his lecture with some observations on some typical female characters, whose portraits he showed, and the qualities essential to making a good wife.

SPEECHLESSNESS.

THE process of human life is a process of gain and of loss, of the acquisition and decline of faculty. Time gives and time takes away. The moralizing of Touchstone is the true record of our existence:—

“And so, from hour to hour, we ripe and ripe,
And then, from hour to hour, we rot and rot,
And thereby hangs a tale.”

On one great human faculty—the characteristic human faculty—that of speech, and the process by which it is gained and lost, a great deal of light has been thrown by recent inquiries. The changes through which we ripe and ripe, and then rot and rot, and ultimately enter on the last scene of all, have in this particular been ascertained and recorded with great precision by the researches of the past twenty years. From the infant crying (as is his too frequent habit) in the night, and with no language but a cry—as if he were the inarticulate nominee of a Caucus—to the meropean stage, and back again to the whimperings of old age, the process has been well traced and defined. It has been set forth with great lucidity and fulness of information in a little book by M. Gilbert Ballet recently published in Paris as one of the volumes *Bibliothèque Philosophie de Contemporaine*, and entitled “*Le Langage Intérieur*” (Felix Alcan, publisher). The work is a treatise on the different forms of the phenomenon, or rather

group of phenomena, known as Aphasia. The phrase "Inner Language" expresses the author's doctrine, which he bases on, or of which, at any rate, he finds the best expression in, a sentence of De Bonald's :—" L'homme pense sa parole avant de parler sa pensée." It shows the various methods by which a man, while retaining the faculty *penser sa parole*, may lose the power *parler sa pensée*. De Bonald would have been very much astonished if he could have foreseen that his doctrine would be pressed into the service of clinical and experimental medicine. He thought only of its political and theological explanations. It was the philosophical basis which he found for the legitimist and Catholic reaction in which he laboured in conjunction with De Maistre and Chateaubriand. He held that speech came to man by immediate divine communication simultaneously with thought ; that the power of thinking was limited by that of speech ; and, that as regards each nation, its language, and the traditions and institutions of which that language was the expression, determined its social and political arrangements. Hence he derived an argument for the monarchy of divine right in France. On its theological and ecclesiastical side he pressed it into the service of the Logos and of obedience to the voice of the Church. De Bonald took the same view as to the divine institution of the art of writing. The decomposition of sounds and writing, he argued, are one and the same thing, and must therefore have been simultaneous, for you cannot decompose sounds without naming them, nor name them except by letters or distinguishing marks. Thence he derives in so many words the conclusion " L'écriture est nécessaire à l'invention de l'écriture." *Q.E.D.* There is considerable affinity, it will be observed, between the theory of De Bonald and that of Dogberry as to the origin of writing, though Dogberry speaks rather as a natural philosopher and De Bonald as a theologian.

M. Gilbert Ballet, content with the phrase which he has picked up from De Bonald, does not trouble himself as to the meaning which it bore in that writer's mind, nor show any consciousness of what that meaning really was. He analyzes language into the different shapes which it has taken among civilized and educated men. These are (1) the audible impression, or the word heard ; (2) the visible impression, or the word read ; (3) the articulate motor impression, or the word spoken ; (4) the graphic motor impression, or the word written. In the first two members of this series, the intelligence is receptive ; in the last two it originates. Without any appreciable decline of general intelligence, all these faculties may be lost, or one or more of them may be lost,

and the others, or some of them, may be retained in almost every conceivable variety. Apart from physical lesion, this loss and retention depend mainly upon the strength of the respective faculties of memory for different kinds of language in different minds. In all men, according to M. Ballet, a mental image of the word precedes its utterance. With the largest class, whom he calls 'auditives,' a mental voice speaks the word before it is uttered with the lips; in another class, whom he calls 'visuals,' the written word is present to the inner sight before it is spoken; in a third, it is suggested by a mental process reflecting the movements of speech in articulation; in a fourth, and this naturally very rarely, the memory of the movements of the hand in writing suggest it. Besides these there are 'indifferents,' neither stronger nor weaker in any one form of language than any other. As language is learned by children through hearing, and as that is the most constant and habitually exercised mode of speech, most men are 'auditives.' M. Egger, an eminent writer on this subject, states that the inner voice, which in his case always precedes thought, is his own voice in *timbre*, rhythm, and intonation. The visuals, among whom Mr. Galton has found some members of the Royal Society, of the Institute of France, and other learned persons, see mentally, as if in print, all the words they pronounce, and read them, as if from long slips of paper unrolled before their eyes, as from some telegraphic instrument. Here, too, habit and usage have their obvious place. Among those who think by motions of articulation, is Herr Stricker, an eminent German writer on this subject, who says that, though he can detect no physical movement of the organs of articulation in thought, yet he is always conscious in thinking of an image of those movements. With respect to the graphic motors, if we may use the phrase, M. Ballet quotes from M. Fournie an instance of a man who said:—"I feel when I am thinking that my fingers are in action, though they are really motionless. I have an inner perception of the image which the motion of my fingers would produce." Some of our readers may recall in this connection a speech made by Mr. Dickens at a newspaper dinner. Early in life, as is well known, he was a reporter in the gallery of the House of Commons. In listening to speeches at public dinners, he said, he was always conscious of a movement of his fingers on the table, as if he had the reporter's pencil still between them. This was in part perhaps due to mere association. But there can be little doubt that in some degree the movement of the fingers had become through early habit a condition of close attention to

the speech. As an instance of indifferentism, M. Ballet cites an incident of his own experience. Owing to the difference of the process by which he became acquainted with those books, he always, in recalling the opening lines of the *Æneid*, mentally sees the printed page before him, but he hears inwardly and mentally recites the first verses of the *Iliad*.

To these faculties of language the loss of faculty corresponds. There are four forms of aphasia which may co-exist, or which may be found isolated :—(1) the loss of the power of understanding spoken words, or, as it has been named, rather improperly, since the failure is not physical but mental, verbal deafness ; (2) verbal blindness, or the inability to read ; (3) motor aphasia, or the loss of the power of articulate speech ; (4) *agraphia* (a term invented, we believe, by the English physician Dr. Ogle), or the loss of the power of writing. An instance of loss of the faculty of understanding spoken words while that of understanding words written remained is quoted by M. Ballet from Abercrombie. It is that of a gentleman farmer in Scotland, who recognized the sounds of spoken words without understanding their meaning, and who, to make communication with his labourers possible, had a written list in his room of the most ordinary terms. On hearing without in the least comprehending the spoken words, he turned to his written list, and his perception of what was said became clear. Of verbal blindness (as it is called) M. Ballet gives the instance of a French merchant, whom he calls M. P., a man of fair cultivation and more or less of a reading habit, who, through an accident in hunting, lost the faculty of reading. “M. P. understood perfectly everything that was said to him, answered questions with much precision, and expressed himself with a certain degree of facility. Moreover, he wrote with ease not only his name and address, but a long letter, and that without any notable mistake in orthography. The interesting fact is that, though he could write, and did it with a certain ease, he was incapable of reading. ‘I write,’ he said, ‘as if with my eyes closed ; I don’t read what I write.’ In fact, he was wholly unable to re-read the words which he had traced a few seconds before.” The letters themselves written in this condition were quite equal to those which he had written before the accident befel him. Of motor aphasia, or the inability to use articulate speech, M. Ballet gives instances of a patient at the Salpêtrière, whose reply to all questions consisted of the word *Macassa*, *macassa* ; of another who could only say *monomomentif* ; of a third who was reduced to the expression *iqui phophoiqui* ; and of a fourth whose vocabulary did not go

beyond *baden abaden badena*. The poet Baudelaire could say only, "Cré nom, cré nom," being in this respect inferior to a very distinguished lady, whose conversational powers extended to, though not beyond, the entire phrase of which Baudelaire gave the usual abbreviation. Still more advanced was another lady, who repeated at every moment, "Madame été, mon Dieu! est il possible? Bonjour, Madame." In the earlier stages of the malady proper names are forgotten. An eminent man of science was reduced to designate the person of whom he spoke as "My colleague who invented such and such a thing." Next common nouns disappear. When the Abbé Périer asked for his hat, he said, "Give me my—— what one puts on one's——." His coat was "What is worn to be dressed in." Scissors, with another patient, were the things one cuts; the window, what one looks through, what gives light. What cannot be said by people affected with motor aphasia can sometimes be sung by them. An officer, who could not pronounce the words *enfant* and *patrie*, whose powers of speech were confined to the word *pardi* and the letter *b*, was capable of singing with perfect articulation the first couplet of the "Marseillaise." A farmer, "du comté de Wiklow dont parle Graves," could not pronounce the names of his wife and children except by reading them. A striking instance of agraphia is that of a Russian officer, well acquainted with Russian, French, and German, who, having been afflicted with motor aphasia as regards French and German, afterwards became subject to agraphia as regards all the three languages, though he retained or regained the power of reading and speaking them. A woman, being asked to write her name, produced the words, "Sumil siclaa satreni," and gave her address as "Suuesr nut to mer linu lain." An English naval officer, wishing to write "Royal naval medical officer belonging to the Admiralty," was constrained to add the terminator *dendd* to each word, and to write, "Royondendd navendendd sforendeund [*sic*] belondendd," &c. We might multiply instances, but our space fails. We have taken the simplest cases, as admitting of the briefest statement. The explanation of these extraordinary phenomena seems to be that, while the centre of general intelligence may remain unaffected, there may be a lesion of the organs on which the working of particular modes of the reception or expression of language depends, or interruption of the connection of these organs with one another and the seat of the central intelligence. Thus cut loose they cease to work, or work wildly. For the localization in the brain of the different centres of language,

as well as for many other details of physiological and psychological interest, we must be content to refer the reader to M. Ballet's interesting little volume.—*Saturday Review*.

"IT RUNS IN THE FAMILY."

THERE is a story in an old book of Oriental travels of two Turks who sat smoking in the doorway of their house while an earthquake was shaking the city to ruins. Hurrying parties of fugitives called to them that the walls were tottering. "Allah wills it!" uttered the Moslems reverently, scarcely taking the pipe-stems from their lips. The falling building crushed them where they sat.

Fifty years ago the word Heredity was seldom heard in every-day talk, and the awful import of the thing it represents, as we face it now, was imperfectly comprehended. When disease of body or mind pursued successive generations, wiseacres and gossips said, "It runs in the family," and bowed to the inevitable with pious, or impious, despair. The stolid fatalism of the doomed Turks had a parallel in Christian homes. Where was the use of warring against Providence?

We recognize heredity as something more than a name—as a power. It is a key to riddles that might, without it, shake our faith in the All-Father's love and wisdom. But in acknowledging the principle, we overlook the possibilities of undoing, each in his measure, the evil wrought by the misdoings of our predecessors.

The mother is, in effect, her child's physician more truly than is the paid practitioner. That she is also nurse, play-fellow, and teacher, fits her the better for the office. She, and often she alone, knows the weak spot in his constitution, the point left unprotected by Nature. If she be a sensible woman, she asks sadly: "Whose was the fault, since chance has no place in God's world?" Many a loving heart has broken under the belief, "*Mine* was the disturbing influence that introduced confusion where divine order should have borne rule."

For, in the teeth of the Declaration of Independence, our children are *not* born with equal rights to health and happiness. I do not speak now of those whose deformity or imbecility is patent, such as are esteemed smitten of heaven from the birth-hour. Far exceeding the number of these is the great army who are plagued by inherited propensities which may never be more than menaces, yet may develop into maladies. The mother's sore throat, the father's dys-

pepsia, the grandfather's 'liver complaint,' the great-grandfather's rheumatism, are accepted as Sir Leicester Dedlock, Baronet, took his gout—"yielding up his family legs to the family disorder, as if he held his name and fortune on that feudal tenure."

The Dedlock gout was much in my mind during a certain summer of wanderings when my opposite neighbours at the *pension* table were an American family, kindly and talkative. The hale-looking father suffered at times with bilious headaches; the mother's speciality was neuralgia.

"Our children inherit both!" the wife proclaimed in dismal exultation. "Dear little Frank, although but six, has *intolerable* attacks of nervous headache; and even baby Florence, who is just four, almost *dies* in paroxysms *precisely* resembling her father's. As for the older children, each takes her turn every few weeks. It is *mysterious* the way such things run in families! Our legacy has come down to us through several generations, and we try to bear it with Christian fortitude."

To generate sufficient supplies of fortitude the afflicted children drank coffee and ate crabs, devoured pastry, pickles, *patés*, fried fish and fritters, vanilla creams and *vol-au-vents*, macaroni and mayonnaise, marmalade puffs and mullagatawny, with impartial zest horrible to behold. The mother boasted that they had always despised 'baby-food,' and that nothing seemed to hurt them. In further demonstration of health they sat up until what old-fashioned folk call 'all hours,' and doated on dancing and late suppers. They were sallow and hysterical—hints which went for nothing in view of the abnormal appetites and nervous energy that testified to 'fine constitutions.' "American children were not apt to be red-faced and lumpish like English and Germans."

Nearer home live an American husband and wife, whose only daughter, as often happens, inherits the father's physique; while the boys are like their mother in colouring, features, and robustness. The little girl was at five tall for her age, slight, pale, and pretty, with the pensive winsomeness that deepens parental love into nameless and wordless yearning. The mother is a woman of independent thought. Her husband is a prey to excruciating headaches, attended by nausea and delirium. They are a heritage from his parents. Not one of his brothers or sisters has escaped the curse. They submit to it with resignation which would brighten a martyr's crown, thankful, they say, that the malady is nothing more serious. When they state that the plague is 'constitutional,' and therefore proof against remedial

measures, the topic is dismissed. Baby Marjorie's father, most happily for all concerned, married a girl who never had a headache in her life. He gave the fact no thought in seeking and wooing her. She bestowed as little upon his constitutional infirmity. That young people who love one another do not take such matters into consideration in contemplating marriage, is an American axiom it argues indelicacy to dispute. Neither of the wedded pair appreciated what had been dared and what escaped until the four-year-old girl sickened suddenly one day, and, after twelve hours of suffering, fell asleep and awoke languid, but free from pain.

"Ah! the family headache!" smiled the physician.

"The family headache!" responded the parents, casting dismayed looks at the wan face on the crib-pillow.

"It is a terrible inheritance, doctor!" added the mother.

Then and there she resolved to lift it from her child. Being clear of sight and sanguine of temperament, she had learned that few earthly ills are irremediable, and calculated the chances that the physical forces the baby had drawn from herself would serve as a friend in the citadel. Her design was at once matured. After close observation of the effects of diet, exercise, and imprudent exposure on the little one, she found that it was practicable to widen the intervals between the attacks, which for a while were frequent and distressing. Working on this vantage ground, she was so far successful with her preventive policy that by the time Marjorie reached her eighth birthday a headache was an infrequent event. Certain irregularities—loss of sleep, wet feet, confinement to the house, indulgence in sweets, pastry, and nuts—were almost sure to bring them on. The child was sent to bed at eight o'clock every night, and not allowed to attend after-dark parties. Properly shod, she spent much time in the open air, never studied by artificial light, ate simple, wholesome food, supped on bread and milk, and was trained into docility and self-control.

A tedious and troublesome task? That depends on the sense and temper of the mother. Marjorie's considers the prize worth all it cost. At ten her girl is healthy, happy, a joy in her home, instead of a source of ceaseless solicitude.

"The physicians assure us that if we can tide her over the next four years she will be safe," says her guardian, hopefully. "She has had but one headache in twelve months, and that was not severe."

The experiment is the more interesting when contrasted with the too prevalent indifferentism of parents as to what habits and food best suit their children's health. There are

stubborn idiosyncrasies of digestion—tricks of the stomach—that ought *not* to be overcome. When candy makes a child sick again and again, candy is rank poison to that particular constitution. When a girl pouts because the mince pie that cost her a headache last week is denied her, it is no sign that she ought to have it. The boy who is cross all day because he was up late last night must be sent to bed early in future. Maternal duty and maternal love are at one here. Whatever is likely to work harm to the baby should be withheld from him, however sore may be his moan at the deprivation. The rule is as plain as that the addition of two and two makes four. Exceptions are so nearly impossible that no sane person should violate the broad principle. Not one child in ten thousand likes to go to bed early. Perhaps one out of a thousand mothers has the moral courage to insist that her offspring shall do in this respect what she knows is good for them rather than what they want to do. So many and so various are the phases of resistance to her will and sense of right, it is no wonder that the stout heart is fain to stay itself on the truth that, while she must sow the seed, the harvesting will fall upon her darlings. We have to get our heads well above the dust and fogs of prejudice to survey both end and beginning of our life-work. Let those who for the great love they bear their children are willing to believe and to *do*, set themselves to the candid consideration of a homely problem :

1. This or that disease or propensity runs in the family.
2. Then *get it out!*

MARION HARLAND, IN "BABYHOOD."

A WORKMAN'S VIEW OF HOME.

A FEW weeks ago, as I was going by train to one of our southern suburbs, I happened to get into a compartment with four or five workmen, who were making their way homewards. One of them was a dusty-coated, but on the whole a neatly-dressed, little man, whose beard and hair were beginning to show unmistakable traces of the hoar-frost of age. He appeared to be between forty and fifty years old, although still hale and hearty. His eye was bright, his cheeks ruddy, and his looks so cheerful that one could not help thinking that he must be possessed of a happy and contented mind. I was actually thinking what a contrast he presented to the other workmen, whose downcast looks and generally careworn appearance suggested anything but minds at ease, when

one of the men, a big broad-shouldered fellow, who was the picture of untidiness, addressing his pleasant-looking fellow-passenger, said: "Excuse me, mate, but isn't your name John Pearson?"

"Yes, that's my name," replied the little man.

"I thought I couldn't be mistaken," said the other. "And you used to work for so-and-so (mentioning the name of a large firm in the building trade). I speak of twenty years ago. You must remember Thomas Blunt; I was apprentice with them then."

"Yes, I worked for them then; but I should never have recognized you as the Tom Blunt of those days."

"Should you not?" said the big man. "I remember you were still there when I was out of my apprenticeship; how long did you stay after that?"

"I am with them still," replied the little man who acknowledged the name of John Pearson.

"You don't say so!" exclaimed the other.

"I do though."

"And do you mean to say you have been with them all this time?"

"Yes; I've never worked for any other master for nigh on thirty years, for come Michaelmas I shall have been with them that length of time."

All the workmen exclaimed on hearing this statement; whereupon Pearson added:

"And what is more I have not lost a single week in all that time through sickness or from any other cause."

This brought out more expressions of surprise from the workmen, one of whom observed that there were not many men who were as lucky as he appeared to have been.

Pearson answered that he did not think there was any particular luck in it. He had known many men who had had more chances than had ever fallen to his lot.

"Then how do you account for it?" asked Blunt. "To my mind," said another, "a man must have had the devil's own luck to escape sickness for thirty years."

"I don't regard it in that light," replied Pearson. "A man has to thank Providence for a good many blessings, no doubt; but people get into the way of attributing to Providence misfortunes that they ought to lay at their own doors. Why, there is a neighbour of mine who, a little while ago, went on the spree, got drunk, and was found in the morning asleep on a doorstep; where he had been since his friend the publican had turned him into the street at closing-time. He caught a cold, and was laid up with rheumatic-fever for nine

weeks. His wife, who had to throw herself on the good nature of her relatives (especially when the 'uncle' could not be run to any more), and who bewailed her husband's illness as a dispensation of Providence, was very much surprised, and not a little hurt, when I told her Providence had good ground for an action for libel against her. That's why I say it's not so much bad luck as bad behaviour that makes people have to suffer."

"I suppose you're a teetotaler," observed Blunt.

"No, I am not," replied Pearson, "nor ever have been. What's more, I've never been at a temperance meeting; though I have read some of their tracts, and very sensible some of them are. No, I take my glass of beer like the rest when I think I should like one; and when I don't think I would like one, I don't let any one persuade me to drink. I never take more than a glass a day, and that's generally at night; and sometimes I don't take a drop for days and even weeks together."

"There's no fear of you getting drunk at that rate," observed one of the men, with a laugh.

"No, I don't think there is," replied Pearson; "moreover, I don't want to get drunk, and don't mean to if I can help it. Once was enough for me."

"Oh, then you have been drunk once," cried two of the men in a breath.

"Yes," said the little man: "when I first went to work, I had a job with a carrier; it was winter-time, and one night when we came to an inn, it being very cold, they gave me some hot grog: then I tumbled into the cart and went to sleep; but at the next stopping-place I had to turn out, and I'd no sooner breathed the fresh air than I became quite drunk and that sick—! It was several days before I got over that bout, and, lad as I was, I swore drink should never serve me like that again, and it never did. And what's been the result? Being steady, I've kept my berths when others, aye, and better men too, have been turned off. For I've always found that employers put a high value on a steady man because they can trust him."

"That's true enough," said Blunt. "It's a pity men couldn't take it and leave it as you do."

"If they can't, they should just give it up altogether, and become teetotal: that's my view," replied Pearson.

One of the other men observed that a good many men would do so if they had comfortable homes to go to; "but," said he, "their wives go to the 'public' and neglect the home so, that the man is driven to the public-house."

"I know a good deal of drinking comes in that way," said Pearson. "I believe there is nothing that drives men to the drink so much as uncomfortable homes. Thank God, I never had anything to complain of on that score. I've always had a tidy, comfortable home—and a happy one too, I can tell you! It's only a poor working man's home; but I would not exchange it for the best. It's always clean and neat, the hearth swept and the kettle a-boil when I get home from work, and there's a cheerful little wife ready to make the tea and toast, and then to sit down and share the meal with me and 'liven it with cheerful talk. If that's not comfort, tell me what is?"

"Well," said one of the workmen, "you've been lucky there anyhow; for you don't pick up such a woman every day. Where you get one woman like that, you get twenty who will neglect the home and let the children run wild, while they are spending the man's money in drink."

"And whose fault is it if they do?" asked Pearson: "tell me that. In nine cases out of ten it is the men's. And I'll tell you why. Because they have not had the sense to start their wives as they would have them go; or else they have not had any thought for the future at all, as is most frequently the case. What do the young fellows do when they go a-courting? They no sooner get to going out with a girl than they know nothing better to do but to take her into the public-house. Likely enough she has not been in one before, and has acquired no taste for beer or spirits. But under her lover's guidance she soon learns the habit. Many's the woman you would find out if you asked who was persuaded to take her first glass by her sweetheart. Then, when they come to be married and she continues to like her beer, and to gratify her appetite that way, he finds fault with her. I don't say it's always like that; but too often it is. When a young man has chosen the young woman he would like to make his wife, he should begin by setting her such an example as he would like her to follow, and if he doesn't want her to get into the habit of going into the public-house, he shouldn't take her there in the first instance; nor should he go there himself. Public-house courtships never led to any good, and never will. That's what I've always drilled into my children's heads, and especially into the lads', who are liable to get from under your eyes more than the girls; and they have followed my teaching—which was also my example,—every one of them. And they've had no cause to rue it; for every one of them has married well and is doing well. No," continued Pearson, "bring up your girls to be tidy and

thrifty, and to be temperate, and then teach your sons, when they go a-courting, not to spoil them by taking them into the public-house, or other places where drink is, and working men will very soon have less cause to complain of slatternly wives and neglected homes. That's as true as gospel; and you can't begin too early," said the little man with more earnestness than perspicacity.

"It does one good to hear you talk," said Blunt, "and I wish more of us would follow your example. Upon my word I feel inclined to begin now, old as I am."

"Why, what age are you?" asked Pearson, with a smile. "I lay anything you are twenty years younger than I am, and I should not count myself too old to turn over a new leaf if I thought it would be for my good."

"What age do you think I am?" asked the big man. "I should guess you to be about forty-five or forty-six."

The little man laughed. One of the other men guessed forty-seven. Then Blunt said: "Well, I'm forty-five, and I'll be bound you're not more than a year older than I am."

"I was sixty-four last month," said Pearson, "so that I was not far out when I said you were twenty years my junior."

Everyone expressed their astonishment. "Well," said one of the men, "it's evident your plan is a good one for keeping you young; for I dare say you are no older in your feelings than you are in your looks."

"If anything, I think I am younger," said Pearson. "It is trouble that makes men age, and I have never knowingly done that which brings on trouble. A man gets his share without that—a working-man especially. I have neither wasted my money, nor my health and strength. I've devoted my time to caring for my wife and family, and they have repaid me by being good to me in return; and so I've been about as happy and contented as a man may be. It comes to this, as I always say, that you get that that you give, and if a man sows thistles, he is pretty sure to get prickles for his pains."

S.

PSYCHICAL ACTIVITY DURING SLEEP.

THE question of the persistence of mental activity during unconscious sleep—that is, sleep which leaves behind it no traces of any thoughts or dreams, is one which is of necessity exceedingly difficult to elucidate. Numerous experiments have been made on this interesting subject with a view of

endeavouring to ascertain whether the mind—using this term simply to represent the reflective powers of the cerebrum—shares in the cessation of activity which attains the other portions of the brain, or whether the apparent inertia be only attributable to temporary disconnection with the apparatus of memory. Observers have caused themselves to be awakened, as suddenly as possible, at all hours and at every period of sleep, but never without the awakening being associated with a train of ideas which terminated in the act of recovering consciousness. This fact has been used as an argument in favour of the hypothesis of the ceaseless activity of the thinking portion of the brain. It must be remarked, however, that the change from a state of unconsciousness to that of self-possession is by no means instantaneous, and there is ample time for the gradually awakening centres to furnish the materials for a dream; the period required for its complete evolution being frequently so short as to escape any attempt to measure it. It is, however, by no means impossible or improbable that some sort of *cerebration* does go on during the soundest sleep without leaving any perceptible, tangible, connected image on the field of memory. We know that such ‘unconscious cerebration’ does go on while we are awake, as when, to quote a familiar example, we abandon the quest of a word or name, the momentary effort to recall which has been unavailing. After an interval of minutes, weeks, or it may be months, it crops up as it were spontaneously, and it often appears as if the search had been going on without the express mandate of the will. It is, then, not altogether impossible that the results of such unconscious and—so far as the will is concerned—inco-ordinated psychical activity during sleep may, although no palpable trace remain, still leave impressions on the receptive media of the higher nerve centres which may influence the train of thoughts and actions in our waking hours. Certain it is that an idea submitted to the influence of a night’s rest may when next resumed be found to have developed itself even when deliberate reflexion has not been brought to bear upon it. In this case the value of ‘sleeping over’ a difficult point may not only depend on the subsidence of collateral feelings or passions, but also on the expenditure of actual brain power in its elaboration. It is urged, on the other hand, that there is no reason to suppose that the reflecting portion of the cerebrum does not share in the periodical rest which is so necessary a condition for all organized tissues; but it can be surmised, without straining our physiological knowledge, that since all the cells of a given area are not called into activity

at the same moment, those not in use for the time being may be enabled to avail themselves of the period of inactivity to provide for the changes necessary to proper nutrition.

The problem is as interesting as it is difficult to solve. The sleeper alone is in possession of the organs the mechanism of which we are seeking to fathom, and this under circumstances which, *ipsis factis*, incapacitate him from self-observation. By carefully collecting and collating such data as are available, we may nevertheless be enabled to arrive by induction at an explanation which shall fit in with the information we already possess, and, like certain theories in physics, pave the way for the discovery of the further details of these recondite phenomena.—*Medical Press and Circular*.

THE STREET MUSICIAN.

SECOND PART.

I USED to wonder whether sadness or mirth would draw the more coin—Hamlet or the clown. But I am no longer in doubt: I have long since decided in favour of the clown. Mirth unquestionably bears the palm; indeed, one might say it bears the full palm, while sadness goes away empty. The reason is, presumably, that whereas we are, as the Psalmist says, born to sorrow (it is our hereditary estate), we have to pay for our gladness like gas or water, and we do not do it grudgingly either.

It is a question whether pain ever gives largess freely. But that is a large question, into which I will not now enter, further than to venture on the opinion that to one instance where pain pure and simple is the stimulus to charity, there are ninety-nine where pleasure is the motive. How many give to the kerb-stone musician in order to get rid of his discordant noise rather than in compassion of his piteous state! In the case too of those who move to pity, only there may be a difference in the motive of the giver. My next-door neighbour may give his obolus because he cannot bear sight or sound of anything pitiful. He is but one remove from the purely irritable man. To my neighbour over the way, on the contrary, it is a positive pleasure to have his feelings of pity stirred. He delights to feel the fountains of his tears moved—to have the surface of his silome ruffled, as it were,—for then it seems to him as though an angel's wing had flapped over him. And in the presence of even an imaginary angel the image of the earthly sovereign sinks

for the time being into comparative insignificance, and we more easily part with it—in copper, that is.

Look at that poor performer on the wailing catgut. Does it not move the bowels of your compassion to hear him? Perhaps too much. It is so excruciating you are compelled to move on. We know how flame may be transmuted into sound, and sound into flame; why not into physic also? In order to avoid the possible contretemps you move on, and the poor violinist gets no obolus of you to-day. But pass a little further along. There we have another adept on the fiddle. But what an instrument he has got! It is made of a battered mustard-tin, to which an appropriate neck has been fitted, a tail-piece added, a bridge suitable and sufficient, and stretched over all, the gut with the latent music in it. It is grotesque enough for a satyr—and a satyr plays it. His cunning, laughing eyes look at you from a mass of hair, and hirsute arms protrude from ragged sleeves. The man evidently knows his trade, and he plays upon his fiddle and your heart-strings at the same time. It is a quick, lilting tune which he seems to drag out of his instrument by the sheer force of his right arm; it gets hold of the light-footed girls, who are never far off when there is music about, and it is at once as though a big marionette-player had got his elastic strings attached to their heads and were moving his fingers.

What an adept that antique performer is! And what tricks he plays upon his marionettes!

The satyr violinist sees the effect of his bow-hand and puts on more steam. You feel the influence going footward, and are compelled to compromise the matter by allowing a coin to dance out of your pocket. Ah, wonder-working catgut!

I used to imagine the strings of a violin were really what the popular derivation of the word would lead one to suppose; and it was wont to stir my young piety to think what entrancing strains could be produced from origin how vile and discordant! I never entertained any particular love for cats. But who could doubt the wisdom of their creation when out of their dead entrails such divine music could be wrought? Who could believe it, to hear their living discords by night? When that pious delusion was shattered, the earth had lost half its beauty. I even began to doubt whether the shoulders of girls ever budded and burgeoned into wing.

It grieves me to note the rapid decadence of street minstrelsy. How few of the old style of musicians we see! Whither are they gone? Alas! I fear it is the common story: competition! driven away by machinery. The barrel-

organ bids fair to drive every musician from the street, as the reaping-machine has well-nigh ousted the mowers from the meadows. We shall soon have nothing but such organ-grindery for our sole itinerant-musical entertainment. Even the German band threatens to go down before it.

How well those grinning gargoyles of the street and the alley, the Italian or Savoyard organ-grinders, know that the satyr still prevails in man, and that he is ever drawn to his kin. And what profit they draw from the knowledge: from fifteen to twenty shillings a day in hard cash and the love of all the 'slaveys'! What cunning rogues they are too! They seem to know as by instinct the houses where are the most children, and there will they stop, and grind and grin, and grin and grind, till one wonders how, between ugliness and dissonance, the elders are not driven frantic.

Poor ill-fated isle! In the cities of other lands the itinerant performer gives music in return for the oboli of the charitable; here we only get discords. No wonder we are behind other people in respect to all that relates to music. What can you expect of children fed (musically) on the hurdy-gurdy? It is a marvel that there be any ears left.

It would have been an untold blessing to our afflicted land, if, when Sir Edmund Henderson issued his mandate against the canine world and sent forth his armour-plated policemen to seize unmuzzled dogs, he had also instructed his myrmidons to lasso straying 'hurdy-gurds,' deliver them over to the guardian of some home for the purpose, and if not claimed within a given space, incontinently asphyxiate them like the poor dogs. I am told the operation is not painful.

Parenthetically, I may observe that I am strongly of opinion that the organ-grinder nuisance is at the bottom of the rabies. I believe it could be proved by statistics—as well as most things. But let it suffice here to recall to mind the fact that all animals are lovers of music, and that, like human beings, they may be distracted by organized noises (the pun is not intentional). And what refuge is there for the houseless dog when these alien tormentors are abroad?

THE noblest part of a friend is an honest boldness in telling us of errors. He that tells me of a fault, aiming at my good, I must think him wise and faithful—wise, in spying that which I see not; faithful, in a plain admonishment, not tainted with flattery.—
FELTHAM.

A BRAVE DUTCHMAN AND HIS HORSE.

ON the east coast of Cape Colony, near to the town of Port Elizabeth, there lived a few years ago a Dutch grazier named Hans van Buren. He was well-to-do, being the possessor of many thousand head of cattle and of broad acres besides. During the day his cattle roamed at will over the wide plains that surrounded his farmstead, but at evening they had to be gathered into large paddocks, or kraals, to protect them from the wild beasts that issued from their lairs at night and prowled far and near for prey.

One evening as Hans was helping his herdsmen to collect the cattle, he observed that the sun was setting amid a bank of clouds, piled layer on layer, and of a deep and angry red. Foreseeing a storm to be at hand, he bade his men make all the haste they could, so as to get the herds into kraal before the tempest came on.

Hans was not mistaken; they had barely got the cattle safely enclosed ere the first mutterings of the storm began to make themselves heard. Darkness came on very quickly, and as the grazier sat by his bright peat fire, with his pipe in his mouth, he listened in awe to the howlings of the tempest. It seemed to grow in fury every minute, and as he was, like most men who live in daily contact with nature, a man of fervent and pious feeling, he muttered ever and anon in his homely Dutch tongue: "The dear God be with the good people at sea to-night!"

After a while Hans threw himself on his pillow, but not to sleep. The storm had presently increased to such a height that slumber was out of the question. The windows rattled, the door shook, the wind screamed past the chimney pile, and every now and again there was a loud crash as a large branch or the huge trunk of a tree snapped before the tornado: he must have been a drowsy man indeed who could have slept through such a commotion. By midnight it was blowing a perfect hurricane, and Hans felt that any moment might be his last, as well as the house's, so terribly did its old timbers creak and strain under the fierce blast.

In the midst of the uproar the grazier was startled by a strange, wild, almost unearthly scream. So wierd and unusual was the sound that for a moment he was affrighted out of his self-possession, and he rose up in his bed involuntarily and stared wildly about. The next moment, however, he was out of bed and hurrying out with a lantern to the stable where he kept his good mare Jacqueline; for it hardly needed two thoughts to tell him that it was she. When he reached the stable, which he did with difficulty, owing to the violence of the storm, he found her bathed in perspiration and trembling with fear. Hans talked soothingly to her, and patted and stroked her till she was calm again.

By this time, however, the grey of morning had begun to streak the east; the fierceness of the tempest, too, had somewhat abated—the gusts were less violent and after longer intervals. During these

lulls Hans could distinctly hear the roaring and thundering of the waves on the shore, barely a mile distant. It was a fearsome sound, and the grazier listened in disquiet and awe, saying to himself: "The sea will have had its victims to-night. The Lord have in His care all poor men at sea!"

With these words he was about to fasten the stable door and return to the house, when a man rushed into the yard breathless, saying he had come to borrow ropes, as a large ship had been driven on shore during the night and was fast going to pieces. "She is a big ship," said the man, "almost within bowshot of the beach." They could plainly make out the number of those on deck and in the rigging, he went on; there were twenty or more.

It took barely three minutes for Hans to saddle and mount his good mare Jacqueline; nor did it take much longer time to cover the distance between the homestead and the beach. For Hans Van Buren's beautiful steed was a paragon among horses. Of thoroughbred English stock, light of foot and strong of limb, fleet as an antelope, and with almost unequalled powers of endurance, Jacqueline had not her superior in all that section of the country. She was the good Dutchman's pride and the admiration and envy of all who knew her. Many were the tempting piles of golden sovereigns Hans had been offered for her; but he valued his good brown mare too well to think of parting with her. He used to say Jacqueline was his wife, his daughter, his companion, almost all he had of friend and confidant. Could he part with his beloved? Hans would smile and pat the neck of the graceful creature at the suggestion of such an idea; and the bonny mare, as though she read his thought, would thank him with a look of her brave, patient eyes.

Arrived at the beach, the grazier took in the situation at a glance. The wreck was so near to hand, that with a rocket-apparatus it would have been easy to cast a line over the vessel; but no such thing was at hand—and the sea was running so high that he must have been a doughty swimmer indeed who could have lived in such a surge for more than five minutes. A young farmer who lived near had bravely essayed the task of swimming to the wreck with a rope about his waist; but in vain.

Van Buren was a cool and self-possessed man, as well as a brave one, and he no sooner saw the position of affairs than he made up his mind what to do. Taking the rope he had brought with him, he fastened one end securely round the pommels of his saddle, and took the remainder in a coil upon his arm; then, putting his brave brown mare, Jacqueline—so called after the popular Dutch heroine—and encouraging her with his speech, he urged her into the boiling waves. For one moment the beautiful creature appeared to hesitate, but it was only for a moment: the next instant she was bravely breasting the cruel breakers.

The bystanders, a few humble fishers and farm-folk, were struck with amazement. They knew Hans well enough—knew him to be one of the bravest of the brave; they knew the mare Jacqueline, too;

but to put her to the task of swimming to the wreck—for that was evidently his intention—and against such a sea,—it seemed positive madness! One or two deprecated the attempt—they said: “You had better not try it, master; she will never do it.” But Hans, who was a man of few words, went on with his preparations all the same, saying merely in reply: “She will try, friend.”

And a brave trial it was. At times horse and rider were overwhelmed with the breakers, and the anxious spectators held their breath, and feared lest they had seen the last of both. But the eclipse was only for a moment; the instant after they were seen to emerge upon the breast of a wave, and each time nearer to the ill-fated ship. At length they reached it, and when the next minute Hans succeeded in throwing the rope over the side of the vessel, and it was caught by the sailors, there was a loud “Hurrah!” both from the shore and from the ship. Hans bade four or five of the men on the wreck fasten themselves to the rope and jump into the water. This was done; and the brave Dutchman and his horse started back for land, dragging the rope with its human freight with them. It was a risky experiment, but it was successful; a few minutes seeing them safely dragged up on to the beach.

Without waiting longer than was necessary to give his brave horse time to recover breath, Van Buren again urged the creature into the angry surges, and again they succeeded in bringing five persons to land, amid the acclamations of the spectators. One of the latter urged Hans not to attempt the feat again; but the sturdy grazier had no thought of stopping till the task was fully accomplished. Giving Jacqueline a minute's breathing time, Hans once more turned her head to the waves: she knew his will, plunged into the roaring surf, and again put forth her utmost strength. This time, however, it took longer to reach the wreck, and the onlookers, so excited were they in watching the struggle, that they stood dumb and motionless, like carved images, and only broke into a shout when at length the vessel's side was again reached, and the rope thrown and caught. On this occasion, six clung to the rope; for after five had fastened themselves to it and jumped into the water, another threw himself overboard and clung to the rope. Again, after another fearful struggle, the brave animal's feet touched terra firma. Everyone rushed as far as possible into the surf—some to tug at the rope and succour the half-drowned seafarers, others to encourage the panting Jacqueline.

The poor brute trembled with the exertion, and seemed ready to drop. Hans sprang from her back, took her head in his arms, and hugged and caressed her with pride. It was some minutes ere she fully recovered strength and wind. Meanwhile, the grazier anxiously watched the ship with its last despairing tenants, who were waving pitiful signals of distress. One of the fishermen, fancying he detected the Dutchman's intention in his look, said deprecatingly:

“You'll never attempt it again, sir, will you?”

“I must, Felsman,” replied Hans: “how can we leave those poor fellows there to their fate?”

"She will never do it, sir."

"I think she will ; she is all right now."

So saying, Hans mounted once more, and again turned Jacqueline's head to the waves : the docile creature obeyed his direction without the least hesitation, plunging again up to her breast into the angry waters. It took a long time to reach the wreck this time—it seemed now and then as if they would never get there. The poor animal's strength was well-nigh exhausted, and every time the billows washed over her it seemed longer and longer before she struggled again to the surface.

Those on shore watched the terrible contest in the intensest excitement ; their feelings being divided between the poor fellows on the wreck and the brave horse and its heroic rider. Now they cried, "Come back ! come back !" Then seeing the contest bravely maintained, they shouted : Go on ! go on ! You will do it ! you will do it !"

At length the brave pair got near enough for Hans to throw the rope. Once more it was seized by the despairing men. There were eight of them left, and they looked at each other inquiringly, as though they would say : "Who is to remain behind this time ?" Seeing which, Hans bade them all attach themselves to the rope. It was a hazardous experiment, but it was done, and the return commenced. More heavily weighted and with decreased strength, the poor horse seemed to be powerless against the whelming waters. For a moment or two they seemed to be losing ground, and Hans questioned whether he should not unsheath his knife and cut the rope ; but that instant, Jacqueline, putting forth a supreme effort, again seemed to master the waves, and to ride forward triumphant. Steadily, but slowly, they made way, Hans heartening the brave Jacqueline with word and touch. Encouraging shouts, too, came from the beach. At length, horse and rider arrived near enough for helpful hands to be stretched out in aid. The rope with the rescued men attached, was pulled ashore, unfortunately, however, to find that two of the poor fellows had succumbed in the terrible ordeal.

As for Jacqueline, she no sooner touched ground than she seemed to lose all strength, and sank down exhausted. Hans called for brandy, and poured some down her throat. But it was of no avail ; she turned her beautiful patient eyes upon her master, as though mutely appealing for his approval ; then they gradually glazed in death. Hans, kneeling down by her side, threw his arms about her neck and wept, while the rescued seamen and the others crowded round, looking on in sadness and tears.

SELF-RELIANCE and self-denial will teach a man to drink out of his own cistern, and eat his own sweet-bread, and to learn and labour truly to get his own living, and carefully to save and expend the good things committed to his trust.—LORD BACON.

Poetry.

LIFE.

Poor helpless things ! why measure life
 By your own meagre selves ?—ah me !
 And think the soul itself you see
 When you have seen the lowly strife—

The conflict vile, which mortals wage,
 Forgetful, in the war for pelf,
 Of everyone except dear self,
 In this our shallow, godless age.

Ye know not what yourselves you are !
 And yet from birth to death ye rave
 Of earthly things, as though the grave
 Were e'en our bourne—but far, O far

More deep is life, more vast is soul,
 Than such small lines can mete or span ;
 And down within the heart of man
 There is a voice which says his goal

Is not beneath the azure dome,
 Where he must buy and sell and fret
 A weary life away to get
 The wherewithal to hire a tomb ;—

Is better nobler, higher—'tis
 To live immortal souls above,
 To ever grow in grace and love,
 To taste of perfect happiness.

If this be true, compared to it,
 This life is but a May-day dream,
 That takes its hue from every beam,
 Or shadow that doth o'er it flit ;

And he a fool who spends his days
 To ornament this home of his,
 Built in a sandy wilderness,
 The first siroc may rive and raise.

A sense of duty firm and strong,
 Deep reverence for the good and true,
 And some devotion to endue
 Us with forgiveness for the wrong :—

These are the things for man to keep
 Within his soul from day to day,
 That when the Pilot calls he may
 Unfearing trust him to the deep.

Correspondence.

To the Editor of THE PHRENOLOGICAL MAGAZINE.

DEAR SIR,—In this month's MAGAZINE are two more letters in favour of the proposed Phrenological Society. Holding, as I do, that the subject is of the highest importance, I shall feel it a duty to encourage this effort as far as I may be able, and would place my views before the preliminary meeting, if one be called.

I should like the Society to be wide enough to admit those men of science, like Dr. Ward Richardson, or Sir Crichton Browne, who have not yet publicly acknowledged themselves as phrenologists, but who nevertheless see that mental science must be based on phrenology if practically studied and to be of use. I fear we lack breadth and boldness; we ought to challenge an attack—and this we could do if united. The great questions of insanity, punishment of criminals, education, and (I must say it with diffidence, I suppose) the question of religion, have to be treated from our standpoint.

Phrenology is the key to the unaccountable—the mysterious, the unknown in human nature.

Shall we boldly offer this key to the world from a responsible Society, or leave it a more gradual growth, hindered in this growth by the ignorance of some of its 'professors,' who, after receiving benefit from it themselves, are anxious to benefit others, and become public teachers before they have had time to give it an all-round study themselves. I sympathize with them, and wish them God-speed; but the educated public do not view their advocacy as we do ourselves.

Hence, for the benefit of the *professional* phrenologist, as well as for the public enlightenment, such a Society as that proposed would be of great value. A degree could be awarded those who show ability in character-reading, and altogether the Society would give a status and character to the science that at present it does not possess.

To this end, Mr. Fowler and other friends must give their best help and advice; nay, more, at first some sacrifice of time and talent must be made. You, Mr. Editor, must give us your help at least till the preliminary meeting, and afterwards, with this help continued, I hope we may be able to exist as the "London Phrenological Society."—Yours most respectfully,

JAMES WEBB.

Church Road School, Leyton, June 1st, 1886.

To the Editor of THE PHRENOLOGICAL MAGAZINE.

SIR,—In your "Facts and Gossip" for May you expressed a desire for information from other Phrenological Societies in this country or the Colonies. We have, therefore, great pleasure in submitting the following particulars respecting "The Nottingham and District Phrenological Society," and hope you will be able to find

room for them in your next issue. Our inaugural meeting was held on August 28th, 1885. There were twelve persons present. A president, secretary, and treasurer were appointed, and it was decided for the present to meet weekly at the house of our president, 23, Alberta Terrace, Sherwood Rise. A committee was then formed, who subsequently drew up a code of rules, which were submitted and passed at a general meeting of members. During the winter the attendance has been good, and an excellent programme has been arranged and carried out. The said programme consisted of essays, lectures, discussions, examinations of members' heads, etc. Amongst the subjects considered may be mentioned Philoprogenitiveness, Amativeness, Conjugality, Adhesiveness, Inhabitiveness, Continuity, Combativeness, Destructiveness, Acquisitiveness, Firmness, etc. Lectures and Essays have been given on Physiology, Voltaire (with cast), Napoleon (with cast), Elihu Burritt (with cast), and others. January 1st being the weekly meeting following the one on which Destructiveness was arraigned, it was decided to discuss the faculty of Alimentiveness in a practical form, and a substantial tea and supper made us somewhat curious as to the size of the organ in each member's head.

Other interesting meetings have been held, but I will only give you the particulars of one. In May last, Mr. L. N. Fowler visited Nottingham and delivered a course of lectures in the Mechanics' Large Hall. During his stay he kindly gave us a lecture in a large room in this locality, entitled "How to be happy by the aid of Phrenology and Physiology." The lecture was well advertised and pushed by our members, and a crowded audience was the result. In moving a vote of thanks to the lecturer, special mention was made of the service rendered to the science of phrenology by Mr. Fowler, and especially the sub-divisions of the faculties as marked on his new bust.

The meeting was altogether very successful.

I assure you, Mr. Editor, we are determined to do what we can to disseminate the principles of this instructive and interesting science. We believe it to be of immense value to the community, and, though at present our leading journals may seem to ignore it, we predict its ultimate triumph—for 'difficulty is one of the conditions of success.'

GEORGE H. J. DUTTON, President.

Nottingham, June, 5th, 1886.

Book Notices.

Suggestive Lessons in Practical Life (SMITH, ELDER, & Co.)—Under this title it is proposed to issue a new series of reading-books adapted for school and home. The design is an excellent one, since it consists in training the young to thoughtfulness and intelligence through observation of the facts of the world's industry

and skill. All acquainted with children are aware how eager they are to know the facts of everything around them, and the first book issued, "The Food We Eat," meets this demand in the most practical, pleasing, and instructive way. Written in simple, but expressive language, the lessons may be read to young classes, and yet will be found to abound with information of general and enduring interest. Opening with the soil we till, the work proceeds to consider the bread we bake, the cows we milk, the butter we churn, the cheese we press, the cattle we slaughter, the provisions we smoke, the fish we catch, the game we chase, the fruits we enjoy, the beverages we drink, and the sugar we crystallise. Each subject is subdivided and discussed in the clearest manner, so as to afford an accurate idea of the distribution as well as growth and manufacture of the many products dealt with. Where a moral question arises, in respect to alcoholic drinks, the answer is distinguished by wisdom and discretion; and the great merit of the work, which places it before all other school reading-books, is its thoroughness.

It would seem at first that, after the publication of Mr. Egmont Hake's ample biography, the Journals at Khartoum, and all the subsidiary volumes and pamphlets which have appeared since the hero's death, there was no room for another life of General Gordon. But Sir Henry Gordon has thought otherwise; and now, modestly, and long after all irresponsible persons have finished and become silent, he puts forth his volume, *Events in the Life of Charles George Gordon* (KEGAN PAUL, TRENCH, AND Co.). It is a noteworthy book: a soldier's life of a soldier; a brother's monument to a brother. To the main outline of General Gordon's career, as already known through the other biographies, Sir Henry Gordon has added but little. But, drawing from a store of documents and letters, he has filled in many details which make the picture more complete. A good deal that he has written is, indeed, wholly new to the public; but it is the personal interest of the book, the greater light which it thus throws upon the character of the defender of Khartoum, which gives it its freshness and fascination. We knew Gordon well before; now we know him intimately. Sir Henry follows his brother carefully through all the stages of his wonderfully active career. We see him the mischievous youngster playing practical jokes in Woolwich Arsenal; then the Lieutenant of Engineers earning his first military experience in the Crimea. Then, after useful work at Galatz and in Armenia, came the eventful years in China and the suppression of the Tai-ping rebellion. A quiet period at Gravesend followed; then a visit to the Danube and his first expedition to the Soudan. The Cape, Mauritius, Palestine, Khartoum—these words sum up his later career. The latter part of the book dealing with the last dramatic doings in the Soudan and the defence of Khartoum will be read with the greatest interest. Sir Henry discusses the causes of the failure of Gordon's last expedition to the Soudan, and seems to attribute it mainly to the refusal of the Government to comply with Gordon's various

requests :—to send Zebehr, to send British cavalry to Berber, and to land Turks at Suakim. But he speaks indecisively upon the great problem presented by the spread of Mahdi-ism in the Soudan. Of one thing, however, he appears to be certain ; that had the Government decided earlier (even in July) upon the relief expedition, and had Lord Wolseley's advice been followed, the forces could have been at Dongola by the 15th of October, and in Khartoum by the beginning of December. Had this been so Gordon would in all probability be alive now ; and the Mahdi would once for all have been victoriously 'smashed up.' Concerning Gordon's peculiar religious views, his searches in Palestine for Biblical sites, his extraordinary generosity, his contempt for wealth and position, much will be found in these pages.

Facts and Gossip.

A VERY interesting experiment in emigration, which owes its origin to Mr. Arnold White, is just now being attempted. Eighty emigrants, all total abstainers, are being sent out to Kaffraria. Each of the number is to have 120 acres of land and other help, and the little band has been selected with the greatest care. If one of the most beautiful and richly gifted portions of South Africa be any aid to the success of this enterprise, the prospects of the expedition are virtually assured. Kaffraria is beyond question the most favoured spot in our vast South African dependencies. It abounds in wood, grass, and water, and is eminently adapted for the raising of stock, as well as for agriculture. Fruits of all kinds flourish in its congenial climate. The previous history of aided emigration to South Africa, brief though it is, augurs well for the success of the present scheme. In 1820, a large number of settlers, principally Scotch, were despatched by Government to Algoa Bay, then but a sandy and deserted beach. These settlers quickly spread over the eastern province of the Cape Colony, and have transformed it into the most enterprising and most successful portion of the colony. Port Elizabeth, on the shores of Algoa Bay, the most thriving business town in South Africa, Grahamstown, and other places, sufficiently attest the qualities of the hardy settlers of 1820.

THERE was a great fuss, a few months back, about Sir John Lubbock's wonderful dog, which its master had almost taught to speak. A monkey has completely eclipsed the quadruped. A well-known American *savant* has educated a favourite monkey to become a good pianist ; all monkeys, this gentleman maintains, have more or less a musical faculty. If men had not invented the piano, the learned American seriously maintains, monkeys would infallibly have done so. After only forty-eight lessons the monkey Tabitha, who is a real ornament to her sex, could play scales with surprising dexterity. The suppleness of their fingers, their agility, their strength, all tend

to show, at least according to Tabitha's master, that most monkeys are born pianists. Patience is the only thing required to bring out this hidden faculty. There is another fact which strikes one. Monkeys have this great advantage over human pianists: they have four hands, while men are unfortunately not endowed with more than two. A monkey, among other advantages, can thus, it will readily be observed, play a duet without the assistance of a companion.

THE new novel by Mr. A. P. Sinnett (author of "Karma" and "Esoteric Buddhism"), which has been already announced as in preparation, will be published about the 15th by Mr. Redway of York Street, Covent Garden. It will be called "United," and will be in two volumes. It is a story in which mesmerism and psychic attributes play a large part, though the scene is laid in English society of the present day.

THE references made, and the correspondence published, in these pages respecting the proposed Phrenological Society have called forth a good deal of interest, and in order to put that interest to the test, it is proposed to hold a preliminary meeting on the second Saturday in July, at the offices of this magazine, No. 4, Imperial Buildings, Ludgate Circus. Any one wishing to join the Society is invited to be present at the above-mentioned meeting. Proceedings will commence about 2 o'clock. In reply to some who have made the inquiry, it should be stated that it is the intention that the membership of this Society shall be open to all and sundry who are in any way interested in Phrenology, whether their knowledge of the subject be small or great. The results of the meeting will be published in the August number of the Magazine.

THE article on "Hypnotism" in last month's magazine was reprinted from *Mind in Nature*.

REV. HENRY WARD BEECHER lectured recently on "Conscience," before a large and appreciative audience. Conscience, he said, is a subject about which there is more said and less really known than almost any subject which engages the time and thoughts of men. Conscience has been supposed to be a sort of moral instinct whose place it was to determine right and wrong in the human soul. It has been called the voice of God in the soul, thus implying its power of judgment. Now conscience is but a sentiment or emotion and is not a judicial faculty, but is itself dependent upon the judgment. Whatever that says is right; the conscience adopts and it is dependent upon thought for its action. It will be found in the study of phrenology that when any emotion is constitutionally large, it will influence the intellect in proportion. So, while conscience is ruled by the intellect, it can and does have the effect upon it that other emotions and sentiments have. There are many men whose consciences are small and dumb and who never learn the distinction between right and wrong, and there are many men whose consciences

are large and active, and hence, whose intellects are broadly affected by it, and who find the right or wrong in a matter by intellectual processes.

A CHILD does not learn right or wrong by experiment. In the family it is instructed, and as it grows up and its sphere of existence widens, it learns by comparison and from custom the intellect distinguishes. To some minds the custom around them is always their guide, but higher intellects come to determine right or wrong by applying general principles. As man has risen higher in the scale of humanity, the ideas of right and wrong have advanced, and what was right for an earlier and simpler age is not right for this, with its ever broadening life. That which was permissive in olden times is not the rule of action of to-day, and those things which in ancient times were, with their knowledge, looked upon as right cannot so be regarded in the light of modern intelligence. In the matter of war, for instance, captives were first killed, as being the way in which they could be most easily disposed of. Later came the idea of making prisoners work for their captors, and so arose the system of slavery, a system that became so large and heavy to carry that its own burdensomeness destroyed it.

A THING may be right in one age, but wholly wrong in another and more intelligent. Knowledge is the determining action of conscience, and ignorance in the community is holding the consciences of many in check. In every grade of society there are people who represent all the graduations of knowledge and hence of conscience. This is the source of trouble to those who would teach the people. That which would be accepted by one would be disdained by a higher intellect. No man is a successful preacher who does not take this into consideration, and he who attains the largest measure of success is the one who appeals to the intellects of all. That many do not attain it we see in the fact of the weeding out of congregations and the formation of a 'highly intellectual church' here, a 'ranting church' there, and a 'rich church' in another place. It will be found that you cannot make effective legislation to follow the highest moral sense of the community. It will not rise higher than the average, and it is a great mistake to attempt to force it beyond. It will surely be broken and thrown away.

IN speaking of the different kinds of consciences, Mr. Beecher said there was first the feeble conscience, that like a jelly-fish was a nerveless, pulpy mass, but drifted wherever the tide directed. Then there was the superstitious conscience—the one that read its Bible as a matter of duty, that would not omit the form of the thing for fear of evil. The morbid conscience has caused as much trouble in the world as any. It is that kind of conscience that believes God has given it the especial charge of His work on earth and in pursuit of this idea it has shed more blood than ambition in its wildest essays. The shifting conscience is a common one. It wears a smiling face to the world, but at home it is ugly and makes its family

pay dear for the enforced pleasantness outside. As to the rights of conscience, it has the right to its beliefs and thoughts, but as soon as it puts them into conduct it becomes amenable to the law of the land. Men may be conscientious in their doings, but, nevertheless, they must recognize the rights of others and yield to the common law, which allows freedom to all as long as the rights of others were not infringed.

WHETHER have bachelors or married men done most for this poor race of mortals which, as Cato said, "can neither do with wives nor without them"? This remarkable question is almost as practical as Boswell's inquiry to Johnson, as to how the sage would conduct himself if he were shut up in a tower with a baby. "Paint him," would be the natural answer of a Royal Academician to Boswell's inquiry, but the other question is more serious. A correspondent of the *Pall Mall Gazette* is all in favour of the wedded men, and in this little match of "Married versus Single," the former have a strong team. But when we look closely into the list, it will at once appear that the wedded heroes were successful, not because of their wives, but in spite of them. Adam, for example, would have been infinitely more successful, and might be living still, though at a great age, had it not been for "the fairest of her daughters, Eve." Abraham had a good deal of domestic trouble, and as to David, had he only married once for all, it is possible that his career might have been more victorious. As to Socrates, his wife was the great obstacle to his success in society, and Xanthippe, "the bay mare," was emphatically "the better horse." About Mrs. Confucius little is known, and of the wife of Julius Cæsar we are only certain that she was somewhat absurdly expected to be "above suspicion." Shakespeare was wedded, but not by his own goodwill, according to many authorities, and M^dme. de Molière was a thorn in the side of her lord. Nor was Milton's opinion about matrimony exactly what might be expected from a man who found happiness in the connubial life. As for Marlborough, the great Sarah has been the butt of all his biographers, and even Mr. Saintbury represents her as having had little merit except that she was once pretty and always faithful. Napoleon was married once too often, and did not Wesley have trouble with Mrs. Wesley? Garibaldi was married, indeed, but he left his wife at the church door. When we come to mere popular preachers, it looks very much as if the list of great married men were running short, and the list of defenders of matrimony closes with the illustrious names of Mr. Gladstone, Prince Bismarck, and Mr. Joseph Arch. On the other side, unluckily, it would be hard to make out a strong team of men who were great though unwedded. General Gordon indeed says in his letter from Central Africa, that no married man could have done what he did. In fact, no married man can well be a Saint; and, setting the Apostles aside, very few authentic saints were married. The wedded life almost compels a man to compromise, and the greatness which springs from refusal to compromise is not for Benedick, the married man.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

NOVUS HOMA has a predominance of the nervous temperament, and is somewhat deficient in the vital. He is organized on a high key, and is adapted to some intellectual sphere of life—like a writer, lecturer, or agitator of some reform. He is very fond of debate and reasoning ; he is liable to go to extremes and overdo.

G. L. (South Kensington) has a highly organized mind, is decidedly aspiring, is not contented with the ordinary labour of life ; he early desired an education, has a public spirit, is anxious to have to do with public affairs. His standard of action is elevated ; from a boy he has been struggling for a higher position, greater reputation, and better character. He is susceptible of more than ordinary will-power, decision, and determination ; he has strong feelings of sympathy for others, and is not wanting in a desire to help along reforms and progressive movements. He appears to have a high degree of zeal, faith, and hope ; he is ambitious, sensitive, anxious to please and to be popular ; he also has a favourable degree of self-esteem to give dignity and manliness. His talents are of the practical type ; he is given to close observation, nice discriminations, and great power of criticism, is anxious to examine everything closely, is not satisfied with wholesale statements. He has the power to lecture, explain and illustrate subjects, is decidedly penetrating and anxious to know all about the future ; he lives much in anticipation of what is to be as well as what is. He will find it comparatively easy to control his appetites and passions ; is not malicious and revengeful, nor cunning and artful, nor particularly greedy for property—only as a means to an end. He should be a professional man—a doctor, lecturer, or in some public official position.

ECLECTIC.—You have a distinct degree of the vital and mental temperaments, but scarcely enough of the motive to be a hard labouring man ; hard work and you will never agree. You have apparently good health, and will probably live to be old if you take proper care of yourself ; but if you follow your inclinations you will study and educate yourself. You are not very well adapted to a common sphere of life, like that of a farmer or a practical scientific man ; you have more of the reasoning, thinking, philosophical turn of mind—you want to know everything, and then you would not be satisfied, for you would want to know still more. You are liable to think too much and to devote yourself to abstract thought, are full remote and far-fetched in your ideas ; but with study and a definite

profession you could excel in philosophy, in teaching, and as an author. You have special gifts as a teacher, lecturer, or preacher; will be ingenious in argument and flowery in speech, and oratorical in your style—could excel in the languages and in moral philosophy and mental science. Take uniform exercise, give special attention to the laws of life and health; at a proper time take a companion who has a strong motive mental temperament of the active, energetic, positive type.

J. S. has a tender, sensitive organization, with strong scrofulous tendencies; there is a want of muscular power and physical strength. She is capable of a high degree of enjoyment of a social and sympathetic character; she should be known for her tender feelings and her interest in the welfare of others; she is rather self-sacrificing, naturally respectful, mindful of superiors, comparatively humble and modest; is liberal in her views, forgiving in disposition, reserved amongst strangers, and has more energy of mind than strength of body. She is decidedly affectionate, domestic, and loving; capable of drawing many persons to her, and of exerting a genial influence over them. Her greatest defect is in body, there not being enough vital stock—animal life and power—to resist outside influences, yet has a very lovable spirit and is capable of making many friends. The intellectual powers are favourably balanced, showing good capacities to reason and think as well as to observe and apply truths. She must have inherited a delicate constitution from one or both of her parents, and great care and attention will be necessary to secure health and prolong life.

T. H. (Dorset).—You have a peculiar organization both mentally and physically. There appears to be a predominance of the motive temperament with a fair degree of the vital and mental. You will be rather slow in developing, but permanent and reliable when once engaged in an enterprise; will be characterized for good powers of observation and practical judgment; have the capacities to discriminate, to apply principles, and to see their bearings and relations. Will manifest a great amount of firmness, steadiness, and uniformity of purpose; are constitutionally kind, sympathetic, and tender-hearted; are not cruel, destructive, or revengeful. You may take delight in the exercises of a soldier, but you will never volunteer to fight for money or fun. You are decidedly social, companionable, domestic, and fond of children; are rather too impressible and sympathetic, and may sometimes carry a matter a little too far, commit yourself too easily, and get too much work on hand. Encourage tact, worldly wisdom, force of purpose and circumspection; guard against being too obliging and sympathetic, and let others do their own fighting and work, and you be content to do yours. You can fill almost any place that requires patience, perseverance, practical talent, and common sense, but had better encourage your speaking talent, especially the advocating of a good cause. Will eventually prove yourself to possess high moral, if not religious, tendencies of mind.

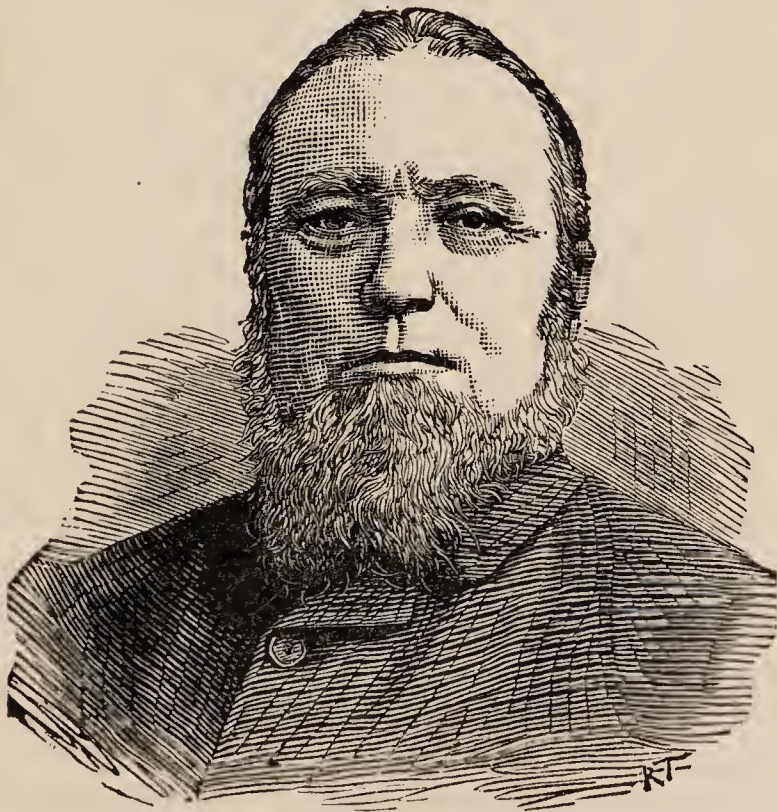
THE Phrenological Magazine.

AUGUST, 1886.

JOSEPH ARCH.



HE organization of this gentleman indicates more than ordinary strength of character, and of purpose, force, resolution, spirit, determination, and will-power. He is highly organized in body, rendering him equal to almost any physical emergency when in working order. Having a strong body, a strong face, a heavy base to the brain, and running up high in the organ of



Firmness, he has a force of character not easily restrained. He looks like a stout man in every way; not so refined, finished, delicate, and susceptible, as strong and athletic. There is a fair relationship between the brain and the body, but originally he had more bodily strength, and must have come forward mentally after he had gained his physical stamina and constitution. He is thoroughly in earnest in

everything he says and does, and does not trifle with anything. His physiognomy is so marked as to show strong determination of mind, power to overcome obstacles, and a disposition to brace up and defend rather than to yield.

His forehead indicates great practical talent. He is a man of more than common observation; has an unusual degree of quick and correct perception. He distinctly individualizes everything, and should be characterized for definiteness of purpose. His great power of observation at once introduces him to the whole subject, and he readily surveys his entire surroundings. He is very much like Nathan, the prophet, being quite direct and positive in his assertions, and he talks as though he were talking to somebody in particular. He readily gets at facts and delights to deal in them. He is governed by his experience, and tells what he knows.

His judgment is of a practical, common-sense kind; he does not deal in abstract subjects so much as in the application of principles that are already understood. He has great power of analysis, makes nice distinctions, is quick to see the fitness of things, liable to make striking comparisons, and he presents his subject in a clear, positive light. He may not lack general scope of mind, imagination and poetical sentiment, still, he has more of the mind that would lead to science and to the investigation of nature than to deal in poetry and imaginary subjects. His powers of intuition are uncommonly good; he gets at truth in a short-cut journey; he appears to appreciate a truth from the first, and is capable of understanding human nature very accurately. He has not many preliminary remarks to make, does not try to smooth over subjects and prepare the way by saying very pleasant things. He is not given to flattery; is always in earnest, and sometimes too abrupt and direct. He probably has never kissed the Blarney stone; for he puts on no airs, and does not try to imitate anyone, but is content to act out his mind in his own way.

The central portion of his coronal brain is large, which indicates kindness, humane feeling, and interest in the welfare of others. His Benevolence would be liable to manifest itself in general philanthropy, helping along the cause as a whole rather than to spend on individual objects of charity. He has loftiness of mind, aspiration, and a certain amount of inspiration that leads him to be surprised at himself sometimes; for some of his best thoughts and speeches come with the least preparation. He has the elements of reverence, respect, and regard for superiors and sacred subjects, while he is rather positive, perhaps self-willed, and determined in his

spirit; yet he has considerable modesty, respect, and subdued gentleness.

His mind acts with great promptness, and he is liable to take on himself too much work. It is easy for him to promise to do things, for he sees so much to be done, and feels so strong in himself, that he is liable to put himself into harness without reference to his time and strength to accomplish the work. He is fairly cautious, reticent, and economical, yet, as a whole, there is more danger of his overdoing than of coming short and not doing as much as he ought.

His love of family appears to be strong; while his attachments to persons generally is not so great as to prevent him from being interested in the masses. He may have some special friends, but usually individuals are more liable to become personally attached to him than he to them. His prayer is for everybody rather than for himself and his friends. He is a man for work; he cannot keep still. He has a sledge-hammer hand and a resolute spirit that wants to do something that is not play, and such an organization is bound to make a noise in the world, whether in the coal-pit or as a member of parliament.

He is favourably qualified to take responsibilities and to be a master-man; but he does not belong in organization to the æsthetic, fashionable, nicely-got-up kind of men.

He is organized to fight the battle of life and, if necessary, to rough it, and do the hard work, and the more opposition he meets with when he knows he is right, the more determined he will be; the only way to conquer him is to let him alone.

L. N. F.

TRUE MANLINESS.

THERE is a world of meaning and significance in the expression 'True manliness.' Nothing short of perfection in the genus *homo* is covered by it, and that of necessity will be a widely differing ideal according to the position from which it is viewed. Knowing that the mind of man, even at its best, is very defective, it is open to very great question whether this subject can be even approximately dealt with from any human standpoint.

What man should be, or what he may possibly become, is my theme; and, therefore, what he is known to be must be my starting-point. The facts of history plainly declare that man is a compound being. He has an animal or physical nature in common with the rest of the animal creation, which

is an essential portion of his manliness. He has also a mental or intellectual nature, which causes him to hunger and thirst for knowledge, and this is also indispensable to true manhood. Over and apart from either, he has a moral or a spiritual nature, which, while linked with earth and its concerns, has a strong affinity Godward. This is especially an important item in the compound of true manliness, and should be the great heart or vitalizing centre of it. These are all adequately represented phrenologically, for there we have the animal propensities such as are common to man and the lower animals; the intellectual faculties, many of which are peculiar to man; and the moral or religious sentiments, which form a natural connecting link with, or affinity towards, the Infinite and the Eternal—qualifying man, in fact, for aspiring to the heights of perfection in character. Now, for perfect manhood to be realized, the three are equally essential; and every separate function classed under any of the three general heads or divisions mentioned must be decidedly strong and vigorous, contributing ever their quota towards the end. Truthfully the faculties of the human mind cannot be arrayed antagonistically under separate divisions as good and bad ‘bumps.’ They are all good when *used*, and all bad if *abused*. All the difference between good and evil in human life is the difference between use and abuse; and the great secret of the origin of evil centres in the fact of liberty of will, the natural and necessary outcome of intelligence; and thereby the possibility of perverting as well as applying the powers enjoyed.

So, then, by the full and proper use of all the powers possessed by man is true manliness alone to be reached. For instance, a human being with the animal portion of his nature alone strong, and every other faculty weak or wanting, would be an idiot—a brutish being; another, with the animal and the intellectual equally strong and vigorous, with the moral wanting, would be a demon incarnate—a fiend in human shape. But a man or woman having these three separate orders of faculties equally strong and active has in them a satisfactory base laid for great attainments—even to the perfection of said manhood or womanhood. A word just here, by way of rebuke, to the thought that the predominance of the moral faculties conduce most certainly to true manliness. Facts do not make this evident—*ergo*, it is not true. Comparing the three to machinery, the moral may be exquisitely perfect, well fitted in all its parts, and beautiful to look upon, but a machine depends upon its motor for force to set it in motion; and so the moral faculties, without a

strong animal nature to supply necessary energy and force, will be tame, insipid, inert, and worthless. And, again, what would the most perfect machinery, combined with an efficient motor, be without a skilled director? Just what the moral nature, coupled with physical powers, would be without equally strong mentality to take the oversight and direction of them. It is assumed, then, for the purposes of this essay, that given an equal and strong development of the animal feelings, the intellectual faculties, and the moral sentiments, there is a satisfactory and a sufficient base laid for attaining to true manliness.

But a base is not everything, as a foundation is not a building. A good foundation is an essential portion of every perfect structure; but the structure itself must be superadded to it, brick by brick, stone by stone, or stick by stick, for its stately proportions to be efficiently displayed and made to serve their purpose. So with the true man; he comes not into being with his faculties ready for immediate action, even though they be exceptionally good and sound. Every man and woman has to construct his or her real manhood or womanhood from materials furnished to work with; and with ever so good a base to start upon there is every chance for using worthless as well as durable materials. In fact, it is about certain that worthless materials will always be to the fore, and solid and precious materials will only be got at by employing unceasing exertion to get rid of the immense amount of rubbish which hides and smothers them. Culture—culture—everything hinges upon culture in man's little world. Look at the vegetable kingdom! If perfection is desired in any individual species nature must be assisted; man must discharge his high functions as lord; and by the application of nature's laws, previously mastered, he can then patiently work up to his ideal. The plant in itself is powerless to effect this. Nature unassisted is not progressive. So with the animal kingdom. Man—whose province it is to subdue all things unto himself—must first make himself master of nature by acquiring a knowledge of her laws, and then he can harness her to his triumphant car of progress, and do with the animal as he did with the vegetable kingdom. The only hindrance to progress, then, will be probable apathy and indifference; he may keep on and on, henceforth progressing towards his goal—perfection. But when human nature is to be dealt with for the same purpose, and lifted above its ordinary or natural type—and I assume that true manliness is nothing short of that—how is it to be wrought upon? Man has power, or rather can acquire power, to subdue and

improve subjects of the vegetable and animal kingdom through his intellectual and physical nature ; but can he take hold of himself and lift himself up ? Physically, no ! If he is lifted up some other power must do it. And this by analogy points to a still greater truth. The principle of it is conspicuous in the illustrations taken from the vegetable and the animal kingdoms. It is not in the nature of plants or the lower animals to improve themselves ; for such improvement is only possible by some superior and extraneous power concentrated upon them for that purpose. Is not man subject to this same obvious law ? With all due respect to those who may differ from me, I here state my conviction that man is no more able to attain to the heights of true manliness by his own unaided efforts than are the plants and animals already noticed to improve themselves. As they must be wrought upon by a higher power without their sphere, so with man. Nature owns man lord so far and no farther. Some higher power than man must elevate him to the pedestal of true manhood, if he is ever to attain it ; and that being so, does not man's moral nature, which points him Godward, clearly indicate how it must be done ? Man may lord it over lower kingdoms in the realm of nature ; but does it stand to reason that he is lord also over himself ? Clearly it does not, and the thought itself is absurd. He has a Lord over him who can do by him what he is empowered to do over inferior natures ; and only as that Lord is reverently understood and submitted to can the perfection of true manliness be attained. In my estimation, this subject refuses to be treated fully and fairly in any other light or by any other means ; and the only inference my reasonings up to this point admit of is that all the gospel of Christ claims to be and do is exactly what the nature of man requires to lift it out of itself and cause it to aspire to and attain the perfection of His character—true manliness ; or, in other words, to become a Christian.

This is a subject by many tabooed, and very perversely rendered. Christ was a true man if ever the world possessed one, and the aim and qualification of the mission of that Heavenly One was to produce true manliness in His followers. Had Christ's way and plan for working this been reverently followed Christianity would have resulted. But His way has been widely departed from ; His thoughts and intentions foolishly and perversely handled and destroyed ; and consequently we see in this nineteenth century an abortion nominally called Christianity, which will never pass muster at the courts of heaven. There is more of man than of Christ in modern preachings and teachings, and all we see,

therefore, is man trying to lift himself up out of the mire of degredation to a higher level. Necessarily, all such efforts can only be abortive. Degeneration is man's natural tendency; regeneration is his want; and man can only be regenerated, so as to fill his proper place in nature and be a true man, by being born from above.

Up to this point, however, I have only treated the subject very broadly and generally; so I will now essay to deal with it somewhat more in detail. Nothing, I may safely say, furnishes so ready and perspicuous an analysis of human nature as the science of phrenology. All the minute parts of man's wondrous compound nature are aptly and specifically figured there, and any one of those parts wanting makes a defective man. Those who may have imbibed the idea that the parts of phrenology are arrayed against each other as good and bad will fancy they see a difficulty in this; but it is only a fancy. Look at man! What is he? What is his province and work? He is a being intended for high and lofty ends, and to attain this he has not only to learn much, but he must learn how to master and subdue all things; for he is intended to be masterful; or, in other words, to be lord over nature's domains. Among many other things, he must be able to execute his purpose, and in doing it destroy evil and wrong. To be a true man, therefore, he must be fully qualified to execute his strong purpose; and in doing so if his Conscientiousness satisfies him that it is a righteous purpose, actually called for in the interests of justice; and if Benevolence equally satisfies him that in its finality and general bearing it is merciful; then give Destructiveness—or, as I much prefer to designate that faculty, *Executiveness*—scope, or that man's character is an embodiment of weakness, and is so far wanting in true manliness. The pity or cowardice that disarms a man when about to kill a venomous reptile or some bloodthirsty animal is not begotten of true manliness! Benevolence as frequently mars as makes the true man. Mercy is too often held up by itself as heavenly; justice and forethought being shelved and lost sight of. It is not always cruel to take life—that is to say, killing is not always murder! Human nature may and does sink so low in degredation that it is immensely more merciful at times to exterminate than spare it; for that only affords opportunity for propagating the evil and indefinitely perpetuating it. Capital punishment—much though it be decried in some quarters—is actually very merciful in its outlook; for in putting an end to the existence of one miserable wretch, he is thereby effectually prevented from begetting others in his

own image. Man, if made in the image of his Maker—that is, perfect in degree as God is perfect (and such I count true manliness)—should have no more compunction in taking the life of a degraded, brutish being, than he would of destroying a venomous reptile or a treacherous and bloodthirsty animal; and in doing the deed—if he regarded it in the full light of its ultimate bearings and possibilities—he would be actuated by disinterested benevolence. Reverse the picture, and an exhibition of refined and short-sighted cruelty and torture is apparent. If a miserable wretch, sunk in degrading vices, is allowed to live, it is to be miserable; to be tortured with his own defects, passions, lusts, and misgivings; and if he is to be allowed to marry and beget increase, his progeny must of necessity be cast in the same mould, and misery and torture is thereby not only prolonged, but also indefinitely multiplied. So, then, Destructiveness—so called—if employed to take human life in the cause of truth and justice, and with due regard to its future beneficent and merciful intention, is actually and of necessity part and portion of true manliness, or the Divine reflected in man.

I have here taken this extreme view of human perspective, so to speak, to make all that is to follow the more easy to comprehend. Man is intended to be lord over nature; and to do it he must have intellect to peer into her mysteries, and force of character, spirit, and earnestness, to subdue all that is refractory, and carry him through. While doing this he has to sustain his position and character in all social relations. He must love his wife, and obey the law of nature to multiply and replenish the earth (Amativeness); he must be true and constant to the mate of his choice (Conjugality); he must love his offspring (Philoprogenitiveness); he must be generally sociable and friendly (Friendship); he must love his home and fireside (Inhabitiveness); and these all working their respective parts will make him a social being, a very necessary step towards the goal—true manliness. Then, as an intelligent being, and possessed of freedom of choice, the animal propensities of Vitativeness, Alimentiveness, Bibativeness, Acquisitiveness, Secretiveness, Combaticiveness, and Destructiveness, will all find healthy action in solidifying and animating the selfish and social as also the moral instincts of his nature. If, at times, to preserve some particularly precious life another must be sacrificed; or it may be the lives of many are endangered by allowing one to live; in such a case the threatening cause of mischief should go without compunction; for it is better that one should perish rather than the many. This same thought has been expressed

in other words already, and is one of the true functions of Executiveness (Destructiveness), and an essential part of true manliness.

But man has a duty he owes to himself, for he is a selfish animal ; and unless he exercises due thought and concern for dear self—whatever he may be—he is not a true man. For this he is endowed with the faculty and feeling of Self-esteem, or Self-reliance ; and that he may be also under due influence from without, and experience shame for misconduct, he is made equally subject to the strong feeling of Approbateness. These two conjoined are powerful levers to aid elevation, dignity, and courtesy, and give the ambition needful to greatness and dignified conduct in connection with genuine manhood, as certainly as they may beget the witless and senseless manifestations of pride and vainglory. Then, that he may exercise forethought and concern for the future, the sentinel of Cautiousness is stationed hard by, thereby to make him safe and reliable ; and that he may be painstaking and continuous in well-doing he is furnished with the faculty of Continuity. None of these are superfluous—none can be dispensed with, and the character remain perfect. And, moreover, they must all and always exert their influence, or deformity and deficiency betray themselves in the result. For instance, no man should be so thoroughly under the dominion of self-love as to lose thought and consideration for others ; it would be more pardonable, and less weak, even humanly speaking, should this be exactly reversed.

Taking the feelings and sentiments all through first into consideration, there are still the higher moral sentiments, which, as before said, form a connecting link with the moral or spiritual world. No man can be a true man, and lack any of the moral sentiments ; and, moreover, the moral sentiments cannot have satisfying or nourishing food to feed upon unless it be from above—from some being higher and purer than himself. It by no means follows that because a man has a perfect development of these moral feelings, and consequently strong aspirations towards the good and the pure, that therefore he is at all sure to realize his heart's desire ! What the moral feelings may become is entirely a question of training ; and whether the growth shall be towards true manliness or otherwise depends entirely upon whether truth or error be received. The moral feelings have a strong affinity for superstition and mystery, and such things, if fed upon, will excite and fill the nature with a moody and indefinable sadness, or gladness, approaching at times very nearly to madness ; but, after all, it is only when truth is clearly and firmly embraced

by the intellect, upon indisputable evidences, that the moral nature can be furnished with solid and lasting material to build with which will give lasting peace and joy. Conscientiousness is in itself a blind feeling, having no inherent power to decide between right and wrong. When the intellect has weighed and sifted evidences this faculty contributes a feeling which carries the nature in the direction of the evidence, and if the evidence be faulty, or altogether wrong, the conscience will wrap itself around that wrong, and carry the nature with it as irresistibly as if it were right. Veneration, again, will as readily consent to give homage to an idol as to God; Spirituality is as easily carried away by false spirits as true; Benevolence as readily expresses sympathy with, and renders relief to, the infamous and the unworthy as the reverse; Hope pursues mere phantoms and shadows as keenly as if genuine substance; and Firmness will be just as persistent in evil working as in good. The possession of each and all of these ennobling faculties will not of necessity lead to any good end, and what they may and do become is entirely dependent upon the proper use of the understanding in handling and digesting the eternal verities. As a set-off to the notion that the moral faculties are guided, as it were, by intuition, the world has furnished innumerable instances of men and women both, who have been caught by the fascination of some specious error, and carried away so completely by it, that "they have not been able to deliver their souls, nor say, Is there not a lie in my right hand?" And it does certainly appear that the bulk of the so-called Christianity of the present day is of this character! Clearly it fails more generally than it succeeds in accomplishing the avowed intentions of its Author! And that, if true, is a striking confirmation of the truthful, prophetic vision of our Saviour; for the New Testament writings are full of warnings as to such declensions and departures from His ways during the Christian dispensation and their certain consequences!

And now we have the light of the body, the eye of the mind—the intellectual faculties—to consider as to its bearing upon true manliness. What has been already said shows that they are of immense importance in this matter. They are not in themselves character, and cannot and do not make character, but they quarry out, select, and fashion, the proper material wherewith it may be built up. What is not received and digested by the intellectual faculties can never enter the soul so as to be assimilated with, and become part of, the character. Facts come first, and for the reception of facts—truth in action—the perceptive faculties are furnished. Indi-

viduality, Form, Size, Weight, Colour, Order, Number, Language, Time, Tune, and Locality, add each their part in this great work of gathering in facts. These hand over the material they have collected to the superior-mind powers, the reflectives; and here the process of digestion, in order to further circulation and assimilation, is completed. Comparison examines and criticises and analyses by the laws of analogy which pervade all nature; Causality probes deeply for the reasons and causes of all things; Wit seizes upon every little incongruity and conflicting thought, so that if necessary the sifting process may be thorough and complete; then Imagination and Intuition flush the crude idea with figure, fancy, and perspicuity, and the life-giving thoughts which have passed through this crucible are then ready to be taken up and appropriated by the real entity in order to the production of fruit in the shape of true manliness. Constructiveness is not inactive in all this; it seizes every part and puts them together fitly and neatly, and a beautiful and wondrous compound machine, complicated and efficient, is the result.

Yes; true manliness is a wondrous compound. It is the *summum bonum*, yes, all that is precious in human nature; it is the *mens sana in corpore sano* of the ancients; it is the great end for which man was fitted and brought into being by his Maker; and it is the goal to which he is being beckoned by his Redeemer. It is the theme of the poet, the dream of the visionary, the aspiration of the Christian, and the want of the age. There is no sphere of activity where it is not wanted. The family circle needs it to train up the young members in the way they should go; the social circle wants it that salutary and saving influences may be shed around which will brighten up the pathway and lighten the difficulties of weary workers in that circle; it is indispensable in the political circle so that truth and righteousness may permeate every statute, and that the nation may perforce be God-fearing. It is by no means a weak and wanting thing. That mamby-pamby sentimentalism, which fears to punish, and leans to letting the guilty be free, is not born of true manliness. As things are viewed in these days there is good that is evil, and evil that is good; there is light that is darkness, and darkness that is light; there is mercy that is cruelty, and cruelty that is mercy; there is piety that is profanity, and profanity that is piety. Words should be weighed and used carefully at their real value, just as if they were current coins of the realm. What are words but current coins of well-defined value in the realms of thought? According to the notions of many, if a man's actions are well known to

be crooked and wrong, what is falsely called 'the mantle of charity' is to be thrown over it all; and that in certain high quarters is a mark of true manliness! Away with all such lying and deceit. If I saw a man in danger of putting his foot on a deadly serpent, and went up to him, saying, "It's all right, my friend, he won't hurt you;" would that be charity? If I saw a man walking deliberately towards a burning fuse over a blast, not knowing of his danger, and spoke pleasantly to him without warning him; would that be love? Quite as much so as very much that is designated charity by so-called Christians! And as love is truly the heart and life of true manliness, I must say, before concluding, that love in some of its most needed phases can only be harsh and austere. Sin is the curse of the earth and of man, a venomous reptile that endangers the happiness and life of one and all. If I say to a man, who rolls it about as a sweet mouthful under his tongue, and revels in it, "You shall have peace;" is that love, or am I a liar? Verily we want the reality of love instead of the slimy substitute of human contrivance, which is the reverse of true manliness, and is at the present time slaughtering more victims than were ever crushed by the car of Juggernaut. Plain and truthful speech and action from one who has so mastered himself that he can speak and act from pure motives, and make it manifest by his every-day life, is something like the *beau ideal* upon which I have endeavoured to express myself. I know of one such ideal, and only one—Jesus of Nazareth. In the same breath, and from the same pure motive, He could denounce the hypocrite and bless the penitent. When men cursed themselves by their own vileness, He told them of it in hot and plain language; *that was true manliness, and that was love!* When, from widely different causes, they were ensnared by lust and sin, He pitied the weakness of their natures and uttered His pardons. Could I pourtray another specimen of true manliness, my pen would speed in its execution, but where does history furnish one? True manliness is an immensely elevated standard of unknown quantity, and far be it from me, while trying to do it honour, to attempt to lower that standard, or in any way misrepresent it. I have not done it justice; I have merely hovered around it and touched it in some of its most salient points; still, if my ideal be true, and my thoughts thereon clearly expressed, my pen may have assisted some weary wayfarer like myself a step or two nearer the goal of true manliness.

THEODORE WRIGHT.

THE PROPOSED PHRENOLOGICAL SOCIETY.

ON Saturday afternoon, July 10th, a meeting took place of phrenologists (professional and others) interested in the establishment of a Phrenological Society. The meeting was held in the Imperial Buildings, Ludgate Circus, and was presided over by Mr. L. N. Fowler. Among those present were—Messrs. James J. Morrill, James Webb, Alfred J. Smith, B. Hollander, J. Frank Hubert, Jno. Dillon, H. Godfrey, A. T. Story, and Alfred Hubert.

By a unanimous vote of those present it was decided that the time had arrived for the formation of a Society. Mr. Fowler said how much he should like to see a society for the study and dissemination of phrenology in existence. Mr. Webb spoke in general terms of the value of phrenology in all branches of life, and therefore the need there is for some organization to keep the science alive and in a progressive state. Mr. Story briefly detailed the efforts that had been made during the last few years to start a Phrenological Society in London, but so far without effect. Now, however, he said, when kindred societies were springing up in different parts of the country, the occasion seemed auspicious for the starting of one in London. The notices and letters which had appeared in the PHRENOLOGICAL MAGAZINE had called forth a very hearty response, not only in London, but from phrenologists in the country. Mr. Hubert would like to see a society formed with a view to bringing phrenologists together, and thus allowing them to compare and contrast experiences and views. Mr. Smith and others spoke in a similar view. Finally, on the motion of Mr. Story, seconded by Mr. Morrill, it was resolved that the gentlemen present, or such of them as cared to join, should form a provisional committee to carry out the wishes of the meeting, with power to add to their number. On the proposal of Mr. Smith, seconded by Mr. A. Hubert, Mr. Story was requested to act as Hon. Sec. to the committee *pro tem*. It was further resolved that a public meeting for the formal constitution of a Phrenological Society should be called early in September, the date and place of meeting to be decided at a future meeting of the committee and to be advertised a fortnight before the time appointed.

In an informal conversation which ensued, it was thought desirable and generally approved that the society should be a teaching and investigating one; that the meetings should not be held oftener than once a month; that the subscription should not, if possible, exceed 10s. 6d. per annum; that

ignorance of phrenology should not be a disqualification for membership; that lady members should be welcomed; and that in short anybody should be qualified for membership who either earnestly desired to investigate or to advocate the principles of phrenology.

The meeting then adjourned till Saturday, August 7th, at 2.15 p.m. (when phrenologists or those interested in the formation of a society will be heartily welcomed).

PHRENOLOGY IN ENGLAND.

(From the American Phrenological Journal.)

THERE are at the present time very evident signs of a revival of interest in phrenology in Great Britain. It may not be altogether apparent on the surface; but that says nothing, for the first indications of a new movement, or of fresh vigour in an old subject, are not above but below the surface. To read the more prominent newspapers one would think the very reverse were the case; because when these papers have occasion to refer to the subject, it is to give it a passing stab or sneer. We had an instance of this in a recent issue of the *Daily News*, professedly the most liberal morning paper in London. It took the occasion of the death of Desbarolles, the famous French professor of palmistry, to have a fling at phrenology, which it veraciously described as "an effete branch of thought, only practised in holes and corners" by itinerant charlatans. Some allowance is to be made for the *Daily News* in the position in which it finds itself. The proprietors recently deemed it necessary to make a change in the editorship, and Mr. Lucy, who had for some years acted for them in the gallery of the House of Commons, was placed in command. Mr. Lucy is said to be a descendant of the Luces of Warwickshire, famous in Shakespearean story. This, however, may be a myth. The new editor at once set about signaling his advent to power by introducing some novel features in English journalism. He would have been as horrified as the proprietor of any London journal to have seen a heading to his leading articles, but he was bold enough to make a compromise with custom to the extent of introducing a kind of side-heading, after the manner of the marginal notes on county-court summonses. This, however, was merely a mechanical change, and so of secondary importance. What Mr. Lucy aimed at was to settle once for all a great many questions that his soul ached to see unsettled. One of them was phrenology, and he

accordingly lost no time in tilting against it. Perhaps we may never know whether he is sorry for what he did or not, but he had several bad quarter-hours after it. The next post brought him so many replies to his unprovoked attack that he was probably surprised to find that for a 'slain' thing phrenology was wonderfully alive. Moreover, successive posts did not fail to bring batch on batch of rejoinders; so many of them coming from remote parts of the Three Kingdoms, that the Liberal organ did not venture to select any of the letters in support of phrenology for publication. O dear, no! That would have shown the world that the 'slain' thing was not dead, as averred, and the veracious new editor would have been discredited. One or two of the smaller London papers followed the lead of the *News* in venturing to have a little fling at phrenology, or 'bumpology,' as they like to call it, because it shows so much knowledge of this thing, and moreover such wit.

But these papers by no means represent public opinion. The only London newspaper that does endeavour to represent public opinion, is the erratic and eclectic *Pall Mall Gazette*. Whatever people may say about its general views and methods, it is honest and it is alive, and that in a manner that cannot be said of any other London paper. Well, the *Pall Mall Gazette* is the only metropolitan paper that has of late years had the courage to say a good word for phrenology (with the exception of the *Echo* under its late editor, of whom more anon). Mr. Stead, the editor of the *Pall Mall*, is a believer in the science, and he is a believer because he has taken the trouble, as far as the leisure allowed by a daily paper will permit, to investigate it for himself. There are a number of other editors of important journals who are believers in phrenology and take a lively interest in it. Mr. Aaron Watson, late editor of the London *Echo*, now editor of the *Shields Gazette*, and sub-editor of the *Newcastle Daily Leader*, is one, and he is, perhaps, one of the best amateur phrenologists in England. The proprietor and editor of the *Northern Echo* is also an earnest supporter of the science, as are likewise the editors of the *Dundee Advertiser* and the *Dumfries Standard*. The latter is also a writer on the subject and on physiognomy. Many others might be mentioned.

One journalist, who has done as much for phrenology in this country as any living Englishman, is now almost beyond work, having reached his eighty-second year; although one may occasionally see an article of his in one or other of the co-operative papers. The gentleman

referred to is Mr. E. T. Craig, of Hammersmith, one time editor of the *Oxford University Herald*, and author of the "History of Rahaline," which embodies his experiences in connection with a co-operative experiment he made in Ireland many years ago, with a large measure of success, which in his 'History' he attributes largely to his acquaintance with phrenology. For many years Mr. Craig was a lecturer on phrenology, and in many parts of the country his name is still a household word in connection with the subject. He is now almost bed-ridden. Another name that should not be passed over is that of Mr. Wm. Tarver, editor of the *Christian Million* and the *Housewife*, the latter a monthly periodical, in which a page or two are given to phrenological delineations from photographs, and evidently with good success. The delineator is Mr. Jas. Coates, of Glasgow, the best known phrenologist probably now in Scotland. He contributes similar delineations to a popular Scottish paper. There were never so many lecturers in the field as at the present time. They are doing a good work in popularizing the science among the masses; among them are a few of signal ability. Mr. Nicholas Morgan, of Sunderland, the author of several able works on the science is well known. In his books, as in his lectures, this phrenologist displays more than common independence of thought and originality. The general run of the English phrenologists are inclined to be imitators of the eminent American phrenologist and lecturer, Mr. L. N. Fowler. A number of new men have recently made their appearance in public with more or less success; one of them who at present bids fair to do good original work in phrenology in England, but who, either from a retiring disposition or press of business in other directions, is little seen in public. The gentleman referred to is Mr. A. T. Story, the editor of the PHRENOLOGICAL MAGAZINE. He is the author of several works in addition to his contributions to phrenological literature.

It is said that the latter and a London physician are engaged on a work on the skull. One word about the medical profession. For years past, the doctors have been the greatest enemies of phrenology and have really been the cause of its unpopularity, or, perhaps, we should say its unfashionableness. But all that is gradually passing away. The younger generation of medical men are turning their attention to phrenology, and even many of those who are not incited to give special study to the subject, speak of it with less prejudice and ignorance than their elder brethren. A young doctor, one too who writes for the chief medical

papers, remarked the other day that with every fresh advance in our knowledge of physiology we were brought nearer—from the physiological side—to the phrenological ground; and he said he felt convinced that within a few years a discovery would be made that would result in a complete *rapprochement* between phrenology and physiology. Incidentally it may be mentioned that another sign of the growing popularity of phrenology in directions where it was formerly tabooed is the fact that *The Family Doctor*, a popular and ably conducted periodical, has recently taken up the subject with great success. There are, therefore, all the indications of a great future for the science in England.

THEO. ST. MARTIN.

OUR BOYS.

THE depression in trade continues with but slight amelioration; but still the multiplication of the human species goes on, in our own country at least, without the slightest intermission or diminution. This, and the ever increasing German invasion, accentuate the importance of the question, "What is to be done with our boys?" while the answer becomes more and more difficult every year. A year or two ago, this question formed the subject of voluminous correspondence in the columns of a daily contemporary, when the fact stood out clear from much sentimental platitude that, however well educated a lad may be, and even in inverse ratio to the excellence of his education, if he have not remarkable talent, some capital, or a certain amount of interest, he will stand a very good chance of being obliged to resort to something *infra dig.* for providing his daily bread, unless he has at the same time learnt to be a producer.

One closely related to an eminent jurist has said that, to attain success in his profession, a barrister should at least be independent of it, for otherwise he must do what is unprofessional, and will therefore lack, and continue to lack, advancement. What is true in the legal profession, also holds good to a very large extent in all professions, unless, indeed, there be genius, backed with perseverance and a good constitution, which must tell in the long run. A remarkably successful man of the present day, the leading spirit in the project for taking the sea to Manchester, on being asked the secret of his success, replied: "I had the physical constitution to begin work at six o'clock in the morning, and keep on till eight, nine, or ten at night, and that for twenty years." On visiting

Owens College, Manchester, I asked the professor how many of those young men who were studying so diligently would leave their mark on the sands of time. He replied : " Only about two or three. The majority would break down at about thirty years of age, because they had not the stamina to carry them through the battle of life."

Here lies the secret. We will not say that boys are over-educated ; but we do assert that mere abstract education, not backed up by genius, by capital, or by interest, is so much dead weight to its possessor in the first active steps in life, unless he has a berth ready to receive him. What is wanted for the great majority, whose bread is not buttered for them, is education indeed in its primary sense, viz., the bringing out of the natural powers, manual as well as mental, and that education supplemented by technical education. In other words, let the whole training of our rising generation, always excepting the favoured few born in affluent circumstances, be conducted with the definite object of making them fit to earn their living in the state of life to which they may be called. We could not all be rulers of men, even if we had the capacity ; and there can be very few eminent judges, successful generals, clever physicians, or consummate engineers. Rather than struggle all our lives at the tail of a profession, or, still worse, stick like leeches to the office stool, let us boldly begin by working with our hands. The acquirement of a handicraft is, as a rule, easier and less irksome to a youth than book-learning ; but when the utility and power of knowledge are appreciated, it will be pursued with greater zest, for, other things equal, the educated workman will always take precedence of the uneducated.

The road to success is far surer and shorter now-a-days through the workshop than from the classroom or the office. In mechanical engineering, whence come the managers of works ? Not from among the clerks or draughtsmen, but out of the shop ; though naturally, of two equally good workmen, he who knows more will have the better chance, and advance the faster. Who become clerks of works, and ultimately, perhaps, managers of large works ? Not architectural draughtsmen and quantity surveyors' clerks, but foremen or leading hands of masons, bricklayers, carpenters, or joiners, all of whom find out, indeed, that knowledge is power, when they have the opportunity of turning it to account.

Let us not be misunderstood. We do not underrate education ; we merely assert that it will not *per se* buy bread and cheese. Those who are dependent on their own resources must make themselves useful, first and foremost ; and the

surest way—that least likely to fail at a pinch—lies through the hands. Manual dexterity once acquired, its direction by knowledge, and especially by technical instruction, will give its possessor an advantage over his fellows, and that in a progressively increasing ratio. Work makes the grass grow, and prevents the steed from starving; and work does not, at the present day, in the least degree unfit, but, on the contrary, increases the fitness of ‘our boys’ for anything good that may turn up. A great deal of the false pride which prevents the rising generation from turning their hands to account, must be laid at the door of fond mothers; but we would say that material dirt will wash off, while moral obliquity, too often brought about by high notions not backed up by means, is more difficult to efface. We feel certain that, after due reflection, mothers would far prefer to see their sons come home, however dirty, from work in good spirits, with an appetite to enjoy their food, instead of shabby-genteel from the office stool, with pale faces and languid gait, with no end or aim beyond the daily routine.—*Industries.*

SIZE OF BRAIN AS A MEASURE OF POWER.

(*Third Prize Essay.*)

PHRENOLOGY, ever since its discovery and promulgation by Gall, has been subject to ridicule and derision, by the misapprehension of its doctrines and the prejudice of its opponents.

One of the doctrines most opposed by those who are antagonistic to the science of phrenology is “Size of Brain as a Measure of Power.” It has been deemed a butt for all adversaries of the science to shoot at. Like most of the phrenological doctrines, it is generally misunderstood, and regarded as being exclusively the only measure of power; our opponents not taking into consideration the various conditions by which that measure of power is modified, and which influence in a great degree the power of mental action. In all works on the science this doctrine is associated with quality of brain, temperaments, and education, and is thus generally expressed. Size of brain is found to be the aggregate amount of the mental power, other conditions being equal—such as quality of brain, temperaments, and education. So that those who oppose this doctrine of phrenology show that they have not a competent knowledge of the science they impugn, or they would not base their reasoning on such a partial and one-sided view of it. It would thus appear

by their arguments that our opponents leave themselves open to the charge of ignorance, in not looking at the doctrines of the science they attack in all their bearings, and in opposing a science to which they have not given a proper examination. What we assert for phrenology is more enlarged observation and inquiry, prosecuted with a greater regard for the cause of truth; then the difficulties which apparently surround the science would disappear and vanish like mist before the sun of truth, and phrenology would take its proper position among the sciences as the science of human nature, the grandest of them all.

Those who oppose this doctrine of phrenology object to a known law of things. It is an acknowledged law of nature that size is a measure of power. A large magnet attracts a greater mass of iron than a small one; a large muscle is much stronger than a small one. Comparative physiology shows that the olfactory, auditory, and optic nerves of those animals which are distinguished for their sense of smell, hearing, and sight, are marked by being numerous and large, and evince a more elaborate development. Take the brain of the carp for an example. The hemispheres of the brain proper are relatively small when brought into comparison with the optic lobes, which are the distinguishing features of the brain of that fish. From this case it is obvious that special development of portions of the brain occurs in harmony with the development of the special senses, and the amount of exercise assigned to them in animal life. Thus the hemispheres are, in the case of the carp, comparatively small, almost rudimentary, being little more than ganglia; while the optic lobes are expanded to large proportions. The same thing holds true in the brain of the cod, as well as in many classes of the smaller-sized fishes, where acuteness of vision is the chief characteristic. This coincidence between the size of a portion of the brain and the power of function depending on it, is so universal as to justify the general inference, that, whenever any organ is met with in a high state of development, we may there expect to find the power associated with it increased in energy, and in the same proportion.

But size of brain is not the only measure of power: much depends on the conditions which modify it. Quality of brain is as important as quantity. There may be no more matter in a large brain with shallow convolutions than in a small one with deep ones finely folded. The combination of size and quality is what you are to seek, if you are to find in organization the best expression of power. Let no one think,

however, that finely-folded convolutions are all that are necessary; for the brain of the whale is more finely formed than that of some men, but the quality is not equal to that in the human case, and so the fineness of convolutions is not always a proof of genius. Quality of brain must therefore be considered as well as bulk. In all great persons quality of brain is combined with quantity; neither in itself would constitute greatness. All truly great persons have large heads; but those who are partial geniuses, or great only in any particular talent, not always. Baron Cuvier had a large head; Socrates, Plato, Bismarck, Gladstone, Napoleon, Washington, Franklin, Spurzheim, Webster, and Agassiz, all had large heads. Our opponents object that Sir Walter Scott and Byron had small heads. True, but Sir Walter Scott had a very peculiar head, the shape of it being almost conical; while Byron's brain was developed most in the basilar region. They also object that a great head is often a sign of idiocy, and quote the proverb—"Big head and little wit"—as perfectly true. But here again they also mistake in not taking the quality of brains into account, which is, as I stated before, a most important consideration, as it greatly modifies the mental action. In Portadown, a few days ago, I saw a man who had a very large head, but who was said to be *non compos mentis*. He was shown to me by a person who objected to the science of phrenology, and who brought the case of this man as an incontrovertible argument against the doctrine of size of brain being a measure of power. My friend gave him the choice between a sixpence and a penny, and he took the penny because it was the larger. The fact was, that although the man had a large head, the quality of his brain was very poor, as he was born of intemperate parents. Bad parentage was the cause of idiocy in his case. A great many objectors maintain that a small head is the best, and quote Goldsmith in his poem—"The Deserted Village"—wherein he speaks of the village schoolmaster—

"And still the wonder grew
How one small head could hold all that he knew."

There is no doubt but that persons having small heads may appear very smart and clever, but they will not be profound. A person having a small head, and the quality of brain good, will be superior in intellect to a person who has a larger head, but the quality of the brain not so fine. But, all things considered, the person who has the large head will have a more powerful intellect, and be a more profound thinker, than the person with the small head; just as the

larger the muscle the greater the muscular power, so the larger the brain, other conditions being equal, the greater will be the mental power. Cases of microcephaly also prove the law that size is a measure of power, in a negative way, as all persons having a very small head, or a head below seventeen inches in circumference, are more or less idiotic.

Temperament also modifies the law of size of brain being a measure of power. Those with a fine, exquisite temperament will have a corresponding fine conformation of brain, and so will have a superior intellect to those whose temperament is not so favourable to the activity of the mind.

Education also modifies this condition, as it unfolds the faculties, which otherwise would have remained inert, and brings into activity those faculties which, if allowed to remain in their dormant state, would be useless to the person through life, but which, when brought under favourable influences, will greatly modify the character of the individual.

In conclusion, I would draw the attention of all impartial searchers after truth to the many and varied instances of size of brain as a measure of power, which they must necessarily observe in their intercourse with society.

DAVID MILLIKEN.

CHARACTER BUILDING.*

BY MARY ALLEN WEST.

CHARACTER does not come by chance ; it is wrought out, and is the combined work of God and man. The very origin of the word points to this truth. Its root is the Greek word "charass" which, with slight change, we translate "harass." As Edward Everett Hale says : "The great trip-hammer of the mint of God hits us hard, again, and again, and again, and with every blow the metal struck changes its lustre, its strength, even its image and superscription. Its character comes to it because it is pounded by this tremendous hammer. The more it is beaten the more character it has." As coins come from the mint with image and superscription clear-cut and strong just in proportion to the strength of the blows received, so character is strong in proportion to the blows it bears in God's mint.

We speak of sterling character—do we ever stop to study out the meaning of this figure of speech ? It comes from the English pound sterling coin of the realm. A pound sterling is, literally, gold pounded till it shows the image of the reigning sovereign.

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Thus, our vernacular, which is a crystallization of the deeper thoughts of the generations forming it, testifies to the value of character by linking its expression with the coin of the realm, the standard of value.

Character is the one thing of intrinsic value in the universe, the only thing we can take with us ; all else we leave at the grave.

As with the nation, so with the individual, the law of heredity decides in large measure what the character of the child will be.

"They enslave their children's children who make compromise with sin."

This thought, it seems to me, should keep every man and woman pure for the sake of the children that are to be.

This, then, lies at the very foundation of life and character building. A foolish prudery—and wicked as well as foolish, when we consider its results—has too long kept it in the background. Never till men and women study this subject in the light of God's truth as revealed in the Bible and in science, and having learned His laws regarding heredity, sacredly obey them, shall there be a generation of children having a fair start in the world. Most children commence life handicapped by the sins or the follies of their parents. An intense absorption in either business or pleasure, to the exclusion of soul culture, results in children with moral natures warped or undeveloped. The mother's corset often leaves its mark upon the child. In the father's wine-cup is often dissolved pearls more precious than Cleopatra's—the will power of his children—while the steadiness of nerve which is their rightful inheritance, is too often puffed away in the smoke of his cigar. God gave the world an impressive lesson in heredity when He would make the strongest man on record, and commenced the process by sending an angel from heaven to give the strictest possible total abstinence pledge to the mother of Sampson. All through His word he recognizes the law of inheritance, and orders that spiritual opportunities be transmitted with temporal estates. He clearly shows that both good and bad traits may be transmitted, and also that sin can cancel the inheritance of good traits, as we see in the case of degenerate children of good parents, or that grace may cancel a bad inheritance.

We have been very slow in "thinking God's thoughts after Him," in this direction, but have at last recognized the fact that it was by no accident He sent the angel to Sampson's mother instead of to Manoah, but that He thus pointed out a fixed law of heredity, which is, that the line of transmission

is between the sexes, from mother to son, from father to daughter. True, we have many instances of transmission of traits from father to son, from mother to daughter, as well as a transmission of traits to a child equally by both parents, but the general law seems otherwise, and experience proves this. No race of heroes ever sprung from mothers who were slaves. The mothers of great men have become almost as noted as the great men themselves. Witness the mother of Alfred the Great, of Napoleon, of Luther, of Goethe, of Washington, of John Q. Adams, of Lincoln, of Garfield, of John B. Gough, and scores of others. Close study of Bible history reveals the same fact.

When the lives of great women are as closely studied as those of great men have been, we may find the other half of this truth, that the fathers of grand women have themselves possessed grand natures, and that we must look to the fathers if we would find prefigured the character of the daughters. Queen Elizabeth is Henry the Eighth slightly modified by sex and Protestantism. Lady Norton inherited from her father, Thomas Sheridan, the talents which her mother so sedulously cultivated. Elizabeth Fry inherited from her father a large philanthropy. Lucretia Mott's splendid moral courage was the feminine gender of her sturdy sea-captain father's sterling qualities. In Mrs. Jameson is reproduced the the artist soul of her father, which, in her case, wrought with pen instead of with pencil. Elizabeth Barrett Browning is an intensification of her father's genius and character. Harriet Beecher Stowe is the true daughter of Lyman Beecher. Margaret Fuller reproduced her father's lineaments and mind. Mary Stanley was not only her father's "right-hand man," as he used to call her, but resembled him in character as much as Dean Stanley did their mother. Hannah Whitall Smith who has such a power to draw all hearts unto her, is the daughter of one who is styled "the best loved merchant in Philadelphia." The spirit of Lucia Kimball's father is shown in his favourite saying, "I must do what I ought; God will take care of the rest." Such cases can be multiplied, but these examples are sufficient.

Carefully analyzed, they may help to elucidate another principal of heredity not so well established, but which the best authorities assert. It is that both sons and daughters are likely to inherit physical form, passions, and appetites, from the fathers, and intellectual and spiritual traits from the mothers. These two principles of heredity working together often produce complicated results. Yet, it is said that few men or women have ever exhibited great intellectual power

unless these were prefigured in the mother, thus substantiating the second principle named. If this be true, and no one can prove that it is not, it presents a strong and unexpected argument in favour of intellectual culture and development for mothers, and an equally strong argument to fathers for controlling all appetites and passions. Sowing wild oats does not seem such a harmless thing, when we remember that innocent children must reap the harvest which this sowing produces, a harvest often of woe and shame, of physical weakness, and moral obliquity.

A parent's first duty, not only to himself and to God, but to his children, is to be able to say, "I respect myself."

To say that, and feel it in every fibre of his being, he must be clean and pure, honest in the sight of God and of man; when he can thus say it, he is sure of the respect of his children—a vital point in their character.

PHRENOLOGY FOR CHILDREN.

(Continued.)

WE have now come to the social group, which consists of six faculties—Amativeness, Conjugality, Parental Love, Friendship, Inhabitiveness, and Continuity—all of which you will gradually learn to understand as your experience takes you more into society.

Let us first take that faculty which lies at the base of the brain, and is called—

AMATIVENESS.

(a) Definition.—(b) Location.—(c) How do little boys and girls show this faculty?—(d) What influence does it exert?—(e) How can you cultivate and restrain it?

(a) This faculty is the organ that inspires in your minds the love of the opposite sex. Boys are attracted to the society of their sisters, and their sisters' friends; while girls become interested in the society of their brothers, and their brothers' friends, as well as in their fathers' company. It unites, as no other faculty does, the physical charm and instinct with the mental amative sentiment.

(b) You will find this faculty located in the cerebellum, or little brain.

(c) When about thirteen and fourteen, boys and girls think they are approaching manhood and womanhood, and begin to act in accordance with these ideas. They suddenly become more thoughtful, and show many acts of kindness to their friends of the opposite sex, and do all in their power to make

those they love happy. Little girls with this propensity largely developed love to nestle in the big, strong arms of their papas ; they delight to be petted and kissed, and there is often a struggle among our little friends to get the first kiss on father's knee when he and the boys return home from business ; and the latter are equally pleased to see the miniature struggle, and reward their sisters.

(*d'*) This faculty plays a most important part in the completing of your characters. It exerts a kind, genial, and refined influence in society, and kindles in each an interest in what most concerns the other sex. This power to soften all that is harsh, forbidding, and unsocial in others, must not be confused with the sentiments prompted by friendship, sympathy, and other similar sentiments, for each faculty has its distinct function, as you will understand better when you compare them in your own characters. Under proper control, this love-giving faculty is, next to Conjugality, one of the most beautiful and interesting features your characters possess.

(*e*) Dear children, do not be persuaded that this is simply and only a 'bad organ.' We have really no 'bad organs' ; it is only the perversion of faculties that makes you fall into error. This power is one you must study in its highest and fullest sense, and you must get the purest minds to talk with you about its proper cultivation and restraint in your characters. Some of you have not enough of it ; hence are cold-hearted, unsociable, and uncongenial, when you are persuaded to go into the company of the opposite sex. You are what some people call shy, and do not trouble to do anything for others with a 'good grace,' if you can possibly avoid it. You will find that when the faculty is large boys will show more kindness, gentleness, and love towards girls than towards boys. If this were not so we should be destitute of the impulse from the organ of Amativeness, and the more I study character the more I see the necessity for a full degree of it as boys enter manhood, marry, and settle into their trades and professions. Into whatever occupation a person is called, be it as a doctor, minister, or commercial man, he will be better able to get at the heart of his patients, or his audiences, or his customers, in mixed society, if he possess the genial influence of this faculty. The spiritual and intellectual talents of all of you who intend to become ministers of a live religion, need the quickening influence of the social faculties in order that you may understand the practical wants of the people in home-life. But take care you do not waste this faculty in worthless ways, where it cannot be

appreciated or understood. When unduly developed, Amativeness can be controlled in several ways—by making a study of your lives; by avoiding excitement of a social nature, stimulating food and drinks; by keeping yourselves in a healthy condition of body; by daily baths and exercise in the open air; and by calling upon the other faculties—the intellectual, moral, and executive powers—to occupy the thoughts and entertain the mind. When you come to examine the brains of animals for yourselves, you will find that in them the cerebellum, or little brain, is much larger in proportion to the cerebrum than in man's brain. In children the little brain is smaller in proportion to the other part of the brain, and their heads are correspondingly flat and narrow posteriorly between the ears.

CONJUGALITY.

(a) Definition.—(b) Location.—(c) How does this faculty differ from Amativeness?—(d) What animals show this conjugal instinct, and what animals show a lack of it?—(e) How must this faculty be cultivated, and how restrained?

(a) Conjugality is the faculty which gives you the mating instinct. Many of you while yet children show it. Your hearts yearn for a companion in whom to confide, with whom to walk, talk, and exchange love. Many have, in years gone by, been known to remain true to their childish attachments, and never to have regretted following out the instinct prompted by this faculty. Its expression makes it one of the most beautiful organs in the social group, whether it is shown in youth, middle-age, or maturity. It is the foundation of everything pure and unselfish in your natures, and makes you unconscious of your own wants until those of your loved ones have been first supplied. Its sentiments have been more often written about, both in prose and verse, than any other; for it stimulates the poet, the author, and the artist. Many of your other faculties are beautifully expressed in characters—as, for instance, Benevolence, Sympathy, Spirituality, and Faith; but Conjugality is like a planet around which all the other faculties seem to stand as moons or satellites in comparison.

(b) You will find this organ located in the lower part of the back-head, on each side of Parental Love, above Amativeness and below Friendship.

(c) This faculty differs from Amativeness, though it is closely related to it. It acts independently, and is often large when Amativeness is imperfectly developed. Mrs. L. N. Fowler says, when comparing the two faculties: "Though

we have the organ of Amativeness, which leads the brother and sister to love each other, and gives a love between the opposite sexes, leading them to marry, yet we also need that portion of the brain called Union for Life, which is close to it, and is a more elevated faculty than Amativeness; for persons having only the latter, though they marry, often live unhappily together; but if Conjugality is large, the persons always adhere to each other through weal or woe; are desirous of sharing all their joys and sorrows, and of being constantly in each other's society."

(*d*) Among animals and birds this faculty is distinctly shown, especially by the lion and eagle, who remain faithful to their chosen mates for life. Doves and robins, and certain kinds of monkeys, also show this singleness of attachment, examples of which establish the fact that Conjugality belongs to the animal kingdom as well as to the human. Nearly all our domestic pets are deficient in it; they do not choose mates, but associate promiscuously.

(*e*) Just a word or two about cultivating and restraining this important faculty. What you do not understand now you may a few years hence. To cultivate Conjugality, dear children, you must avoid being fickle or changeable in your attachments. Do not take up or fancy you are in love with every new face that comes into your circle because it is pretty. Go and play with the homely little girls and boys, and think a little before you show too much regard for one mate or the other. Think *first* what character you want your friend to possess, and, when such a one has been found, do not let circumstances or atmospheric changes alter your regard. Many of you will perhaps find it necessary sometimes to restrain this faculty; for some of you children may have already experienced twinges of jealousy or sensitiveness when your special little friends have slighted you a bit, or you have fancied they have forgotten you. Take care, and do not exaggerate these tender feelings.

PARENTAL LOVE (OR PHILOPROGENITIVENESS).

(*a*) Definition.—(*b*) Location.—(*c*) How do children show it?—(*d*) In whom is it large as a rule?—(*e*) Can this faculty be restrained or cultivated?—(*f*) Do some animals show a greater love for their young than others?

(*a*) Parental Love is that faculty Nature has given us in order that we may properly care for, and tend, the young, the weak, and tender—love for little children, animals, and pets of all kinds. It is a natural instinct in parents, as well as in many who are not, but who love children so much

that they feel drawn to care for those of others. Had mothers no special love for their little ones—who cannot care for themselves—aside from a sense of duty, the task would become irksome and tedious.

(*b*) This faculty is situated above Amativeness, in the centre of the social group.

(*c*) Many little girls show a marked degree of this faculty. Some of you know how delighted you feel to have a baby doll to nurse in its long clothes. You are perfectly happy when you possess a large family of dolls, and call each by its own name. You do not mind how much work you have to do to plan out dresses for them, and contrive little surprises by taking them out for a drive or a walk, or by inviting friends to have tea with them. Then they have to be put to bed, and in a hundred ways you learn to imitate your mothers. Boys express the same faculty by feeding and caring for rabbits, dogs, horses, and other animals.

(*d*) This faculty is generally larger in the mother than the father, though there are exceptions where fathers take as much interest in their children as any mother can show. It was large in the lady who possessed five beautiful cats, which daily sat up to her table when she took her meals. This lady spent the best part of her affection on these dumb animals, instead of doing good by bestowing it upon a few of the scores of motherless children who have to grow up as best they can without motherly love. Some people, however, spend their lives and their fortunes to make homes for orphan children. Such is a true work of love; for no one could start such an institution without first feeling the drawings of something more than pity for little children—it is genuine love.

(*e*) It is a faculty that needs guiding when too large, and cultivating when deficient. When too active one is apt to be over-indulgent, and inclined to pet and spoil children when young. It, however, enables many to become excellent nurses in children's hospitals, as well as in large private families. Without this faculty the sight of children irritates some tempers, and many children are left to the mercy of servants and hired persons because the mother will not trouble to look after her children herself. Their education is superintended by governesses, and no desire is shown for the children's company until they are ready to go into society, by which time the foundation of their characters has been laid, and the responsibility thrown upon strangers, which is a most unfortunate thing.

(*f*) Some animals show as distinct a love for their off-

spring as any human being; while others are just as neglectful. The mammiferous animals take great care of their young—monkeys particularly so—and show the development distinctly marked in their skulls. Different nations show this faculty in singular ways. The Caribs, who are barbarous and savage, are yet loving and affectionate in the care of their young.

INHERITED TRAITS.*

THE scientific study of heredity is considered a recent departure, but like many other novelties is only the rounding of a cycle. Moses evidently regarded the transmission of diseases and deformities very seriously, as we find from the care with which he regulated the marriages of the priesthood. The directions in Leviticus xxi. clearly show the precautions taken to keep pure the blood of the tribe destined to perform the sacred offices.

The children of Israel have ever since jealously guarded the purity of their descent, and remain among the changing types of the world a distinct people, whose characteristics are everywhere recognized.

Other races have profited little by the law-giver's precepts regarding heredity, and give so little study to the subject that its only modern data must be sought in the text-books of medicine and its cognate sciences. The meagre literature of this topic calls for additions to our stock of information; and as mere conjecture is valueless, I shall ask the members of this union to favour me with any reliable facts in their possession that may bear on the matter in question.

Certain diseases are clearly proved hereditary to a frightful degree; of these, consumption, scrofula, insanity, gout, defects of vision, are well attested instances. Others are undeniably repeated in many families; for example, a mother who suffered from attacks of erysipelas transmitted the predisposition to five of her thirteen children, one dying from a severe form of the disease; and at least two of the grandchildren have the unpleasant legacy.

Dr. A. Barkan mentions a Parisian family that in the sixteenth century had night-blindness which has developed in 126 of the descendants.

Dr. Kerr of Pasadena recently published strong evidence

* Read by the Superintendent of the Department of Heredity of Brentwood, Cal., W.C.T.U., at the regular meeting, June 11, 1885.

proving the hereditary nature of neuralgia which he thinks as transmissible as scrofula.

These may be sufficient illustrations of inherited misfortune, and the question may arise, "Of what benefit is this melancholy knowledge?"

Much may be done to avert ill consequences when we know the liability of children to certain diseases; for instance, a lad of twelve years old, whose mother, grandmother, and half a dozen uncles and aunts died of phthisis, began to droop with lung trouble. He was placed in careful hands for a year, outdoor exercise and nourishing food were abundantly supplied, and with but little medical treatment he rallied, and is now at twenty-six a healthy man. The influence of active pursuits, pure air, and proper climate, is wonderful in its power to check incipient pulmonary disease.

Formerly, the delicate son, in mistaken kindness, was given a sedentary occupation, and the vigorous boy sent to the farm; wiser judgment now reverses the decision.

The practical gains of a knowledge of heredity might be shown in choice of location for a new home. Those who fear a consumptive taint should avoid the harsh winds of the coast, while the offspring of neuralgia parents will do well to shun both the dampness of the ocean climate and the malaria of the river valleys.

Physical ailments are not the only ones to which a study of our subject may apply. Children often show that a moral defect has been handed down, and a greater solicitude is felt than for mere corporeal malady.

A friend of mine found that her little son had entered life with a strong tendency to falsehood. Father and mother, recognizing an increased degree of a weakness seen in some of the older relatives, set themselves earnestly to eradicate this vicious propensity. Every fault, honestly confessed was tenderly forgiven, and the sin and shame of untruth constantly and lovingly urged upon him. The patient labour of the parents has been crowned with success.

Some children inherit violent tempers which threaten the happiness of themselves and all connected with them. The patient and long continued efforts of parents may enable the child to subdue this besetting sin and save him from unavailing regrets for words or deeds of passion. Of course, as years of responsibility are reached, the struggle devolves upon the individual who is the unfortunate heir of evil predisposition and in most cases he is able to conquer himself.

I was struck by the thought expressed in last Sunday's sermon that no one is blamable for inheriting sinful propen-

sities ; but when grown to the age of accountability, will be held guilty if he has made no effort to overcome his natural perversity.

As we grow in knowledge, we may likewise be judged sinful if we do not try to correct the unwholesome bodily conditions that we inherit. If we are not morally punished for transgressing the physical law of our members, we shall certainly pay the fleshly penalty, and while moral errors of ignorance may be forgiven, our corporeal sins must be fully atoned for.

STRAWBERRIES.

WHAT dreams one may have on a London pavement ! A few minutes ago I stood in front of a fruiterer's shop. In the window were baskets of delicious strawberries. They were so fresh that they seemed to have the morning dew still upon them—though, of course, it may have been artificial. They were Brobdingnagian in size—on the top of the basket, that is—and were a good, large mouthful apiece. I was tempted to buy a basket and sit on the next doorstep and eat them, as one pleasingly remembers one would have done as a boy. But eschewing that delight, I resolved to indulge in a big plate of strawberries and cream for desert. Indeed, though no gourmand, I make a mental note that it shall be a 'whopper.' Meanwhile, as it wants some two hours to dinner-time, I walk about, my soul filled with a dream of strawberries.

I am wafted away—far away—to the dear old cottage at the end of Caverton town, within sight of the old river-bridge and within sound of the old mill, above which I have so often sat and watched the speckled trout, and dreamed whole days away. There my spirit nestles down in the quiet, retired garden—half flower and half kitchen-garden, redolent of the rose and the sweet-briar, as well as of the pea, the potato, and of sweet herbs innumerable. It is as trim and neat as ever, and but little is changed : only the old bee-hive and its busy tenants are gone.

How naturally I gravitate towards the long bed beneath the thick privet hedge, with the pleasant shade of the maples above it, that the wasps and bees loved so well. Even now I can hear their drowsy hum. Here and there in the hedge are the large white flakes of the convolvulus, contrasting so finely with the colour of the berries on the bed below. There they lie, under their broad, sheltering leaves, large, red, and luscious. Tempting is not the word to describe them.

Someone has described the strawberry as the prince of fruit : I should call it the princess.

I think it is Boroughs who says that after the Almighty had created the strawberry He 'rested a spell,' so well satisfied was He with His handy work. I—anyone—would have done the same. It was no prentice-work—the creation of the strawberry, and, *pace* Darwin, no chance-work either. Evolution, with the aid of insects, may have done a great deal ; but I refuse to believe that it is responsible for the strawberry.

There is an Eastern fable to the effect that the strawberry originally grew just within the gates of Paradise, and that one of the fallen angels, when driven forth from the celestial abode, had the presence of mind to snatch a handful of the seed and scatter it about outside—thoughtful, even in his downfall, of the coming generations.

Fallen great one, how I thank thee !

It has often been a theme of speculation to me how much we may owe to the fallen ones ? What indeed would the earth have been without them !

For myself I have always imagined the strawberry to be the fruit with which our mother Eve beguiled the first great, stupid, hoodwinked, adoring Adam. She inveigled him on to the straw whereon they ripened, and there tempted him, to their common ruin, with the sweet smiling berries, as red as her own lips and hardly less sweet.

Whether she put cream to them or no, it is hard to say ; probably not, but I certainly believe that the addition of cream to strawberries was the invention of one of the immediate female descendants of our first parents, if not of Eve herself.

We have fruits that are no less grateful than the strawberry ; but none seems to come at so seasonable a time. One may almost say it is the first fruit of the year ; for the green gooseberry is not a thing to be trifled with until it has gone through the cook's laboratory. Boys that indulge in this crude vegetation are fit for any mischief. The imps of Sheol are fed on it. The strawberry on the contrary is conducive to 'sweetness and light.'

Later in the year we get fruits in such variety and profusion that we are liable to become a little cloyed with them ; just as, when summer has warmed to its work, there is no longer anything new and exhilarating in a day of bright sunshine, as is the case at strawberry-time. To me, there is no weather like strawberry-weather, unless it be the after-summer—that delightful period of the year, sometimes only a fortnight in length, rarely longer than three weeks, and sometimes, alas,

but a few days!—when the fierce heats of summer have burned themselves out, and we get but their kindly after-glow. The days are just long enough for a not-too-eager out-door man, and the evenings so long and so pleasant for reading and for thought. At the other end of summer you get big, bouncing strawberries, at this end large glorious stars: such stars as move even a dull man to meditation, and fill a cogitative one with high thoughts. I think, next to the inventor of the strawberry I would have been the inventor of the stars.

As I was saying, there is to me no weather like strawberry-weather: it follows so seasonably upon the hard, cold winter. Everybody knows what it is like; not too much heat and not too much moisture, but just heat and moisture enough. The climate of heaven must be made up of such weather, mingled in the proportions necessary to measure out the celestial year, with just enough of the biting north at the proper solstitial period to make one feel it a pleasure to button up one's coat and step out into a brisk walk, and to give one the agreeable tingling sensation of seeing the girl-angels throw off their lighter shoes for strong boots and their thin gossamer garments for jaunty surtouts and hats bordered with fur. One can hardly imagine heaven being quite heavenly unless it were possible to sit occasionally in the cheerful firelight, and foregather for a space with one's proper thoughts, marshalling them in order, advancing the noble and the well-favoured, giving encouragement to the heroic, checking the vain and frivolous, and lending support to the weak or one-sided.—Botheration! How people do hustle you when you dream on a London pavement.

THE SPECTROSCOPE.

THERE is no scientific instrument since the days of Galileo, who invented the telescope, which has revealed so many wonders, and so amazed and startled the world by its revelations, as the spectroscope.

The discovery which led to the invention of the spectroscope was made by Fraunhofer, in Munich, in 1826. The most celebrated optician of modern times, he devoted his tireless energies to the fabrication of a telescope which would avoid chromatic aberration. The object to be achieved was to form the lenses so as to escape the dispersion of the rays of light. This, Fraunhofer did by bringing together two prisms of different kinds of glass, with equal powers of dispersion, but with unequal refractive qualities.

It has been ascertained by a series of experiments that the dispersive powers of dense flint glass are about double that of crown glass, while their refractive powers are nearly the same. Hence it was found that two prisms, having two opposite dispersions, neutralized each other, and the rays passed through unbroken and without meeting the eye decomposed. Fraunhofer discovered while conducting his experiments that different substances, reduced to a gaseous condition, threw different coloured lines upon a screen, each line representing an individual element. Thus the light of iron at a white heat gave a dark line ; potassa a violet line ; sodium a yellow line, etc. In honour of him these lines are called "Fraunhofer's lines." But the great genius who made this wonderful discovery died young, without ever dreaming of his invaluable gift to science.

Kirchoff, Bessel, and Bunsen at once saw the immense value of the discovery, and the spectroscope was the speedy result, and is now a common instrument in the laboratory of the scientist. To give an idea of the refinement of the powers of the spectroscope and its accuracy in investigation : take 1 lb. of salt, divide it into 500,000 parts ; each part is a millegramme, which any chemist can detect by reagents and analysis. But divide the millegramme into 3,000,000 parts, there is probably no chemical test which would show the presence of chloride of sodium in that infinitesimal subdivision of the salt ; yet, take any part of this mixture, however small, and convert it into a gas and the spectroscope will promptly detect the presence of sodium (common salt being the chloride of sodium).

The spectroscope is now brought into requisition by astronomers in daily observations. It has revealed the constitution of the photosphere and chromosphere of the sun, in part demonstrating the presence of hydrogen in a glowing condition, and also other elements equally clear and satisfactorily.

These discoveries produced a complete revolution in solar physics. Lockyer of England and Jansen of India made these discoveries in 1868. The spectroscope was then directed to the star Sirius, and to other bright stars, with marvellous and amazing results. Sirius is at least 200,000 times as far away from us as the sun, which is 93,000,000 of miles away, yet the spectroscope has shown that it possesses the same elements that have been found in the chromosphere of the sun. What a wonderful achievement of the human mind ! When Leverrier discovered the planet Neptune, in 1846, it was universally regarded as the proudest and the most brilliant discovery in science, and it crowned him with im-

perishable laurels. But here is an instrument which reaches far out into boundless space, hundreds of millions of miles away, and with unerring fidelity places upon the screen before you the lines that tell of the elements entering into the composition of the distant orb. The sun is 850,000 miles in diameter, and the star Sirius is fourteen times larger, and is supposed to be the centre of another system similar to our own. It is impossible for any one to form the remotest conception of the distance to the sun, yet Sirius is 200,000 times as distant. Thus the spectroscope revels in the labyrinth and azure depths of the star-gemmed heavens, jewelled with a thousand worlds, blazing with suns belonging to other systems, set in diamond dust nebulæ of mysterious light, studded with luminous points, and hung with pearls, dim and gleaming, still more remote, which baffles the intrusive scrutiny of the most powerful telescope. Every star that twinkles in its calm and sparkling beauty, is legitimately within the domain of spectroscopic research, and every subject in nature resolvable into a gas is compelled to yield the secrets of its composition to the searching inquiry of the spectroscope.

Poetry.

O greatest among nations, bond or free,
 That sat'st aloft upon thy ocean throne,
 And fought'st for freedom, yea, e'en fought'st alone,
 Against the ranks of banded tyranny,
 And didst thy mightiest that all men might be
 Like to thyself, unfettered as the wind,—
 Shall it be said that, growing old and blind,
 Thou didst begin to dread fair liberty?
 Shake thy hoar locks and gird thy loins anew;
 Thy sister wakes, shall she then not be free?
 Shall those who named thee 'Freedom' scoff and scorn
 That thou bind'st tighter when thou shouldst unmew?
 No; whoso bears thy yoke, no yokeman shall he be,
 But free as the winds that o'er thy seas are borne!

ST. M.

Book Notices.

Struggles for Life, by William Knighton, LL.D. (London: WILLIAMS & NORRIS), is an interesting book, but one which awakes in the heart of the thinking reader sorrowful feelings. The author describes the many difficulties men have to cope with in their lives—political, social, and moral. He does not despair of mankind's

ability to overcome its besetting difficulties, but he clearly points out how far society is from doing all that might be done to lessen the evils from which it suffers, and he calls upon it to be up and doing, and to fight valiantly against discouragement and wilful blindness. Many as are their errors and falls, he bids men not to be disheartened, but to struggle onward in the route of progress, to help on the weak, and cheer the faint and weary.

The Industrial Self-Instructor and Technical Journal. Vol. II. (WARD, LOCK, & Co.) Artisans, apprentices, and workmen of all grades and conditions now enjoy abundant opportunities for improving their positions, if only they are willing to go through the necessary training. Crowded as are the fields of labour, progress is sure to those who seek it by the paths of knowledge. Technical learning of a really practical kind is perhaps not to be entirely derived from books, but they greatly smooth the way, and a work like this "Industrial Self-Instructor," which deals with mechanical and constructive arts in the clearest and most comprehensive manner, will prove of inestimable value to those who patiently study its many useful lessons.

The Hygiene of the Vocal Organs. By Morell Mackenzie, M.D., London. (London: MACMILLAN & Co., 1886.) Dr. Morell Mackenzie has just published a practical handbook for singers and speakers, entitled "The Hygiene of the Vocal Organs." Dr. Mackenzie writes in the preface to his book that he does not attempt to throw "new light on the problems of voice production," but he naturally can claim to be heard on "the well-being and functional efficiency of the vocal organs." During many years he has been "ministering to diseased throats," and every singer or actor of note has at one time or other come under his treatment. He has thus had unusual opportunities of studying the conditions which affect the voice for good or evil. He assures his readers that he wishes it to be clearly understood that his point of view is that of a practical physician, and avoiding technical details, Dr. Mackenzie has striven to make his book "a really useful guide to those who have to use the voice in the pulpit or in the rostrum, on the stage or in the political arena." There is much in this treatise to interest the physiologist and the musician, and while contributing largely, in a popular manner, to the sum of common knowledge, this information sweeps away many popular errors.

Low Down: Wayside Thoughts in Ballad and other Verse. By Two Tramps. MR. GEORGE REDWAY, of 15, York Street, Covent Garden, has added a new volume to the library of *bizzarrie*, which seems to be so much in favour at the present time with readers of all classes. For quaintness of appearance and typography this little collection of verse is certainly ahead of anything that has yet appeared. It is printed on seven differently-tinted papers, in as many varieties of type; it is enclosed in a common brown-paper cover, to which it is attached by a couple of pieces of string. Alto-

gether a strange-looking publication, yet by no means inartistic or wanting in taste. The mere name of Mr. George Redway is sufficient guarantee of this. Purporting to be the work of 'Two Tramps,' the book's *bizarre* dress is evidently a portion of the scheme which is to hide the identity of the authors of the verse within its pages. The roving vagabonds could not afford to do all their printing at one time, nor in one printing-office. They have seized opportunities as they presented themselves, and hence the variety of the type used, and the parti-coloured pages, a result which is, after all, somewhat pleasing—to the eye, for the quaint appearance—to the eyesight, for the relief offered in the tinted paper and the changes of type.

So much for the book's appearance. "Are the contents worth reading?" asks the book-purchaser. Here we have not space to go through the entire book; let us therefore do as the ordinary novel-reader is said to do—look at the beginning and the end. The book opens with a Prefatory Sonnet, in the form of a fable, which represents a decrepit beggar, sitting on the wayside, and reproached for his idleness. His answer strikes the keynote of the purpose of "Low Down"—

" Not mine to work as others ; but I love
The sad and toiling people, and would swell
Their joy, by moving those with gold and lands
To loving-kindness with the hapless drove."

This little fable is told in a touching manner, full of the sympathy it expresses. Its originality, too, is striking as well as appropriate. Turning now to the end of the book, we have "L'Envoi," Our Tramps tell us it is not a 'mere sensation' they seek to create with their stories, but to draw more certain attention to the trouble caused by winter and sorrow, which

" Ever stand awake,
Poverty's dread sentinels for all time."

In these two poems we have the whole aim and bent of the book; in every line of which is breathed a true sympathy with the sorrows of humanity—a true joy in humanity's joys. Take for example the poem, "Holy Days," and feel in its sympathetic joyousness the love that springs from truly heartfelt tenderness—

" Come, my children ! come, my children ! Let us haste to join the throng
That on hillside and in meadow fill the air with joy and song !

* * * * *

God forgive us we if we joy when others weep !

There men meet with white, wan faces hiding sorrows dark and deep ;
And they laugh with mocking laughter, thrilling through our hearts
with woe,

While their hearts are sighing, longing for somewhat they hardly know."

There is quite a collection of Sonnets—these Tramps of ours have some notion of literary composition—which all contain much to read and ponder over, and are all well worth reading and pondering over.

There is a something in some of the longer ballads that brings to us a memory of Dagonet, yet the handling of the matter is very different. Take, for example, the poem, "Rags and Riches." The method of this verse is both novel and strong. The tramp speaks—

"Ay, 'tis God's will ! That's what you'd have me say ;
'Tis Heaven's decree that I should starve to-day !
'Tis Heaven-born justice you are rich, I poor,
That you with curses drive me from your door !

* * * * *
'Tis false ! All false ! God never willed it so !
He gave you wealth to distribute below.

* * * * *
And if I am a 'tramp' and you a 'swell'
God can best judge for us 'twixt Heaven and Hell !"

There is no sheath to the lance-points of the Two Tramps, and they are driven right home into everything they touch.

Some interest is added to this book in the fact that to every poem is appended the name of the place where it was written, from which we may understand that our Tramps are really somewhat nomadic in their lives ; for they have visited many towns and cities on both sides of the Atlantic, and on both sides of the Channel.

On the whole there is much to be praised in the little book—much that is original and fresh, breezy and daring, and so whatever of censure "Low Down" deserves we will leave to the pen of some more spiteful critic ; and, while recommending the collection to our readers, express a hope to see something yet more ambitious, at an early date, from the Two Tramps.

Healty Hints.

AMONG the most troublesome and often noticed eye affections are what are known as hordeolum, or common sty. Dr. Louis Fitzpatrick, in the *Lancet*, differs from some of his professional brethren, who persist in ordering the application of poultices, bathing with tepid water, etc. These no doubt do good in the end, but such applications have the great disadvantage of prolonging the career of these unsightly sores, and encourage the production of fresh ones. Dr. Fitzpatrick has found, after many trials, the local application of tincture of iodine exert a well-marked influence in checking the growth. This is by far preferable to the nitrate of silver, which makes an unsightly mark, and often fails in its object. The early use of the iodine acts as a prompt abortive. To apply it, the lids should be held apart by the thumb and index finger of the left hand, while the iodine is painted over the inflamed papilla with a fine camel-hair pencil. The lids should not be allowed to come in contact until the part touched is dry. A few such applications in the twenty-four hours is sufficient.

Facts and Gossip.

THE thanks of the nation are due to the Reverend J. W. Horsley ; for he has discovered, and set forth his discovery in the pages of the *Sunday Magazine* where all men may read it, the origin of juvenile crime. "The perverted taste for lollipops," says the Reverend Mr. Horsley, "caused chiefly (because not prevented) by mothers, is a large—very large—cause of juvenile crime." The causes which move men to commit robbery and murder have long been sought in vain, and the very criminals themselves have put us off, when questioned, with such excuses as 'poverty,' 'hunger,' and 'drink'; but, now that the secret is out, all we have to do is to shut up the 'sweetstuff shops,' and the remedy is found. When this is accomplished we can disband the police and pull down the prisons. Then we can open every second house as a gin-palace, and chuckle over the amount that will add to the revenue. Only to think all the time, money, energy, and eloquence which tetotallers have wasted when all their attentions should have been directed against sweets and not 'unsweetened' ! The Blue Ribbon Army must change their name and their tactics, and reorganize under the title of 'The Lollipop League,' and mothers be bound over not to give 'sweets to the sweet.'

A NATIONAL association has recently been formed in Brooklyn for the promotion of physical education, and the discussions at the first session show that its founders have a broad, comprehensive view of the field to be cultivated. The vice-president, Rev. Dr. Thwing, said : Physical Education has a literature. Its history is an engaging feature. This study is related to Pulpit and Forensic Oratory, to Plastic Anatomy, to Music, to Histrionic and Mimetic Art ; to Sanitary Science, Anthropology, and so to Ethics. For these reasons, it deserves a thorough, scholarly consideration. The Greeks saw in one's gait the key to character. His '*walk*' and 'conversation' or life, had more than an accidental connection. Plato says that a good soul improves the body, and that he is but a polished clown who takes no interest in gymnastics.

PYTHAGORAS, the philosopher ; Sophocles and Æschylus, the poets ; Epamaminondas, the chieftain, were graceful athletic performers. Roscius, an actor in Cicero's day, had an income of £8,000. In modern times, Rothstein in Germany ; Ling, of Sweden ; Delsarte, of France ; and Guttman, Lewis, and others, of America, have shown the fruitfulness of this science. We may approach the study of Physical Education from many points—that of the drill-master, the artist, the actor, the athlete, the musician, the physician, or the psychologist. The utterances of representative men deserve a permanent record for the perusal of those who are not present. Many years of experience in college and seminary instruction have deepened the conviction of the vital importance of the themes now discussed. The establishment of Normal Classes

is one of the first things aimed at. A committee have also in charge the formulation of uniform methods of measurements. Professor Edward Hitchcock, M.D., of Amherst College, is president, and W. H. Anderson, M.D., of Adelphi Academy, Brooklyn, is secretary.

JAMES J. MADDEN, a gambler, who died lately at Leadville, Col., had the largest brain of any man in America. Dr. McDean, who attended the deceased during his illness, stated that he had a very remarkably-formed head. It was about the average size, with an immense frontal and lateral development. After death the doctor examined the head, and when the brain was removed and weighed, it brought down the scales to $62\frac{1}{2}$ ounces. This is the heaviest brain ever found in America. Daniel Webster's brain weighed $53\frac{1}{2}$ ounces, and Professor Agassiz's $52\frac{1}{4}$ ounces. Dr. McDean ought to have told us something about the man's powers.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

S. H. M. has a favourably-balanced temperament; there is harmony of organization. She is not so highly organized as to go to extremes, yet is sufficiently elevated in tone of mind to strive to be highly intellectual and moral. She should be characterized for general stability of character and circumspection. She has the qualities to give thought, judgment, capacity to lay out work, to have some charge or superintendency. She has a watchful, prudent cast of mind, is rather slow in deciding, but firm, steady, and persevering. She is not in a great hurry to start a new enterprise, but finishes up as she goes along; is quite mindful of all moral obligations, and is not careless in speech or action; is distinctly domestic in her disposition, and capable of adapting herself to any or to all of the relations of domestic life. She has good, practical, common sense, and does not easily forget her experience. She will be more noted for what she does than for what she says. If she fails it will be in not being quite up to the mark in a sharp, showy, off-hand way. Her influences will be uniform, and she will practise what she preaches.

J. D. (Chesterfield) has a strong degree of the vital and mental temperaments; is capable of a great amount of enjoyment, and is very susceptible to internal emotions and external influences; is liable to be highly excited, and at times be much under the control of his feelings. He is well qualified to enjoy life, provided he has not hard, physical labour to perform. His head being high indicates

strong feelings of respect for superiors—strong sympathy and interest in the welfare of others, and a generally well-balanced mind. He is naturally confiding; is liable to trust and to think others more honest than he finds them to be; has scarcely enough circumspection, watchfulness, guardedness, and disposition to postpone answering a question until he has thought it over. He is liable to promise too suddenly, and thus get too many engagements on hand; is domestic in his disposition, and capable of being much interested in others. His pride and ambition are fairly off-set, or balanced, by superior intellectual and moral faculties. He has favourable talents to reason, think, and understand; he also has good conversational talent, and, with suitable practice, could succeed as a speaker. He ought to be interested in some intellectual or moral enterprise, and be before the public; for he requires that kind of stimulus which an audience or public labours would furnish him. His memory of events is not first class. He has powers of analysis and association, and his intuitive perceptions of truth and of results is remarkably good.

E. B. (Chatham).—This Miss is quite original; has wit of her own; says things that belong to her own mind; is entertaining in her style of conversation, and quick to reply to the remarks of others. She is naturally methodical, and capable of doing business systematically. She turns off her work or business with dispatch; knows how to make the most of every minute, and seldom makes mistakes, for she has a wide-awake consciousness of what she is doing; is sharp of observation; has good general intellectual power; is alive to what is going on, and versatile in talent; has no want of taste in art, and appreciates high culture. She is ambitious to do her best, and to be favourably received. Whoever marries her will find a help-meet, and one who will want to be by her husband's side and take an interest in what is going on. She has a marked degree of social energy; is entertaining in company, makes many friends, and has family pride. She has the qualities to be industrious and economical, and is not wanting in pluck and power to defend herself and friends.

P. A. (Bridgend).—This organization indicates industry and earnest purpose, strong desires, and a high ambition; great desire to get reputation and position in society. He feels himself to be older than he really is, because his mind is rather matured for one of his age. His talents are of the practical, definite type, and he is a critic, and wants everything perfect. He has an intuitive mind, and is continually probing subjects, and investigating things, that people of maturer age would generally only think of. He has rather a confiding disposition, and is candid in his ways of speaking and acting, and mild, if not amiable, in his disposition. He could make a literary or a scientific man, and has some talent for financiering and book-keeping, or for navigation and surveying. His wife should be dark in complexion, with large, broad nose, long ears, square chin and forehead; one with a strong hold on life, and coming from

a good sound stock ; should not marry one where there is hereditary delicacy in the family.

P. A. (Bridgend).—This lady has a substantial hold on life, and comes from a family where there are some strong gifts. She is characterized for ardour, earnestness, sincerity, and strength of desire. She is decidedly domestic, affectionate, sympathetic, and respectful ; also industrious, good at planning, and has a marked degree of originality of mind and talent that might be used in music, mechanics, or art.

H. B. (Bath).—You have apparently a strong hold on life, and, under favourable circumstances, could live to a good old age. You are not going to fret your life away ; you are not going to break your back by hard work ; will not give up to very strong states of excitement ; are not naturally impulsive, but very strongly sympathetic, and have a very tender tone of mind. You need more executive power, and more force and pluck. You are rather too candid ; have scarcely enough of the conservative mind to save, lay up, and provide for the future ; have not a selfish type of mind, and do not live for yourself exclusively. You may not mix up with others familiarly, but still are glad to aid others in enjoying themselves. You are more given to intellectual pursuits, and to be regulated by your moral principles, than you are governed by passionate or even social feelings. Your strongest love is to your female friends. You have a desire to travel to gratify your intellect, and can easily interest yourself in a new home. You are adapted to variety of business, for your mind passes from one subject to another easily ; are not very well adapted to business unless it be for somebody else. You could write, teach, and sustain yourself in some professional position where judgment and moral sense are required. You have favourable intuitions of mind, and are rather quick and correct in your judgment of character and perceptions of results.

C. H. R.—Your organization indicates activity, earnestness, sincerity, impressibility, quick perception, and a great desire to consummate your wishes as soon as possible. Your nervous temperament somewhat predominates ; you are uneasy unless you are accomplishing some special end, for you deal in definite ideas. Your spirit is one that would incline to study, and to a profession ; for you cannot plod as a worker, and could scarcely confine yourself to business. If in business, you are adapted to that which brings you as much as possible in contact with society, but you would prefer to be a professional man of some kind. Your talent is artistic and literary ; your ideas come to a focus at once, and you are very intuitive in your perceptions of character and of truth. You are rather too much of a critic ; you forget that the world is not finished yet, and there are many improvements to be made. You want everything first class ; hence you see many things that you object to. You have abilities for a musician, a writer, or an artist, but would prefer to be before an audience, helping to form character, rather than in almost any other sphere. You have an elevated tone of mind, and probably

will never be contented with the advancement you are making, because your spirit is so much in advance of your progress.

M. W. (Leeds) has a predominance of the vital temperament, with a fair amount of the motive and the mental, but is not so particularly nervous, high-keyed, and intense in her mental operations, as she is excitable and impulsive. She has an aspiring mind, is quite ambitious to do her best and to be appreciated. She is amiable, good-natured, good-hearted, open-hearted, and comparatively mild in spirit. She has, however, great firmness, and is generally steady to her purposes, and can resist strong temptations. She is respectful, and has regard for superiors and sacred subjects; is quite kind in her disposition, and has a practical, common-sense kind of intellect. When she finds her real place in life ~~the~~ outside of wedlock—it will be in a hospital, or in connection with some physician, for her influence in that direction would be very serviceable. She is neither cruel, cunning, nor avaricious; but may be excitable, and at times too set in her own way. She bids fair to live long and to enjoy life.

S. K. (Leeds) has strong feelings, and quite a distinct social nature; will appear to the best advantage in the family and domestic circle, or among friends. She is naturally cautious, rather reticent, generally prudent, circumspect, and consistent. She has good conversational talent; is able to entertain company and tell what she knows; is rather imaginative, somewhat absent-minded, and capable of being much interested in emotional subjects; could become quite religious and spiritually inclined if she gave her attention that way. She has not a very strong hold on life—severe labours, hardships, or exposure, would soon test the strength of her constitution; but light work, with pleasant surroundings, would enable her to live to a good old age. She will always do best in connection with others when they will take the responsibility and guide her in her work. She is easy in her manners, readily adapts herself to others, and is pliable in her disposition.

A. H. (Leeds) has a strongly-marked organization; is distinct in character, and comes from a family capable of exerting a distinct influence. She could fill some responsible position; has strength of will, strong sense of character, a penetrating intellect, and an energetic tone of mind. When she has commenced to do, she is quite firm in carrying out her purposes, but not particularly forward in taking responsibilities; is quite sensitive as to the opinions her friends have of her; is particular in forming attachments, but quite devoted when attachments have been formed. She has a strong moral sense, and would find it difficult to go contrary to her moral consciousness; has a spiritual, hopeful, respectful, sympathetic nature; is rather reserved, keeps her own affairs to herself, takes care of her property, and does not easily forgive others who have done wrong to her, unless they ask pardon. She could make a good business woman, a good housekeeper, or learn a trade where it requires an accurate mind and close observation. Such an organization is worth cultivating and putting forward in society; for she is equal to any of the ordinary circumstances of life.

THE Phrenological Magazine.

SEPTEMBER, 1886.

MRS. CLEVELAND.



ACCORDING to her portraits, the newly-wedded wife of Grover Cleveland, the President of the United States, is a woman of more than common unity and strength of organization. She has a good physique, and is capable of wearing well and enjoying life; her head, too, is well formed and well set on her



shoulders. Although her photographs do not enable one to judge decidedly as to the different parts, the head is so full and rounded out that there can hardly be much lack. The occipital, coronal, and intellectual regions are all well represented, indicating good domestic qualities, strong moral and religious tendencies, and a good share of intelligence; indeed, in the latter respect the indications are that she is

considerably above par. The organs that preside over self-preservation are also in force: so that the President's home affairs will be well looked after.

Some of the more striking qualities of her mind are: first, her affection, her devotion, and her quiet domesticity; second, her sense of duty, respect for persons and principles; third, her powers of management, fortitude, and economy; fourth, her sprightliness, wit, youthfulness of disposition and general amiability; fifth, her kindness of heart and sympathy; sixth, her power to talk, give expression to her thoughts and feelings, and to entertain and amuse.

She will be dignified without arrogance; agreeable without condescension; cautious without timidity; careful without parsimony; witty without vulgarity; original without singularity; benevolent without ostentation; religious without bigotry; talkative without volubility; just without severity; ambitious without display; inquisitive without curiosity; romantic without extravagance; proud without vainglory.

She will have a sharp temper, easily controlled; her Hope will be like a pair of strong wings to bear her above petty ills; she will droop for an hour to be gay six; she will be sharp to cause pain, but quicker to apply the salve of a gentle nature; her emulation will be as a strong wind at her back and may carry her sometimes against her will. She will pray with one hand and scatter beneficence with the other; she will find enjoyment in so many different channels that she will hardly find time to gratify all her desires. She will tell as much on the destinies of her country as the President himself.

Frances Folsom, now Mrs. Grover Cleveland, was born in 1864, in Buffalo, N. Y. As a child she attended Mdme. Brecker's French kindergarten. When about eleven years old her father died suddenly by an accident. Mrs. Folsom and Frank, as the girl was called, were at that time in Medina, and after the funeral resided in that place, where Mrs. Harmon, Mrs. Folsom's widowed mother, lived. The Harmon family had a good social position and owned considerable real estate, including milling property.

Returning to Buffalo a few years later, Miss Frank entered the Central School, and she and her mother boarded with Mrs. Jonathan Mayhew. One of the Central School teachers has said of her that Frank learned very rapidly, and seemed to remember equally well, and that she "always put a little of herself into her recitations." While enrolled as a pupil at the Central School her name used often to get transferred to the boys' lists, and so, in order that it should appear less

masculine, she temporarily inserted an initial C in her name. This explains why her name now, sometimes, erroneously appears with that initial. She was a regular attendant of the central Presbyterian church, of which she is a member. Her mother occupied Mrs. R. D. Boyd's house, on Franklin Street, and from there Miss Folsom went to Wells College, at Aurora. Her Central School certificate admitted her to the Sophomore class at Wells College, which she entered, without preliminary examinations, in the middle of the school year. Miss Folsom was a great favourite at Wells College; her tall, commanding figure, frankness, and sincerity, made her the queen of the school. She was graduated from Wells in 1885, her graduating essay taking the form of a story. The hampers of flowers sent to her nearly every week, beginning about the second year of her college life, from the Executive Mansion at Albany, and the particularly abundant supply that came from the White House conservatories when she was graduated, were only one of the many little attentions paid her; the knowledge of which her college mates spread abroad on scattering to their distant homes for the summer vacations, thus exciting much public gossip.

Miss Folsom had always been in the habit of spending her summers in Folsomdale, Wyoming County, two miles out of Cowlesville, at the residence of her late grandfather, Colonel John B. Folsom. It is a typical homestead—a rambling farmhouse set down amid the lovely scenery of the valley. Her mother's income has always been ample for their support, and any extra funds needed were always to be had from the grandfather, or "Papa John," as Frank called him, and whose recent death will make her the heiress of a goodly property.

The lady's character is that of an unspoiled, ingenuous girl, full of self-possession and with too much common sense to be overcome by her sudden elevation. Her chief characteristic is intense loyalty to her mother, who is a charming woman. Her life has had its deeper side; she is old for her years: one of her accomplishments is a rare gift for letter-writing. In dress her taste is very simple. Outside of a very limited circle of intimate friends, she is little acquainted in Buffalo, and had never mingled in society there, because since she was a school-girl she has never spent more than a day or two at a time in Buffalo.

ATTEMPT the end, and never stand in doubt. Nothing's so hard but search will find it out.—HERRICK.

HENRY WARD BEECHER AND PHRENOLOGY.

IT has struck many who have listened to the discourses of the Rev. Henry Ward Beecher, who is at present in this country, that there is something uncommonly phrenological in his philosophy and theology. The quotation given below from his sermon, "Christian Self-Denial," preached in the City Temple, on July 8th, will exemplify our meaning. Mr. Beecher said :—

"I have already alluded to the fact that a man is of a composite nature, and that in the order of time and nature both, he is first an animal ; and of all animals the latest in coming to himself. For there is nothing in all the earth so far from himself as a human being when he is first born, with eyes that cannot see, ears that cannot hear, hands that cannot feel, feet that cannot walk ; whatever there may be potential in him undeveloped ; he is a mere sucking animal, and that at the lowest. The fly is a full fly in a minute ; a colt is a full colt in less than a week ; a calf comes to itself very soon—it has not got a great way to travel—but a man has to travel a great way before he finds himself. He begins at the bottom, at zero, and gradually attaches figures that give value to the zero on the way up. The things that are necessary for the animal life of a being in the material globe are very strong in him, as they must needs be, and so comes the nourishing appetites that may easily be perverted into gluttonousness and drunkenness ; also the protective elements, which defend him against aggression, as if they brought out in each individual the condition of human society when all were savage, and every man's life depended upon his power of defending himself ; combative, destructive, with a sense of his own personal worth and dignity, which we now call pride, but which towered up in the early days as that element of selfishness which it was his duty to defend in life. We are born animals, but not far along on the way we find beginning the buds of something more beautiful and noble than the animal, and they break out into fragrance and affection in the soul. After a time, if these be cherished, they rise from the mere domestic realm of personal relation into larger affection—into goodwill and benevolence ; the man rises from instinct to intelligence, from intelligence in accepting the things obvious to the senses ; the percipient intelligence into reflective intelligence ; and then, by thought, he ranges from the throne itself to the footstool, back and forth, with ever-widening circuits. Then we find that there is developed in those that still grow, liberty not restrained

by philosophy, or by anything of that kind ; but men that have an inspiration to develope come to the spiritual^a element ; and as all below that had cognizance of things seen, as all truth had to come below that to the sensuous man—to the ear, to the eye, to the taste, to the hand, to form, and to visibility—so we come to the realm in which the invisible predominates, and we become the creators there, and fashion things not only after the manner of their combinations among us, but higher than that ; we enter the realm of faith—the great realm of imagination which, when it is sanctified in religious use, we call faith, but which is a gift of God in all its shapes and forms. Already, while our roots are in the soil, our top moves in the great realm of faith, and we have the power given us somewhat of God Himself ; and we go forth, touching with colour, with proportion, with all quality, the things that are not real, but are more real than things that are real.

“Now, in this great multiplicity of constitution, to which I have given but the barest thought in this richness of faculty, there is, of course, a great contention which part shall govern. As in every commonwealth there must be an upper, and middle, and lower, so it is in the commonwealth of of the human soul.”

It is no secret that Mr. Beecher is a proved and confessed phrenologist. In his book, entitled “Forty Years in Phrenology,” Mr. Nelson Sizer, after referring to Dr. Spurzheim’s visit to America in 1832, goes on to say :—

“The subject of phrenology was discussed in the newspapers pro and con ; students in colleges selected it as a topic of debate, because, as they thought, it would furnish abundant material for the play of their powers of wit and ridicule.

“In Amherst College it was sought to give it the *quietus* in such a debate ; and, to do it most effectually, Henry Ward Beecher, then a student there, was allotted the side in the debate which was to settle the new subject for ever. On the question, ‘Is Phrenology entitled to the name of Science?’ Beecher was placed as a disputant on the negative, because it was thought his wit and oratory would do the work, and at the same time furnish infinite merriment.

“When he came to prepare for the debate he found he needed to know something about the subject in controversy ; that a hollow laugh about bumps, which might pass as wit on the campus, would not answer in a serious debate. Therefore he wisely resolved to send by stage to Boston for the works of Spurzheim and Coombe, so that he might be

informed as to the claims of the so-called science which his wit and skill were expected to demolish. The books came, and the ardent youth launched into their contents, and soon found he had been assigned to a task he was unable to perform. He sought, and obtained, an adjournment of the debate for two weeks; at the end of which he made one of the ablest speeches he had ever been heard to utter—not against, but in favour of the science. His classmates and the faculty—for the interest had brought out the whole college and the cream of the town—were amazed, and the subject was permitted to go by default. The negative was vanquished, and Beecher was triumphant. After the debate, Beecher asked a classmate who had expressed much interest in the subject: ‘Fowler, would you like to read my phrenological works?’ ‘Yes, indeed,’ was the eager reply; and thus the name of Fowler and phrenology then and there became wedded.

“In speaking with me on this subject many years ago, Mr. Beecher said he did not know of any better use he could make of these books, which he still possessed, than to present them to the New York Phrenological Establishment as the germ of practical phrenology in America.

“Mr. Beecher has wonderful genius in handling any subject which he undertakes to set forth; but his chief ability is manifested in his sermons and in his lectures, where talent and character and disposition are the theme of discourse. In such a field his knowledge of phrenology is the key to his power over men, for then he talks direct to faculty; and as he rapidly goes

‘From grave to gay, from lively to severe’

men feel touched in their strongest or weakest points, and seem to think he knows them through and through. The late Samuel R. Wells once asked Mr. Beecher, ‘What advantage he had derived from a knowledge of phrenology as a preacher?’ The answer was instant and characteristic, and in substance as follows:—

“‘If I were the owner of an island in mid-ocean, and had all books, apparatus, and appliances; tools to cultivate the soil, manufacture, cook, and carry on life’s affairs in comfort and refinement, and some dark night pirates should come and burn my books, musical instruments, works of art, furniture, tools, and machinery, and leave me the land and the empty barns and house, I should be, in respect to the successful carrying on of my affairs, in very much the same plight that I should be as a preacher if phrenology and all

that it has taught me of man—his character, his wants, and his improvements—were blotted from my mind.’

“We have heard him speak quite as strongly in favour of the subject in his pulpit, perhaps twenty times, and the keenest of his expositions of character have phrenology as a basis, though the general listener might not notice it.”

THE METAPHYSICS OF EVIDENCE.

How is it that those who accept only that which is evidenced by reason or science are often men of great intellectual calibre?

Darwinism, evolution, the principle of the conservation of energy, all rest on these two kinds of evidence, and in all ages some great intellects and leaders of thought have accorded belief to that alone which can be demonstrated to the reason or the senses.

Men in whom the intellect predominates over the other faculties are just those who think and investigate for themselves. That it does so predominate leads them to seek intellectual and scientific evidence in preference to any other, and to place the highest value upon it. The scientific mind looks for scientific evidence. Those faculties which constitute the scientific mind being predominant, no other proof seems so certain and positive. On the other hand, the mind in which the reason predominates considers logical evidence the strongest and clearest. If a subject does not admit of logical or scientific proof, or if the strongest adducible evidence for it is of a different kind, these two orders of mind regard it as untrustworthy. The great men of intellect or science often take small cognizance of intuitive, or what may be called internal evidence, that of the mind itself; they cannot apprehend it, for it is not capable of demonstration, like that of the reason or the senses; whereas, to the mind strongly intuitive, it naturally seems the most conclusive of all. The fact is, evidence *appears* strong in proportion as the mind has affinity for it. In *reality* no particular kind is essentially stronger than any other. The proof of which strong predominant faculties take cognizance *is* strong as far as the mind to which these faculties belong is concerned, and the proof for which that mind has no affinity for it *is* weak or non-existent. No form of evidence is independent of all other; that of reason rests on that of the senses: the latter supplies the data for argument; the evidence of intuition rests on both the others. It may seem to originate in the mind itself and to be independent of the senses and of reason;

but this is not entirely the case, for although intuition itself is a faculty or capacity for impression, the form which that impression takes is doubtless the result of previous observation and reflection. Neither does one form of proof seem to be less fallible than another. Nothing could have appeared more certainly evidenced to the senses than that the earth is fixed and immovable, yet Galileo, by the aid of science and reason, proved its revolution.

One of the principal arguments for the Darwinian theory is that furnished by the fossil remains: that they are of less and less complexity of structure in proportion to the depth of the strata in the sedimentary rocks in which they are found. The fact is proved, the inference drawn from it,—that of evolution is in harmony with geological science as at present understood; but should fresh scientific discovery in this department of knowledge by any possibility ascribe the position of the fossils in the rocks to quite other cause than the age of the world in which they existed, fossilism would no longer form part of this “Great Induction.”

In all ages men seem to have had intuition of the existence of some Superior Being, Governor of the Universe. The intuition may have been correct, but the form which it took, being supplied by the rest of the mind as a whole, has depended in each case on the condition of all these elements which contribute to the constitution of mind, heredity, education, or tradition environment. Obviously in many cases this intuition must have led to wrong conclusions. Time produces more and more evidence; man pronounces ever fresh judgments. How can they be absolute and final while as yet the whole case is not before him?

CHARLOTTE HELLMANN.

THE IMAGINATION OF CHILDREN.

THE RESULT OF TRAINING IT JUDICIOUSLY.

THE imagination of a child is generally both lively and vigorous. In every passing object he sees something worthy of comment, something similar to something he has seen before. The stronger his powers of observation, the more vivid his imagination will always be. He may not comprehend fully all that is spoken around him, but, nevertheless, all that he hears he treasures up in his restless little mind to grow and amplify until an opportunity, always unexpected, arrives, when he dispossesses himself of it, generally in a sudden, forcible, and frequently very appropriate manner.

This imagination, which all children possess in a greater or lesser degree, may ultimately become a faculty capable of procuring the most intense joy and pleasure both to themselves and others, and it may prove a curse.

Once, some years ago, a lady friend of the writer's was bewailing to another lady, a clergyman's widow with a large family of her own, the fact that her little boy was in the habit of telling lies. He was a little fellow of five, bright, vivacious, loving, but he never returned from a walk without having some absolutely impossible story to relate, in which he and his companions were involved. His lies, so far, were harmless, but his mother grieved to think to what end he might put the habit when a little older, and capable of judging between truth and untruth.

The clergyman's widow's reply was the text of this article. "Do not be worried; the lad has a very vivid imagination. What he tells you has happened has actually occurred *in his fancy*. Do not let him know that he is telling untruths; rather cultivate the noble gift he possesses, teaching him that it is in his thoughts only those things take place, but that their recital may indeed be made useful and entertaining *lessons* to himself and others."

"How can I teach him that without accusing him of falsehood?" asked the mother.

"By deducting the true from the false, the fact from the fiction; by showing him the beauty of the one, the fleeting, though fascinating, charm of the other."

These, then, are the objects to be attained in cultivating a child's imagination. To show it the beauty and advantage of truth in all things first; and the best way to achieve this result is by personal example. Make the consequences of personal deviation from veracity known and understood by the child; strive to make it comprehend also the satisfaction and happiness which always follow the path of truth. Represent to the child the charms of fiction in their real condition, unnecessary, fleeting, though full of temporary fascination and joy.

If there is any pleasure to be derived from fiction, and surely no one in this age of imagination will deny it, certainly it is better that the thoughts which direct the mind in the invention or fabrication of such should be taught to imbue it with some lesson useful or advantageous to the rest of humanity.

If this be granted, then it must also be allowed that it is not wise, or right even, to stunt the imagination, nor to teach its possessor that to exercise it is a sin. On the contrary, it

appears to be both duty and wisdom to nourish and cultivate a gift that may, by proper employment, be put to such noble and useful service as the inculcation of great moral, and even spiritual, lessons to the rest of one's fellow-creatures.

Thus the poet, thus the philosopher, thus the novelist, each in his own peculiar way, and after his own particular method, makes the creation of his brain the medium, the instrument by which he endeavours to teach some more or less forcible, more or less admirable, more or less beneficial, *truth*.

The first efforts of imagination that are seen in a child are always very beautiful and striking. They have invariably some reference to that deep well of affection, springing in all human hearts, for their parents. The child's first word is usually "mamma," its first coherent action one of reciprocity towards its mother's caresses.

If it had no imagination, how could it feel or express this reciprocity? Would it not in all probability turn with equal joy to every stranger who addresses it in tones of kindness? The quick intuition which leads it to regard certain creatures (human, animal, or inanimate) as friends, is derived from its facile imagination, which teaches it to connect certain signs with certain results, to comment upon special appearances and events, and deduct consequences from their impressions. Later, when the power of speech reduces the necessity for silent speculation to a minimum, the ideas find expression in words, which are unconsciously the enunciations of an uncultivated, simple, naked imagination.

It would be obviously unjust to designate these untrained efforts at idealism untruths, or to punish their innocent promulgator for lying. Rather give the young fancy some food upon which to fatten, some nourishment upon which to grow rich and productive.

For this purpose there are innumerable books whose contents are well within the comprehension of the youngest, and, with the immense catalogue from which to select, the choice of material for early instruction ought not to be very difficult. It is, however, not so easy as it appears. The more fertile the child's idealism, the quicker he is to weary of very juvenile works—that is to say, with the literary portion thereof. He soon tires of hearing the same story over and over again. It is then that the first effort at training the adolescent fancy into self-directing channels should be begun. The pictures in all story-books contain many stories beside the one they are intended to illustrate. The child should be encouraged to find out these unwritten romances, and to

express them in his own words. A habit would thus be engendered of creating original narratives, of connecting thoughts, of defining ideas and illustrating opinions.

The education of the eye is an important branch in the cultivation of the imagination. Form, size, colour, number, even capacity, may all be calculated to a nicety with practice, and the habit of making such computations cannot be too early implanted in the juvenile mind. Object lessons are therefore of the greatest use, and the child should betimes be taught to notice and remark upon all, even the simplest, things it sees.

An article treating of the training of the imagination would be very incomplete without some reference to the memory, without which the most vivid, the most brilliant imagination would be of no more utility to its possessor than are the delightful dreams of a heavy sleeper, which pass into the realms of oblivion so soon as he awakes, and would possess no more stability than volumes written in sand or sawdust. The memory must, therefore, receive as much cultivation as the imagination itself; all that the child sees, notices, remarks upon, all its opinions, ideas, thoughts, narratives, being treasured up in the parental mind, and referred to upon occasions, in order to induce the young memory to recall such matters, and to weave around them the magic and joyous spell which renewed thought gives to all pleasant and happy recollection.

Then comes the next step in the shape of more advanced literature, taking the form of history, biography, travel, adventure. Here again the child's mind should undergo a further education by being incited to ask questions, argue points, inquire into possibilities.

Perhaps Germany has produced more imaginative and deeply-thoughtful minds than any other country, and this can hardly cause surprise to any who know that "The Swiss Family Robinson" and "Willis, the Pilot" do not detail the manners of life of any phenomenal or uncommon families. The children of Germany are all brought up to ask their parents or guardians for elucidation on any subject which to them appears incomprehensible, and to express their opinions (with a due amount of deference, of course) on all matters to which they have given any consideration. The result is that, even supposing no other consequence is attained, the parent gradually, and by imperceptible degrees, merges from the respected preceptor and guide into the beloved friend and fellow-student, whose society is always a source of delight, whose companionship is ever sought and requested, never

wearied of, or neglected, for the pursuit of more attractive, but at the same time, more evanescent and less beneficial associations.

To gain this end should surely be the aim of all parents, and there can be no doubt that the proper education and cultivation of the child's imagination, and imaginative perception and power, is one of the great agents towards the fulfilment of so laudable and admirable an ambition. To be a child's "guide, philosopher, and friend," is surely the parent's chiefest desire; then let the training of the child be such, that no other person can satisfactorily hold that position in his regard, esteem, and love as his parent, and the aim will most assuredly be achieved.

T. L. ROBINSON, in *The Housewife*.

PHRENOLOGY FOR CHILDREN.

FRIENDSHIP.

(a) Definition.—(b) Locality.—(c) In what way do children show strong Friendship?—(d) What is the result when persons have very little of this faculty?—(e) How must we cultivate and restrain it?—(f) How do animals show Friendship?

(a) Friendship is the faculty which gives us the inclination to form attachments for special persons whom we call friends. It makes us desirous of being in their society and of having them constantly near us.

(b) This faculty is located on both sides of the back head, just above and outward from Philoprogenitiveness.

(c) The natural language of Friendship is shown by some children in their actions; some by their word, some by their eyes, some by the shake of the hand. Sometimes you see together two girls, and two boys walking arm in arm, and sometimes a little girl and boy, each couple being ardently attached to one another; while many become so exclusively friendly with one particular mate, that they never enjoy going anywhere half so much if he or she—as the case may be—is not also asked. Sometimes this kind of friendship makes matters very awkward for those who cannot ask two where only one is wanted to make up the number in a pleasure boat, at the tea-table, or a seat in a carriage for a drive. And little children who have large Friendship are a little unreasonable when they pout, cry, and refuse to go anywhere when they find their friend is not to be invited. Some show this faculty to be so strongly developed that attach-

ments early formed remain through life. Business partnerships are often made with friends who have proved themselves friends in need. We know of one lady teacher who left a good position in a first-rate college because her bosom friend was obliged to leave; and as they had always taught together they did not mean to be separated. They afterwards took two more situations as teachers in another school. When you boys and girls grow older, you will settle down in homes of your own, and some of you will go to localities where friends live to gratify this faculty. The same is true of new districts and countries, people have banded themselves together to explore wild and uncultured parts, and have clung to one another tenaciously. The members of that noble party who sailed away with Columbus in 1492, you remember, must have shown a wonderful amount of friendship and strength of attachment toward each other to thus venture across the seas to an unknown land. Then, what beautiful biblical examples of friendship we have in David and Jonathan, Paul and Barnabas, and Ruth and Naomi! Such friendships often cost much anxiety and pain, but they also yield intense joy and happiness, and mutual help. Therefore, continue, children, to form good friendships, but at the same time strive not to be selfish over them.

(d) Some children have the upper part of this faculty fully developed, while the lower part giving constancy to one friend is small, who make acquaintances easily, but have no one in whom they can confide or call a friend. They simply make passing attachments for those whom they care nothing about when they are away from them. They would never grieve were they to see them no more; for they say, "There are more people in the world who are just as nice, and what is the use of making friendships which take so much time to keep up?" Although this faculty needs to be under the control of other faculties, it is better to have too much than not any. How cold-hearted you would be if at your school recesses you went away by yourselves and entered into no games with others, but all had skipping-ropes or played your own game separately; how much fun, enjoyment, and social intercourse you would lose! Just fancy what the world would be without a fully developed organ of Friendship! Our home lives would be very different. We should, in that case, feel no inclination to form societies for mutual improvement, for we should all try the plan of working out our own improvement by ourselves; and should have no cricket, boating, tennis, or debating clubs; bands of hope, sewing circles, or home benefit evenings.

(*e*) Some feel intuitively drawn into society, and such have large Friendship; others only like social intercourse when Inhabitiveness can be gratified, and they can invite their friends to their homes. Others again have very small Friendship, and are never particularly social unless drawn into company, and then they sit in the corner.

(*f*) Notice this quality in birds, ducks, bees, sheep, beavers, dogs, and other kinds of animals. You all know how amusing it is to see birds flying in large numbers across the country to their winter quarters, or to watch bees swarm by thousands, or see chickens scratch together, and ducks follow each other in dignified succession along the road-side. I knew of one family of ducks which daily travelled miles in this processional style. Friends noticed them when walking over the moors on the main road, but they never saw a solitary duck travel alone, but always a number together. Sheep also flock together in the fields; dogs, however, are more intelligent, sagacious, friendly, and companionable, and show their friendship to man rather than for mates of their own species. Doubtless, we could all relate in our own experiences, stories about Bobbys as loving and devoted as was the Gray Friars'. It is wonderful how true to phrenological development animal's skulls are found to be when carefully examined.

INHABITIVENESS.

(*a*) Definition.—(*b*) Location.—(*c*) What faculty causes children to be homesick when they are away at school?—(*d*) What faculty enables people to settle and remain in the same locality, and dwell in the same house year by year?—(*e*) When Inhabitiveness is deficient what characteristics are noticeable?—(*f*) What nations show less of this faculty of Inhabitiveness than others?—(*g*) What combination of faculties gives the exploring talent?

(*a*) The faculty of Inhabitiveness gives the instinct in the mind for attachment to home, place, locality, country, and an unwillingness to change one's abode.

(*b*) Inhabitiveness is located directly above Parental Love, below Continuity, and between the two organs of Friendship.

(*c*) It is Inhabitiveness which gives children a home-sick feeling, when they go from home to join their schoolmates. There is a great difference in children: some take days and even weeks to settle down to school habits, while others feel at home at once and merrily strive to relieve the drooping spirits of their comrades. Then what an excitement there is when the school-term ends and Inhabitiveness is actively engaged thinking of the oft quoted line, "Home for the holidays, here we go." When at home again, the children

wander over every room in the house, every old familiar walk along the country lanes, every stile across the cornfields, and down the shady avenues to bring back sweet recollections, and to discern every change. Many go to Germany and France, and are away from home several years; yet they do not forget the happy days they spent in their childhood, in the old familiar tree where the hammock hung, as well as in many other ways; and by their imagination they again live through their early home life. Home to them contains all the old charm. Distance and separation make no difference; and this sentiment will remain with them through life, or so long as their Inhabitiveness remains actively exercised. Such children want their own sides of the bed, their pegs in the hall, their drawers, etc.

(*d*) It is Inhabitiveness that enables people to settle down and localise interest and build up wild and uncultivated parts. A man will pride himself that his present dwelling belonged to his father and grandfather, and further intimates his intention of ending his days there. It is beautiful to listen to an old man as he relates to his surrounding grandchildren curious stories about the dear old-fashioned homestead. How much pleasure he takes, too, in looking at the low gabled stories, the small window-panes, and the garden with its old-fashioned flowers! With large Inhabitiveness, what a warmth of affection parents show in having all their family at home at certain festivities!

(*e*) When we find but a small development of Inhabitiveness we know such people will be characterized for a love of change, a desire to rove from place to place, without feeling any twinge of regret on leaving. They never know the home feeling which makes another person with large Inhabitiveness live within a certain radius all his life.

(*f*) Some nations show this disposition to wander more than others: such as the gipsies and some Indian tribes.

(*g*) With small Inhabitiveness and large Locality persons show a wonderful inclination for exploring. Capt. Cook, Columbus, Livingstone, and Stanley, all possessed this combination.

CONCENTRATIVENESS OR CONTINUITY.

(*a*) Definition.—(*b*) Location.—(*c*) How do children show Continuity when large?—(*d*) How do children show a want of it?—(*e*) Why is it necessary to cultivate Continuity?—(*f*) How must it be cultivated and restrained?—(*g*) Does it help the other faculties?—(*h*) What do we learn from the social group as a whole?

(*a*) Concentrativeness or Continuity is the faculty which

gives connectedness of thought and feeling, and inclination to fix the mind upon one subject until it is finished.

(*b*) This faculty is situated above Inhabitiveness and below Self-Esteem.

(*c*) Some children have this faculty very fully developed, so much so that they easily become absorbed in what they are doing and dislike to be called off. Some boys become so deeply interested in chemistry that they lose consciousness of what is going on around them. Some go fishing and sit and watch their line for hours, yet they cannot be persuaded to give up their pursuit; some sit down and read a story-book, and they, too, become so absorbed that they forget all about what they were asked to do in the morning for mother. Some show their Continuity in making wonderful and beautiful collections of butterflies, and geological and botanical specimens.

(*d*) We have found more children who have to cultivate Continuity than restrain it. Some children cannot get on with their lessons at school, because they say they are too difficult, when a little application would overcome the hard points at once. One little boy named Robbie could not learn his history lesson, the dates of the battles would not stay in his mind; his teacher came up behind him, and asked him how he was getting on? "Oh, sir, not at all well; I forget the dates and the generals' names as soon as I have learned them." "Well, Robbie, my lad, I can tell you the reason. All the time you ought to have been studying your lesson, your mind and attention have been out of doors in yonder field where the boy is flying his kite. You could tell me perfectly all about the attempts he has made to clear his kite and keep it up, but your lesson has been neglected. There still remains ten minutes before recess; let me see how much you can learn in that time, and then you can devote half an hour to flying your own kite, and to enjoying yourself heartily." The secret is thus told, how children, by allowing their minds to wander first from one thing then to another, fail to accomplish anything that is worth much. Lucy was a clever child, a very clever girl, and her parents were justly proud of her; but her greatest fault was, she would not settle her mind to do anything for long. She became passionately fond of drawing when she was eight years old, and was not satisfied until she had a drawing board and some hard and soft pencils. About two years after, she had gone far enough with drawing to find out that it would require years of study with all her genius to make herself proficient in it. She then began to take music

lessons, and got on remarkably well for several years, then gave it up; she got tired of practising her exercises, and she found she could not play her pieces without, so thought she would begin fancy work. She bought her silks and wools and began her work, but she found it required so much application, she wearied of it; and as all the girls were learning singing she wanted to begin; so she took singing lessons of the best master in the town of S. She persevered for a time, but the same difficulty met her here; a want of application made her interest flag, though many said she might have made a very successful singer. Her friends urged her to continue her practising, but her mind was wandering yet after some ideal work in which she could use her talents without putting forth much industry; and she will never find it.

(e) It is necessary to cultivate this faculty of Continuity when small or inactive, because spasmodic effort even when accompanied by genius fails in the long run to accomplish such good work as when done by consecutive effort, by a steady hand, and persevering eye. The builder with his bricks and clay, the painter with his colours, the architect with his designs, have all to go steadily through a certain amount of drudgery. A writer in penning page after page of his book, a musician in practising his voice and fingers, a professional man in pursuit of knowledge, must all have application of mind in order to raise themselves above the mediocre school.

(f) A happy medium is what is wanted, and what must be striven for. Without its help we can do nothing truly great; for without it one is apt to begin too many things, as Lucy did, join too many societies, read only the short paragraphs in the papers, and send too many telegraphic messages in the place of letters. But with it to an extreme, persons often become a bore in society by dwelling on one subject all the evening, or on one sorrow, or one loss in business; so that we must cultivate and restrain it by watching its workings upon the character.

(g) It helps nearly every other faculty of the mind in some way. It greatly assists Eventuality and Form, to remember the consecutive spelling of long and difficult words; it aids Order, Causality, and Acquisitiveness especially.

(h) We have now come to the close of the social group. Think a minute, children, over what you have learned from these six faculties. First of all you found that there was a faculty that corresponds to the love that springs up in your hearts for one another; then, one that gives a clinging devo-

tion between a husband and wife and makes them leave everything to live for each other; that there is another faculty that makes a mother sacrifice a great deal for the sake of her children, especially when they are too young to do anything in return; that another faculty draws friends together by a strong bond of attachment; and that joined to these we learn to cherish home, the family circle, and all that makes its memory dear; and also that we are consecutive in our thoughts and continuous in our plans, our work, and our affections. We must cultivate these faculties aright, and allow them to be the foundation of all the other faculties, and life will be a source of joy, and homes will be made happy and bright.

CHOICE OF PURSUITS.

IT must always be a matter of anxiety to parents, especially to those proud of their family, and anxious for the future welfare and happiness of their children, what to do with their boys—lads so varied in character, disposition, and talents, or no talents; with their girls, who may be gifted, sober, shallow-minded, or showy. The parents' greatest anxiety is about the boys; the girls may marry, and if they don't, they will find their level in some capacity. But what about the boys? In time they must leave school, go out into the world, as their father has done before them, and become bread-winners. But bread-winners at what? Their father, perhaps, was not a successful man, and has himself more than once confessed "that he thoroughly disliked his business, and were it not for force of circumstances, etc., he would gladly change it for some other, if he could, in which he would feel more at home. In fact, it was a mistake altogether—his uncle was in the line, and his mother was glad to get him into something—but himself, his fitness or willingness was never consulted. If he had only been put to a business for which he was adapted, both himself and his wife and family would have been spared much misery, heart-burnings, temper, and not a little of their hard struggling to make both ends meet." Such indeed is the story too often told, not only in this supposed case, but in the family life of many. Parents remain perplexed as to what they will do with their boys until they drift off into the ocean of tempest and struggle—some to float and others sink beyond the notice or attention of the busy many around them. Some, by accident or other fortuitous circumstances, are happily placed; while others, with disappointed hopes, heart-broken and wasted lives, tread

a mediocre round ; and the remainder sink and become the criminal, the hopeless, or the useless—unfortunate creatures, “never doing nuthin’ right,” “always in the way,” round pegs in square holes, valueless, occupying places which by right of ability and fitness belonged to others ; while they—these unfortunates in the choice of pursuits—had they any choice, might have been fortunate too.

Some parents are not only anxious for their children’s future welfare, but they are ambitious—they aim at having gentility, respectability, and as little work as possible in the future occupation of their sons—converting thereby what might have been a successful farmer into a pulpit drone, a thrifty tradesman into a paper-collar nonentity. In July, three years ago, a lady in Rothsay was disgusted with me when I suggested her bright-eyed lad, of 14, would make a capital engineer. “His father was an engineer,” she said, “and had been fairly prosperous in his business, and now she had determined to give her son an education and make a gentleman of him.” I endeavoured to show her “to be a man and an engineer would not prevent him being a gentleman.” The last three years have proved abundantly that her method of making a gentleman of him has been a total failure. How many ministers have we who are not preachers ? and how many preachers have we who are not men ? and how many men have we who would have made excellent ministers and preachers whose lights are obscured at the bench, the vice, or, worse still, selling tape at a penny a yard ? Here stop ; questions do little good. The answers, were we to record some, would be very funny indeed were they not painful—showing plainly, although there are “pursuits” innumerable, there has been no “choice.” Chance, necessity, or fortuitous events were the only advisers or arbiters.

Most persons are obliged to employ themselves, or seek out a suitable employment, in order to support themselves or those dependent upon them. Different employments require diversity of talent, tact, strength, brains, and constitution. It becomes a matter of great concern—present and future—to all who would become bread-winners—the selection of the employment, business, or profession best suited to their organization and gifts—*i.e.*, natural talents and physical constitution—so as to obtain the largest amount of success with the least friction of mind and body, and most advantageous to personal welfare and that of the community. People are misplaced, and in the majority of cases the parents are responsible for the misplacement and its consequent misery. There is no choice of pursuits, or this is a specimen of it :—

“Martin Smith’s son Bill got on first-rate at Allslops & Co., chemical beermakers. I’ll make a brewer of my John.” So John, without further ado, is packed off to live with some relative, to learn the poison-beverage business at Messrs Brass & Co., to his utter moral, mental, and hygienic degradation. He might have made a good chemist, but, lacking the constitutional strength requisite for a brewer, he was misplaced, overworked, depressed, exhausted, disappointed, took stimulants; and then, his story is only a type of too many others.

Parents select for their children professions or pursuits that are easy, respectable, or money-making, without stopping to inquire whether by instruction, by mental development, by habits of character, there is an adaptation to the business adopted; one who should be a jeweller is made a blacksmith, one who should be a carpenter is made a tailor, and one who should be employed as a blacksmith is sometimes made a draper’s clerk. Now, the value of phrenology is this, that in the study of the temperaments and phrenological developments parents may know unerringly the leading characteristics of each boy, so that they may direct him to the right trade or pursuit, where he can exercise his natural faculties and physical endowments to the best advantage. By doing so, parents conduce to the health, well-being, cheerfulness, moral worth, and manliness of the lads. Is not such a choice of pursuits worthy of consideration? Lads with a fitness for mechanical pursuits are never narrow-headed or of a slim and nervous build. The lad for engineering, building, etc., should have a firm constitution—be wiry, well-built, of a strong temperament—having therefore endurance and physical stamina. His head should be well set on his neck—broad between the ears and full across the temples, and prominent in the perceptive. He would then have stamina to endure hardship and physical toil; Executiveness, to give energy and go; Combativeness, to give pluck; Destructiveness, to break to pieces; Constructiveness, to put together; Ideality, Sublimity, to give invention, taste, and mechanical ingenuity; and a fair amount of Secretiveness, Acquisitiveness, and Cautiousness, to give tact, management, to devise ways and means. It would be cruelty to make a clerk of such a lad.

The business lad need not have such a broad head or robust organization; he may be built on finer lines if you like; possess greater activity and emotion. Everything about him should indicate agility, alertness, promptitude. Fulness of the eye, width and prominence of the brow, will indicate large Language and keenness of observation; eye for details,

with large perceptive, and a full forehead, practical knowledge and general planning ability ; while his Language will help him to express himself fluently and effectively. His Destructiveness, Combativeness, and Approbateness should make him energetic and enterprising. Pleasant in manner, desirous of approval and winning confidence, with a fair appreciation for "the root of all evil," he is likely to make headway as a business man.

The professional lad's head may be even less in width than the last, and considerably so than the first. He requires Firmness and Continuity rather than Destructiveness and a strong physique to get through the world. Length of face as compared with width, classical outlines, delicacy of structure, and natural refinement mark the exterior of the scholar and professional man—the prize-taker at school or the book-worm of after-life.

Brevity of space compels my remarks to close. In a word, let each lad be placed in just that position of life for which he is best adapted—the mechanical youth in engineering pursuits, or in such mercantile undertakings dealing with articles of a mechanical constructive character. The business lad, in banking, insurance, or general commercial business ; and the professional lad, for the pulpit or bar, as the case may be—each in his right place—and then there will be no wrecked lives, no wasted endings which had bad beginnings. Life is too short to make mistakes in starting ; hence the value of a judicious choice of pursuits. J. COATES.

TALENTS : HID, BURIED, AND LOST.

A FORTUNE hid in a secret drawer or tucked away in a hole in the wall does not increase in value. Some bury their talents by not using them, others hide them in walls of ignorance, or in secret walls of idleness and inattention ; some bury them by beginning life wrong. They turn their talents into the wrong channel ; they eat the pie first and the cold meat last ; they crowd all their joys and pleasures into their impulsive age, and spend their last days in sad reflections and bitter experience and drinking the dregs of the cup of pleasure.

Boys and girls try to be men and women long before they are such, and fate themselves in love matters long before they have the judgment to guide them, and become prodigals by giving away vital power and mental energy long before they have any to spare ; they learn to violate the laws of their being before they learn to obey. Government should see

that all persons are educated so as to know when they are violating the laws of their being as well as how to obey them. Men ought to be better employed than fighting against disease, trying to cure dyspepsia, earning money to pay doctors' bills, and in losing time trying to get well. The uncultivated children of nature have good teeth and stomachs; civilized and christianized people ought to have.

Much talent is buried in earning money to pay for extravagant weddings and funerals: a man attends the funeral of his talents when he becomes a drunkard and smothers them when he is a glutton. A prodigal plays ducks and drakes with his talents, while a libertine burns up his; a gambler throws away his; a coquette misapplies hers; a miser pinches, starves, and freezes his.

A purely worldly-minded man fails to use the best part of his nature; the man who devotes himself exclusively to books leaves out in the cold two-thirds of his. As some people whittle away more of their pencil in sharpening it than they do in using it, so fashionable people exhaust more vitality in trying to enjoy artificial life than they do in living a natural one or an honest, straightforward one. A proud, cold-hearted man, all absorbed in himself, who has no love for the rest of mankind, is like one who is dying of thirst with an uncorked bottle of water by his side; much of his talents is lost to himself and the world. A man who lives in a cave like the monk who tried to serve his God by prayers and meditations, trying to live on three figs a day, using no water to drink or wash with, and then boasted that he had not seen a woman for twenty-eight years, is like a man trying to do good among children with a raised stick, a sour-looking face, a harsh voice, rough manners, and repulsive actions, with no gifts to bestow and never going where charities are wanted.

To use one class of faculties all the time and another not at all, makes a person one-sided, like a vase with a handle on one side only; or like the housekeeper living in only one room in the home, and neglecting all the others. A man who cultivates his mind at the expense of his body is like a skeleton church with a splendid steeple, a chime of bells, and a clock to tell the time, but no seats or other accommodation for a congregation. A man who devotes himself to his body alone and entirely neglects his mind, is like a house with a good foundation, good walls, and the various apartments well furnished, but with no ceiling to the rooms or roof to the house.

As we ought to use this world and not abuse it, so much the more ought we to use ourselves without abuse; for all

kinds of self-abuse leads to the hiding of more or less talent. A man who has energised all parts of his body and waked up and rightly directed all his powers of mind, is like the man who has converted his two talents into four, or his five talents into ten. The small-minded, contracted, suspicious, jealous, fault-finding man will hide his talents behind a grumbling, envious spirit, where more vitality is wasted in violating the laws of life than is spent in obeying those laws. Some talents are not only hidden but wasted. Where more time is wasted in doing wrong than in doing right, talents are both hidden and lost. Where more strength is used in fighting than in working, talents are thrown away.

Talents are not fully and rightly used when love is confined only to the world and the flesh ; where acquisitions are only material ; where hopes are only worldly ; where faith is only in man ; where the tongue is only used for slander and the hands to carry deadly weapons, and the feet are to go astray or to kick with.

Some talents are worse than buried : they are so when men are too stingy to be happy ; too cautious to act ; too diffident to say pleasant things ; too reserved to speak at all ; too mean to give to the needy that which it would be a relief to get rid of, or too proud to carry bread to the starving. These are worse than buried. Talents are badly used where portions of the mind become morbid from over-action, and other portions become idiotic for want of use. Some talents are hidden, some wasted and thrown away, when men shorten their lives one-half or two-thirds by fast or reckless living.

When we have both dyspepsia and poor teeth to eat with we have a shovel to bury some of our talents and a grave to cover others. To die of consumption indicates that somebody has been in too great a hurry ; to see short, small graves indicates that talents have been prematurely buried. When a man has spent his life teaching others how to live and then acts contrary to all his precepts, he is like a cow who has given a full pail of milk and then puts her foot in it. When a man preaches a truth and practises a lie, he is like a man who has eaten a good dinner and then takes an emetic. The happiest man in the world is the one who is contented when he is doing the best he can with time, talents, and money ; the most unhappy man in the world is the one who is continually conscious that he is wasting his talents, time, and money, and constantly neglecting his duty.

How shall or can we use our talents so as not to hide, abuse, or waste them ? Talents mean gifts and powers of body and mind ; all that belong to our natural organization.

Two books in nature will reveal them to us, and in the third book, the Scriptures, we may learn how to use them. Physiology makes known to us all about the body, its laws and functions, and how to use them ; phrenology unfolds to us all about the mind and what to do with it, so as not to abuse it. When we are fairly on the way with these two lessons then take the third from the Scriptures, and we have the whole lesson before us. Physiology tells us that we have bodies that need to be fed, and one of the most important lessons is to learn how and what to eat and drink, so as to feed and not to poison and derange the system. We shall learn that opium, alcohol, and tobacco do not nourish the body, and the less we take of them into the system the better, and the better we can use our talents ; and the more we use of them the more we abuse, bury, and hide our talents ; the more we depend on them for support the more we need support from other quarters. Those who depend on artificial stimulants and excitements to sustain them are more or less in an artificial state of body and mind. When we have learned how to properly feed the body and sustain the mind by the natural means, we shall not resort to artificial stimulants and excitements to aid us in being either useful or happy, or to sustain us in the discharge of our duties and labours ; for much talent is hid, wasted, and perverted when we are under the influence of unnatural stimulants.

The vital powers are composed of lungs, heart, stomach, blood, and secretions, and we are to learn how to increase their power, improve their quality, and keep them in healthy action to enable them to serve all the purposes of life, to properly sustain the body and support the mind in its labours. Many talents are hidden because the vital powers and bodily strength are weak or diseased. The framework of the body is composed of bones, muscles, and skin, and they need the right kind of nourishment, and care, and usage, to make them strong, vigorous, and serviceable. We have to learn how to build up the framework of the body so that its powers shall be equal to the demand ; a poor body is a poor medium for mental manifestation. Certain and various kinds of exercises are necessary, according to age, climate, and diet, in order to strengthen the body and give vigour to action. There is no sin or immorality in eating, breathing, exercising, and taking care of the body properly ; but one form of sin or immorality is connected with not taking proper care of the body, and allowing it to become diseased, deprived, and weak.

Physiology tells us we have nerves, and that they are too tender and important to be trifled with, deranged, or destroyed.

At the present day the fast and artificial mode of living plays great havoc with the nervous system and puts such a strain upon the nerves that they are all out of order and cannot be depended upon, and when they do work their work is very imperfectly done. The talents of the body are being buried when we are lingering out a life of disease or debility, unable to work or enjoy life. If a man live single and alone, work alone, eat alone, and isolate himself from others, he is not much better than a hidden or buried man while he lives. He is of not much use to himself or anyone else, for his enjoyments and influences are limited. It is contact, action, exchange of labour, love, sympathy, and thought, that keep talents from being lost, hidden, or buried. Every well-born and healthy child has its measure full (whether large or small) of talents, and by birth is rich with gifts and abilities, and its great lesson in going through life is to learn to prize them and use them so as not to abuse them. To have a healthy locomotive organization, that we can cultivate and use at our pleasure, is a most favourable gift.

We are so made that we can walk, work, eat, breathe, and use all the functions of the body with ease, so that life and its duties become a pleasure if we live aright. As we must keep the rails down, the track clear, and the switches all right, in order to have the cars move safely, so we must observe all the laws of life if we would live in safety and peace. It is not enough that we have a track, cars, and engine, but the engine must generate steam to pull, not empty cars from one end of the road to the other, but cars laden with choice goods on a safe track to a good market, to make transportation of any avail. Life simply is not so valuable, but it is what life does : it is the results of that life that count. Some are going through life like a train of empty cars that carry no freight either way. Others have plenty of freight but are going to a bad market, at the rate of fifty miles an hour. Some are on a bad road, have many stoppages, and get along slowly, yet have good freight. Others are on a good road and all is right, but a switch a-head, unseen, is out of order.

A man has got his talents hid when he stands leaning against a post with his pipe in his mouth and his hands in his pockets waiting for something to turn up, or waiting for his aunt to die that he may have enough to live on without doing anything, or waiting for inspiration to move him, forgetting that inspiration only moves those who are at work. The younger brother buries his talents because he was not born first, and the first-born wastes his because he was born first and has the honours, titles, and property. Sometimes they quarrel

with each other because the one was born before the other, and they are obliged to take the consequences.

Phrenology informs us that our minds are immortal and composed of faculties, and each faculty is a treasure and a talent of itself. If we cannot spare any organ or function of the body without great inconvenience and marked imperfection, how much less can we be deprived of a faculty of the mind and the organ upon which it depends. To be wanting in one of these immortal gifts would throw the whole mind out of balance; or to have one faculty so powerful as to control all the others, deranges the action of the whole mind; or to use one or more faculties in a very limited manner and on inferior, unworthy objects, would be to stunt its action and get the least good or use of its action. There are many objects for us to love, and love has not fulfilled its mission until it has bowed at the shrine of them all. To love only one object does not satisfy the demand any more than to pay one bill out of ten that are due. So there are many kinds of courage required, and one kind cannot take the place of another; and so it is with reference to prudence, economy, etc.

Parents are keeping behind the curtain many talents when they fail to comply with the laws of heredity, and introduce an unsound mind into an unsound body in a child. Many children have had no talents to hide, for they had none to begin with. Young people waste much of their own talents and those of posterity also by not selecting a right companion, suitable in mental and physical qualities, for the improvement and perfection of the species; for it cannot improve where poor blood marries poor blood, shattered nerves marries shattered nerves, weak constitutions marry weak constitutions, or disease marries the same disease, so that disease and imperfection are the result. If a good-hearted, good-natured, inefficient young man, without self-government, marries a young lady who is equally noted for her good-hearted, good-natured disposition, without self-government, the most they would do would be to create wants without supplying them, and increase the list of the names in the census book without adding available power to the community. For a young man who cannot think to marry a woman who cannot think keeps the faculty for thinking out of the family, and so of any other faculty of the mind where both are defective; but let the one who is defective select one who is not, that would keep the faculty in existence, which is a matter of great importance to posterity. When a man has more self-esteem than sense he thinks he knows more than he really does, thinks he has more sense than he really has, and places

a higher value on himself than other people do. When a person has more courage than prudence he is liable to run his head against the wall and make a misuse of what talent he has. When a man has the talent of faith so strong as to rely on it and be guided by it without reason or foundation, his talents are like a balloon without ballast. When a man has force and energy without the talents to guide them, he is like a ship in the channel with all sails before a storm and no one at the helm ; or like a steam-boat among the shoals and rocks without a pilot going down the St. Lawrence river.

When a woman has grace of manner and taste in dress, and has become vain and affected, she has hid her best talents. When a young lady has the talent and art to make others love her and yet does not know what to do with it and cannot keep it, she needs one more talent. When fast young men with more ambition than discipline of mind or judgment seek responsible situations, requiring sound sense and mature thought, they are like the young bird anxious to fly before it has feathers.

All talents exercised in excess without an adequate cause or motive are more or less wasted or abused. All talents are more or less wasted or hidden that are not used to the best possible purpose, having the highest and most remote ends in view. Talents used without any increase of the same cannot be used to a very good purpose. Talents are not always equally distributed or judiciously exercised, or they may be well used one day and not well used the next. A man worked hard and industriously fortwenty years, and by great economy he saved \$40,000, and by one speculation that he was over persuaded to go into he lost all he had, and spent the remainder of his days in poverty. One defective quality, courage to say 'No,' was the means of his losing the earning of twenty years. When a man works hard and goes without the comforts of life, has poor food, and a bad bed, just for the sake of becoming rich, in order that he may enjoy it in his old age, and when he has succeeded finds that he has no teeth to eat with and a weak stomach to digest with and disturbed nerves that cannot rest, he sees his mistake when it is too late to rectify it. He had one selfish talent too strong and one too weak, and has made a perfect failure.

Talents vary in quality, value, and importance, and the most care should be directed to those of the most importance and that are the most dangerous or pernicious in their influence when perverted, or when hidden and undeveloped. All talents are increased in value and influence in proportion as they are devoted to the cause of truth, purity, and to works of love and charity.

THE ABBE LISZT.

LISZT was a remarkable man in many ways, and the strong points of his character early showed themselves. When we saw him during his recent visit to London we took the opportunity of noticing the following characteristics; and though he showed that age was advancing upon him, yet his intellect appeared to have lost none of its keenness and brilliancy. He listened to the production of his *Elizabeth* as though for the first time, and enthusiastically clapped Madame Albani after some of the finer rendering of her parts. He was especially pleased with the choir of boys, who took up their part with musical exactness; after which he nodded his approval. We noticed that his head was broad, rather high and prominent in Benevolence, which has made him rich in sympathy as well as kind and benevolent in disposition. His whole moral brain was strongly developed; from the opening of the ear to the coronal region (over which was allowed to flow his long locks combed over the centre) his head was exceedingly high, which gave him his religious ardour, great sincerity, and nobleness of mind. He possessed a consciousness of, and integrity for, truth, which scorned a lie, and admitted a fault. His Approbativeness was very distinctly developed, which gave him great ambition, and made him more than ordinarily susceptible to words of recognition, praise, or censure; yet he possessed great candour of expression, and open-heartedness of mind.

Of his struggles with his sensitive feelings, he admits, after his father's death in 1827, while he laboured to support his mother, though only sixteen years old, that "Poverty, that old mediator between man and evil, tore me from my solitude devoted to meditation, and placed me before a public on whom not only my own but my mother's existence depended. Young, and over-strained, I suffered painfully under the contact with external things, which my vocation as a musician brought with it, and which wounded me all the more intensely that my heart at this time was filled with the mystical feelings of love and religion." Generosity and nobility of character ever held boundless sway over Liszt. He made and gave away large fortunes, and although he was so great a favourite with the 'upper ten' and aristocracy all over Europe, Liszt never forgot the people. "When I play," he once said, "I always play for the people in the top gallery, so that those who can pay but five groschen for their seats may also get something. His Self-esteem took the form of independence rather than haughtiness; and this

spirit of freedom, both in actions and words, stamped him as original and individual in his tastes. He may be called vain by some, but he was ever forgetful of his own genius when he could generously help others in his profession. He assisted one or two young pianists by allowing them to play before him, while he stood by and corrected any faults he detected, and permitted them afterwards to call themselves 'pupils of Liszt,' for which he has been criticised somewhat severely.

His mind was keenly alive to religious aspirations through his large Veneration, and his general moral tone of thought. Music oftentimes kept him in an imaginary atmosphere. He had a highly developed organ of Ideality, and also of Tune, but he had very little Imitation, and preferred to follow



out the dictates of his own imagination and fancy than take another's idea and work that out. The Rev. Mr. Haweis, visiting him in 1880, said: "'As we were talking of bells,' said Liszt, 'I should like to show you an "Angelus" which I have just written;' and, opening the piano, he sat down. 'You know how they ring the "Angelus" in Italy, carelessly; the bells swing irregularly and leave off, and the cadences are often broken up thus;' and he began a little swaying passage in the treble, like bells tossing high up in the evening air. It ceased; but so softly that the half-bar of silence made itself felt, and the listening ear still carried the broken rhythm through the pause. Liszt seemed to fall into a dream; his fingers fell again lightly on the keys, and the bells went on, leaving off in the middle of a phrase. Then arose from the bass the song of the 'Angelus.' We sat motionless—the disciple on one side, I on the other. Liszt

was almost as motionless. His fingers seemed quite independent, chance ministers of his soul. The dream was broken by a pause; then came back the little swaying passage of bells, tossing high up in the evening air, the half-bar of silence, the broken rhythm, and the 'Angelus' was rung."

His intellect was a vigorous one at one time, and quite individual and original in its style. He was a great observer of facts; but he was also a thinker about what he saw and experienced. He possessed his own artistic views, taste, and harmony, in everything that came under his notice. His Ideality and Constructiveness worked under his distinct musical gifts. He appeared to us to have used well the whole of his mental faculties, for his mind showed great sharpness of development, and none of his faculties appeared impaired.

He was born to be a leader in his department of musical art, and impressed one as being possessed of a certain strength of character and ability to exercise a distinct influence over others. He had literary gifts which he could have turned to some account; and is said to have been a writer possessed of great elasticity of style, and of a power that fascinated if it did not altogether convert. All his percepts aided the exercise of his musical talent. He had large Order and Weight as well as Time, Tune, and Constructiveness, which gave him true expression in the production of all musical tones, whether they were soft and dulcet or strong and powerful. His Comparison being large, he was able to make nice distinctions and give fine criticism on works of his own and those of others. He was quick to perceive how the detail and minutiae of everything under his eye should be carried out. His social faculties, though apparently fully developed, were not so distinctly definable, as they were so completely covered with his white silken hair; however, judging from the general contour of head backward from his ear, he certainly was not wanting in the elements of friendship, appreciation for society, and love for children. He could enjoy the mirth and merriment of young life, as well as enter into the sad, serious, and strongly imaginative creations of Richard Wagner, for whom he had such a high respect and admiration. That he was not free from faults or weakness, if they may be so called in such a man, is true. He was the pet and lion of society, hence the more liable to be spoiled by flattery and compliment by the social world. He was easily enamoured by the charms of beauty. And his Approbativeness was constantly being fed by pleasing applause which was surfeiting in effect. It produced a vanity of mind, which to rid himself of, as well as

the surrounding members of society, he renounced the world and took the Abbé's garb and life.

His was not an every-day, commonly moulded character. He possessed a nervous temperament and great refinement of mental quality, and we feel we have done him but poor justice by these remarks.

AN OUTLINE OF THE STUDY OF NATIONAL PSYCHOLOGY.

THIS science, through the result of most recent investigation, has become quite permanently established in principles. The following may be taken as constituting the foundation.

First, at the foundation of the nation lies the nature of man.

Second, human nature manifests itself in every organization of human society.

Third, every nation as an organism has an intellectual and physical development, which is in accordance with the laws of evolution.

Fourth, the mental life of a nation is interpreted through its national consciousness.

Within the last century the national consciousness has become more distinct, marked, and contrasted. The study of the national consciousness of any nation is a scientific problem; a problem more difficult than any in individual psychology. The conceptions with which we deal are not simple and determined as in other sciences. They are not logically determined points, but psychologically varying lines limited only by their directions.

All conceptions are fluctuating that deal with such varied and multiform topics as the public mind. Nevertheless these conceptions are guide-posts for the politician and historian.

Public opinion is such a fluctuating conception. Who would endeavour to determine its limit in time, in person, in contents? It is nevertheless certain and indubitable, that as fluctuating as popular opinion may be, it is readily recognizable as the characteristic of the nation, and of the historical period. At the present time the quality of popular opinion has depreciated. The causes of this are various. In the main, the rapid intercourse between persons, the interchange of thought through the press, and lastly, the extreme tendency of the people for news and variety, have contributed largely to deteriorate public opinion. In fact, the press more than anything else has wrought this change, because it is generally the mouthpiece of a clique or party, and thereby not the representative of the popular sentiment.

From an historical standpoint, there is no doubt that since Roman culture spread over Europe, there has been no period in which the modifications of the popular mind have become more distinctly worked and more decidedly contrasted with a variety of ideals and aims in the national life of a nation than at the present time. This is due to the powerful factors that figure in the advancement of civilization, such for example as the Railroad, Telegraph, and Postal services, which, though of a physical nature, exert an immense influence upon the mental shaping of a nation. The natural sciences undoubtedly have laid the foundation of a strong tendency toward practical knowledge.

Their progress and development within the last quarter of a century has been with giant strides. Investigation upon investigation, discoveries upon discoveries, have been and are being made. That this extreme desire for practical knowledge has contributed largely to suppress the longing for that which can not be attained upon the path of investigation, can not be disputed. The ideal interests and knowledge undoubtedly suffer when the character of the period is to be forcibly moulded and fixed in certain extreme directions.

To sketch in detail the mental life of any nation, is a problem very difficult and complex, and therefore it will suffice, in order to give an idea of the scope of the study, to review in general the mental life of a nation. At first sight what an infinite amount of matter presents itself! What mental activity; what excitation of feeling; what efforts of the will affect the multitude! How many thoughts, resolutions, emotions; how much longing, thinking, and caring! How various and manifold are the aims of man in his vocation and in his moments of leisure—a chaos, a vacillating and surging mass of psychic elements, which under the hands of the experienced psychologist are ordered and classified! Though the popular mind is fluctuating, still it is uniform in its development. The characteristic preciseness in substance and order is so well cut and defined, that century from century and decade from decade may be accurately distinguished. Especially is this true when certain times or periods impress themselves in such a manner upon the popular mind, that the reigning ideas penetrate into the remotest organization of the nation's life. Such is the political moulding of a nation, such the development and formulation of its laws.

The philosopher in his profound meditations only meditates upon the substance of the popular mind. He formulates that which the popular mind expresses into a clear, distinct system. In fact, he is the true representative of the popular

soul. He is the mirror, so to speak, in which the popular mind is reflected. The only safe characteristic by which a great philosopher is known is, that his thoughts are in unison with his own popular feeling, and thereby he becomes the true representative of the popular soul.

A fair example of the stimulus of the popular mind would be the ideal of mankind as represented in these times. Not only has every individual an ideal, but every age, every nation, its ideal. These are dependent upon the same circumstances as those which influence the individual's ideal. To distinguish between the different ideals of the different nations is an easy task. How the ideal of an individual during the Homeric times, how that of an Athenian, that of a Roman citizen, that of a knight during the middle ages, differ, is readily perceived.

But to sketch the ideal of an individual as presented during the present period is no easy problem. For while the ideals of individuals as well as of nations are many and various, and each nation's ideal is the characteristic of the various historical periods, and while it is less difficult to sketch the ideal of preceding nations, owing to their distance in time and comparative simplicity in character, yet our own time, by its very proximity, and by the numberless factors of its intricate development, presents a most difficult subject to investigate. There is probably but little difference whether society is considered as composed of communities, each with their respective ideals, or whether in their totality they strive after one and the same ideal—perfection, which they endeavour and desire to realize.

In a field of research as vast as this, it is necessary to take cognizance of the different functions which the popular mind performs as the characteristic of historical epochs. During some periods it will be observed that some intellectual movements or ideas will gain supreme authority, that during one period the tendency of the people is to follow the emotional, that in another, they lean toward the imaginative. Then again, a forcible expression of the popular will manifests itself, or a profound meditation and speculation upon theological and philosophical topics occupy the popular mind. It is the perspicuity and stability of thought that bestows upon an age a peculiar character.

To consider at length the mode of the execution of these functions, the psychical processes, and the mode and manner of how these separate acts of soul-life are accomplished and moulded in these different periods, would extend far beyond the limits of this article. Therefore, it will suffice to mention

as a fair example the change thought undergoes in time. The tempo of thought changes in the course of the development of the various nations as well as the same nation in different periods. It is now accelerating. This is evidenced in the sound formation of languages. The English is most suitable to illustrate this fact. A comparison of old and modern English will at once show that the tendency of the latter is toward conciseness and perspicuity. A close study of the different styles in authors will also show that the tempo of thought has increased.

In conclusion, a few remarks appertaining to the utility of this study would not be deemed improper. A study which has such a comprehensive range, and deals with the national consciousness in the aggregate, can not fail to improve the method of studying history. For the study of the national consciousness as expressed in works of narration and illustration, is history. For history alone, National Psychology warrants a thorough study, because the mental life of a nation is its vital life.—*Mind in Nature*.

GARDENS.

MY garden is about as large again as a billiard table. I was going to add, it was barely large enough to stretch one's limbs in; but it is if one be recumbent. Still, even though it be not favourable for walking exercise, one can run a goodly race therein; indeed, no area is too small for that, if one but gird one's self aright. Nevertheless, I would gladly have a larger garden, for I am somewhat of the way of thinking of the poet Cowley, whose ambition was to have a large garden, even though his house were but small.

It is recorded of a celebrated German, that, being condoled with on his small garden, he stretched out his hands towards the starry heavens and said, "This is my garden," presumably because he had planted seed there. Or it may be that he was merely thinking of Richter's pretty conceit, that the stars are the flowers of the sky.

But though the heavens are a pretty enough garden for our thoughts to wander in, we want something more substantial for our terrestrial feet. London builders do not appear to have thought so, otherwise we should have had for garden a little more than the ordinary three spans of earth, as though all a man wanted was sufficient room to grow a twig, whereon he could perch like a bird, one leg at a time. I am, in this respect, a little more fortunate than common, because I can

take half-a-dozen paces in one direction without turning, the sixth bringing me to what the Lord has given me instead of a vine and fig-tree, namely—a lime-tree.

That is all of plant-like that grows in my garden. But it is high and broad, spreading over on to each of my neighbours' gardens, and giving them a taste of its shade. It has large, glossy leaves, and in such plenty, that, though hundreds fall, there is still no lack. What a bounteous giver Nature is! And how parsimonious man! She gives in creels-full, by horse-loads, argosies overtopped; he, niggard that he is, by the spoonful, often enough, too, bad measure, except in the matter of punishment; then it is given by the jug. If we were left to man's tender mercies and scant justice, how miserably badly we should come off!

I remember once a rich landowner prosecuting a wretched, half-starved lad for taking a turnip out of his field and making his breakfast on it. The poor wretch was sent to gaol for seven days for it. Seven days for a turnip! When I go aloft—if it ever should be my good fortune so to do—I will ask the Almighty if it was a just sentence to send that starving youth to prison a whole week for one turnip. No, I will not. If the Almighty could hold that just, the throne of His omnipotence would fall to pieces at the thought.

In the spring-time when my linden is in bloom, it gives forth a sweet fragrance, and the bees, attracted by its honeyed stores, make a melodious murmur amid its branches. There is something in the din of labour that is conducive to reflection, and the low hum of the bee that is peculiarly so. At night, when the swarms of the hive are still, the stars peep at me through the thick foliage, and then I forget that there is so much that is mean in life, and that man's justice is often so unjust. I forget half life's carks and cares, and mounting the Jacob's ladder of thought, see all that is goodly and fair, and my soul gives thanks that there is so much to make one happy. Then, sitting under my linden, and fondly following the children of my fancy in their devious sports and gambols, joying in their freedom and their strength, I would not change my place for the lauded avenue of kings; for though the foot of my lime-tree be in a sordid London garden, at the top of it is a star—a star outshining any kingly diadem—and that star is as the gate of heaven.

"God Almighty first planted a garden," says Bacon, and man spoiled it, and so he has been doing ever since. But I believe the whole earth will yet be turned into a garden, though it won't be to-morrow, nor even next day. Not in thy time, O Polio.

The world will never be as it should be till every man has a garden of his own, and can sit under his own apple-tree and linden, if not under his own vine and fig-tree. When I shall have compassed a large garden, the height of my ambition will have been reached. It is such a healthful place, a large garden ; men can there, if anywhere, live to the full length and stature of their days ; and you can grow so much more than flowers and legumens therein. You can grow large thoughts. With half the care that you grow the large gooseberries and gigantic pumpkins that take the prizes, you can produce fine big thoughts that are good for bonuses too. It always pays to be in contact with nature—the closer the better ; and in a garden we shut off a bit of nature all to ourselves.

As to the gardening—it is nothing ; man is a born gardener ; the more he ceases to be a gardener, by so much does he become denaturalized. The first thing a child learns to do is to plant something ; he will plant a tooth-brush and expect it to come up. But the “growing man” soon gets over such futilities, and if given but three feet of ground he will take pleasure in growing something. But he should not be confined to a paltry three feet, or even six feet of mother earth ; for that is but the measure of his own mortality ; and if he does not get that out of his eye he is not likely to do great things. A man wants an horizon—the larger the better.

As to the style of one's garden, it does not matter much. I like a wild garden—sown rather than planted. If I had a large garden I would even have a place for chance growths ; for sometimes it happens that a rare gem comes up in wind-sown places. Such a spot is like a garden of the imagination ; you get things there that charm by their novelty, by the unexpectedness of their appearance. That is the beauty of a garden ; you get so much more than you sow.

But though I like a wild garden, I would have an orderly-planted garden also—one with fair geometrical beds, round and square, oblong and triangular, and would have all fair flowers grown therein. There are those who kick at this fashion as obsolete ; but to me nothing that is good is obsolete. Give me even a Dutch garden and Dutch virtues—orderliness, cleanliness, and straight paths. Lord, how it simplifies matters if you have got a clear, straight path and keep to it !

When I was gardenless, in the horticultural sense, I still managed to turn myself loose in a little wilderness all my own. Whatever was already growing there I left alone, unless it were something that was clearly doing ill ; then I rooted it

up, or tried to ; but some ill weeds will stick so that it is next to impossible to eradicate them, except by destroying the whole field. Those growths that I found good I took care of and encouraged them in their thrift. And what pleasure it was to see the infinite variety that came up in that wild domain ! When I rose in the morning and had taken my simple refection, I would stroll into this fair preserve and refresh myself with the blossoms I found there. And ever after the toil and worry of the day—often enough sore distressed—I betook myself to my garden, and there my griefs were soon forgotten or charmed away amid the sweet scents and graceful and gracious forms that were thriving there. Even when other gardens were bare and leafless, mine was full of cheerfulness and light.

Anyone can have a similar garden. It costs care, of course, and some trouble ; but then the care and the trouble bring pleasure, and more than that, strength. As for what grows in such a garden, it is much a matter of choice. What grew in mine were mostly common plants, some even could be called weeds ; but then they are the precious weeds that grow by the wayside of life, as common as the pellitory of the wall and the long-purple of the brook. There were some exotics too—a few perhaps ; but I found them soon become native to the soil. It is well to accustom the eye to what are at first strange forms. It is not well to get into the way of thinking there is nothing good in your neighbour's garden. I shall never forget going into a poor old woman's garden patch and finding there a gem, which, transplanted into my wilderness, gave me the greatest pleasure of any. It throve like Jack and the Bean-stalk's rare vegetable ; and if ever there was a plant that grew up so high that one could climb to heaven by it, it was surely that which I found at the old woman's back door !

THE PROPOSED PHRENOLOGICAL SOCIETY.

August

A meeting of the Provisional Committee, formed for the constitution of a Phrenological Society for London, took place on the 7th ult., at the offices of the PHRENOLOGICAL MAGAZINE, Imperial Buildings, Ludgate Circus. Mr. L. N. Fowler was again voted to the chair, and among those present were Mr. J. F. Hubert, Mr. T. C. Godfrey, Mr. Warren, Mr. R. Hall, Mr. G. Cox, Mr. Story, etc. Mr. E. T. Craig, of Hammersmith, called before the meeting and left his regrets at not being able to be present, having a prior engagement

which he was unable to neglect. It was decided to hold a public meeting, for the formal constitution of a Phrenological Society, on Tuesday evening, the 14th of September, on the motion of Mr. Warren, seconded by Mr. Hall. It was further decided that a small sub-committee should be charged with the task of making arrangements for the meeting on September 14. The names of the sub-committee were as follows: Mr. John Dillon, Mr. Morrill, Mr. Webb, Mr. Godfrey, Mr. A. J. Smith, Mr. Warren, and Mr. Story. (For further particulars see "Facts and Gossip.")

Book Notices.

The Marriage Ring: Thirteen discourses on marriage and family life, by T. de Witt Talmage, D.D. (London: JOHN LOBB, *Christian Age* Office, St. Bride Street). This is a cheap sixpennyworth, on a subject that interests everybody, but chiefly the young, because they know nothing about it, but want to. The first discourse treats of marriage. Then we have chapters on the choice of a wife, ditto of a husband, clandestine marriages, duties of husbands to wives; then comes a chapter which ladies will not read, as being supererogatory, on the duties of wives to husbands; and so on through seven other chapters. We do not know how much Mr. Talmage has been married; but he is a man who cannot open his mouth without saying something good, wise or witty, and so readers will not be able to take up the "Marriage Ring" without having their eyes opened.

Chronicles of Lincluden as an Abbey and as a College, by William M'Dowall, F.S.A. (Scot., Edinburgh: ADAM & CHARLES BLACK). It is with great pleasure that we give a notice of this work, because it is one of those books that gives us pleasure to look at and handle, to say nothing of the contents. It is beautifully printed on hand-made paper, well illustrated, and substantially bound. Indeed, it is one of those books that are a joy to the library: the shelves tremble with joy to receive them. Of the contents space will not permit us to say all we should like to. Lincluden is an interesting ruin on the bank of the Nith, above Dumfries. It was originally an abbey, but later was converted into an ecclesiastical college. Little is known of it in the former capacity; but all that is known Mr. M'Dowall tells us, and tells us in a charming manner. Lincluden was founded by Uchtred, Lord of Galloway, in the hope and belief that his beneficence would be conducive to his soul's salvation. We look on such motives now as superstitious, but there was something beautiful in such superstitions; and we can ill spare any of those sterling motives that tend to leaven human selfishness. Mr. M'Dowall treats the antiquities, legends, and we may add the poetry of Lincluden with reverence and an almost filial-like devotion. In a book of poems,

“The Man of the Woods,” published many years ago, Mr. M'Dougall thus addresses the old ruin :—

“Though Ruin's hand has sore defaced
Whate'er the skilful chisel traced,
And tries with too successful will
To mar the consecrated pile,
Yet rules he not in reckless pride,
His baleful influence undefied ;
For, 'bove the spoiler's sceptre springs
A form which sense of gladness brings—
This thing of life which lifts its head,
As rose-leaves o'er a coffin lid.”

Such is the spirit in which the author approaches his task, and it is needless to say that the result is an eminently readable and enjoyable record. But that one need hardly say to those who have read Mr. M'Dowall's previous works, his “History of the Burgh of Dumfries,” “Burns in Dumfriesshire,” “Mind in the Face,” etc.

Mr. Fryar, of Bath, has in the Press a work entitled *The Golden Treatise of Hermes, on the Divine Art of making Gold and Silver Alchemically*. Illustrated (5s. post free).

Health Hints.

A PHILADELPHIA physician says, that a great deal of what passes for heart disease is only mild dyspepsia, that nervousness commonly is bad temper, and that two-thirds of the so-called malaria is nothing but laziness. Imagination, he says, is responsible for a multitude of ills, and he gives as an instance the case of a clergyman who, after preaching a sermon, would take a teaspoonful of sweetened water, and doze off like a babe, under the impression that it was a bona-fide sedative.

THE superior advantages of wearing wool next to the skin are easily apparent on reflection. They do not depend merely on its greater warmth and closeness of application. It is further capable, according to its texture, and in virtue of its composition, of better adaptation, in respect of temperature, to the needs of various climates, and the changes of seasons, than any other dress material. Moreover, whether it be fine or rough, dense or light, wollen clothing, it is evident, exhibits a special faculty for absorbing and distributing moisture. It is this property especially which renders it the naturally next covering of the constantly perspiring skin. If one be engaged, for example, in active exercise of limb, a linen fabric will absorb what products of transudation it can, till it is wet, but will leave much moisture unabsorbed upon the clammy surface ; whereas a flannel, from its more spongy nature, will rest upon a skin which it has nearly dried, and be but damp itself. It is obvious, then, that in the event of an after-chill, and this occurs in summer as in winter, the body is in the latter case most favourably disposed to resist it. Flannel is not less cleanly than linen, though it may appear less white ; and if

the wearer bathe daily, it is surprising how long it will retain its purity. The disadvantage of skin irritation, to which it sometimes gives rise, is usually associated with coarseness of quality or freshness of manufacture, and is with nearly all who have experienced it a merely transient condition. Women as well as men, but above all children and the aged, who are alike particularly apt to take cold, should certainly adopt a woollen material for their customary undergarment. It is easily possible to adjust the texture to the season, so that it shall be warm enough in winter and not too warm in summer.—

Popular Science News.

Facts and Gossip.

THE eminent French anthropologist, Dr. Broca, is naturally much interested in all things concerning the human frame—the comparative weight of human brains, the peculiarities of formation in the skulls of men of genius, criminals, monomaniacs, madmen, and so forth. He has just been studying the question of the height in connection with the weight of the human body, and, for the benefit of all who may be interested in such matters, he publishes the following formula. The body, he affirms, should weigh as many kilogrammes as it measures in centimètres—deduction being made of the first mètre. A man or woman, in future, anxious to satisfy himself or herself that he or she is neither too stout nor too thin can, on Dr. Broca's system, very easily do so. A person, for example, measuring 1 mètre 80 centimètres ought to weigh 80 kilogrammes, not a gramme more or less, or he is too stout or too thin. As years elapse and age advances, men, as Dr. Broca remarks, lose some of their weight; but, as a compensation, they also lose something in their height, and the reduction both in height and weight ought to continue to tally in healthy, well-constituted persons.

THE proposed meeting for the constitution of a Phrenological Society will take place in the Imperial Buildings, New Bridge Street (a few doors from Ludgate Circus). The date, Tuesday, September 14, should be made a note of by all who are interested in phrenology; and all friends who wish to see the new Society have a good start should make arrangements to be disengaged on that night. Friends residing in the provinces should carefully arrange to have business in London that week. We place great reliance on our country friends.

A circular of invitation will be sent out to all interested in phrenology, and to those likely to attend. We should be glad to receive the names of persons to whom it would be advisable to send invitations, and anyone who would like to have circulars to give to their friends should send in applications as soon as possible. We rely on all friends of the science to do their utmost to see that we have a good meeting on the 14th proximo.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

P. D. K.—No. 1 is favourably balanced for health, provided he is properly restrained in mental activity. He has so much brain-power, with so much of the propelling spirit, that it will be difficult for him to keep within bounds. His neck is not over large ; his chin is almost too sharp to indicate a high degree of physical power, and yet he looks as though he were healthy at present. He should be watched with some care, and checked when he is found to be overdoing or going beyond his strength. He has an unusual degree of ambition and desire to excel, and cannot bear to have others outdo him. He is particularly sympathetic, and at once gets into sympathy with others—with his play, and what is going on around him ; is naturally of an open-hearted type, and shows out just what he is without much reserve, and may sometimes be imprudent in exposing his feelings. He is generous-hearted, of a liberal type of mind, and will act upon the principle of live and let live. He probably never will show a mean, sordid, or grasping disposition ; may have a great desire to possess books, and such things as gratify his intellect, but he is not particularly well adapted to property-getting and keeping. He will probably show public spirit, and be anxious to take a place among men on the platform, or in some professional life. He has a favourable intellectual, and moral brain, and it will pay to educate him and let him get his living by his education. He is decidedly sociable, friendly, and companionable, and will make many friends, and keep them. He has a capital memory, and is particularly intuitive in his discernment of character and truth.

C. G. K.—No. 2 has more than ordinary versatility of talent ; will be equal to almost any emergency. His brain is large, and his mind comprehensive. He will be remarkable for his energy, force, and executive power ; will never be satisfied until he has got the whole world in his own pocket. He not only possesses great force and energy, but a very strong social, domestic disposition ; will have very strong prejudices for and against ; will not allow others to trifle with his affairs. His mind can be directed in a variety of channels, and if left to himself he will probably take to some kind of business, general trading, speculating, or something of the kind. He will look out for himself ; will be rather suspicious of others. He is decidedly cautious, and of a watchful turn of mind ; will be very particular and methodical about his own affairs. He is strongly

inclined to think, to do things in his own way, and to be original in his mode of doing business. He has talent for engineering and mechanics, as well as for business, and will want to monopolise wherever he attempts to do anything. He is capable of being kind-hearted, yet he has very good control over his sympathies, and will give to others judiciously. He is more given to thinking than to observation, and will be characterized for soundness of judgment, power to plan, and ability to organize and manage large business operations. Make a public man, perhaps preacher, of No. 1, and a business man or mechanic of No. 2.

D. E. (Aberdare).—The gentleman has a muscular, osseous system, and is comparatively tough and enduring, but he has none too much lung-power, and general vital organization. He will be liable to attempt too much, and overdo, for he is naturally vigorous in mind, good at planning. Has rather strong imagination, and possesses considerable energy and ambition; hence must strive to live within the limits of his organization. He is more given to thought and philosophising than to science and observation; hence should strive to be more practical, and pay more attention to details.

The lady is favourably balanced; has a good degree of warm blood, vital and animal life. She comes from a long-lived ancestry, and probably will live to be old herself. She is ardent, earnest, practical, and is decidedly utilitarian in her general character; is quick of observation, and wide-awake to what is going on around her. She has good powers of discrimination, is steady and reliable in character, and places such value on herself as not to trifle either with herself or others; is in every way naturally adapted to the gentleman as a wife; but they must be patient, for they cannot fully understand each other at first; afterwards, however, they will blend in their natures more perfectly, and enjoy each other's society in wedlock in a high degree.

JOHN THOMPSON (Shildon).—You have a favourable organization for mental action, but will find it to your advantage to restrain yourself rather than to encourage greater mental activity. You think too much, have too many ideas, and are continually hungry for more information. You must strive to be more practical; turn your attention to science and the conditions of life; interest yourself in what is going on around you. You have intuitive power, and may, at the first glance, discern much of the character of a stranger; but might not do so well to analyse the character in detail. You have a poetical temperament, and are full of the sentiment of poetry, but you are liable to be extravagant in the presentation of your ideas, and are too far-fetched in your thoughts; still, if you practise much, and allow yourself to be criticized, you may get off considerable original and good poetry. You need for a wife a well-formed woman, of fair activity of mind, but more especially of good balance of organization, with no extremes or excesses—not one specially high-keyed or nervous, but a good, common-sense, business woman,

who can look after the affairs of life, and practise economy in all directions. She had better not be a public woman, inclined to lecture and go before an audience, but one who would understand herself in home and family affairs, and be content to do good as she has an opportunity.

A. K. (Brighton) has a great desire to see and come in contact with society. He will find it difficult to settle down to one thing and be content, especially if he be confined to one place. Naturally he was cut out for a traveller and agent—a man who has to do with a variety of men. He is not very substantial in intellect, for he does not stop to think much ; he acts from impulse ; does not feel the full sense of moral obligation, and is liable to be wayward if in the company of those who are wayward ; for although he is kind and tender-hearted, and generally respectful, yet he loves his own way too well, and has not enough sense of obligation to regulate his conduct in the midst of temptation. He has a good ear for music, and, with practice, would make a good speaker, auctioneer, or something of that kind ; but it is a pity he cannot finish his trade before he goes to anything else, in order that he may have something to fall back on if necessary.

A. W. E. (Shoreham).—The power of your organization is mental ; you can work, and devote yourself to business, or to physical labour, but are not so much in your element there as you would be in study. You are much given to thinking and theorizing, and, as an educated man you would philosophise considerably, and would take pleasure in agitating some subject—in being a reformer, and taking up some kind of business that would bring you before the public. You are disposed to encourage education and general intellectual and moral improvement. You are capable of cultivating yourself so as to stand fair as a professional man ; either as an agitator of some reformatory question, as a teacher, or connected with others in the general improvement of society. You are rather too theoretical ; scarcely practical enough. You can tell others what to do better than do it yourself, and you will need to curb your imagination and cultivate practical talent. You also need a little more force, physical energy, and power to do real executive work ; for it would be easy for you to get into a speculative way, being sound in philosophy, but not sufficiently practical in its application. You need a wife who has plenty of energy, and practical common sense.

D. T. P. (Aberdare).—You have an available organization for an education. You could easily sustain yourself in some profession. You have an eager, earnest, penetrating, criticising cast of mind. You could make a fair barrister, but a better lawyer. You would not often make mistakes. You also have good abilities for a descriptive writer, and are not wanting in talent for a teacher, superintendent, or manager ; but, if possible, get into a business or profession where you can be your own master. You should marry a well-formed,

sustained, and well-educated woman, and do the best towards improving each other by living for each other. But seek a profession or an independent business, more especially of an intellectual and moral type rather than to be a soldier, sailor, or business man. You can succeed as a business man, and you would not be lazy about your work; in fact, there is more danger of your overdoing and working too hard when you get fairly at it than of not working enough; but you can accomplish more by working mainly with your brain than with your body. You have a favourable faculty for public speaking; you will impress an audience, and both entertain and instruct them. Should your attention be directed to science or mechanics, your forte would be in chemistry, electricity, telegraphing, and such-like studies, rather than in farming and general mechanics. Your talent in drawing and designing, like an architect, is comparatively good, and you had better build your own house. Try your hand at writing, especially descriptive writing, and ventilate your mind through that channel. Do not be too critical with others. You are very sharp in noticing defects and inconsistencies, but you must remember that the world is not yet finished, hence not perfect.

E. R. C. (Eastbourne).—You have a very compact organization; are well organized to look after yourself, to go into business for yourself, and to work your own way through the world. You will not be content to serve another, but will wish to be master yourself, especially master of your own time, labour, and person. You will never gracefully submit to dictation, or to any extra exercise of authority. You are strong in your likes and dislikes, and express yourself as though you were in earnest and meant what you said. Are rather strong in your temper, and liable to be blunt and direct in your style of talking; are suspicious where everything does not go straight along, and have none too much confidence in others. Guard against a tendency to be too suspicious or jealous. Cautiousness is very active, giving you a watchful, uneasy state of mind. Conscientiousness appears to be large, and inclines you to strict integrity, you require others to do exactly as they agree. Are not careless and indifferent about results; are very sensitive with reference to the opinions of your friends concerning you; although you do not seek flattery, yet you cannot bear criticism very well. Are kind and tender-hearted, and in some way should show a strong feeling of sympathy and love; but are radical in your views. You are not particularly mindful of superiors, and one day is about as sacred to you as another: hence will not care much for the forms and ceremonies of religion. You have a favourably developed intellect, fair powers of observation, rather superior abilities for understanding, criticising, and analysing subjects and characters. You must practise speaking, get into the habit of reading out loud when alone, and in company, and take some lessons in speaking and oratory. Your talents are rather of a philosophical and mathematical type, and could succeed quite well in the exact sciences or in mental philosophy; but will scarcely fail in anything you attempt.



* It is interesting to note that we shall be holding the Golden Jubilee of the British Phrenological Society Incorporated in July. I am the oldest living member who assisted in founding the Society. I shall be 66 in May. There is only one other of the founders now living, Mr Joseph Hubert. He is several years younger than myself.
J. Millott Severn F.R.S.
past-president of the Society

logical Magazine.

OCTOBER, 1886.

THE NEW DEPARTURE.



PHRENOLOGICAL SOCIETY has at length been formed. It came into being under fairly good auspices. What it will amount to in the long run no one can at present tell. It may be blessed with long life, and do untold good; or it may merely run a brief, fleeting, and chequered existence, and drop out of knowledge with even less of stir than it came into being. Let us hope, however, that such may not be its fate. From the spirit manifested at its birth we augur something different. A Society, like a nation, is what the sum of its members is capable of making it—that is, there can be no more in the Society than there is in its members, taken collectively. Hence, if there be real grit in the united membership of the Society (or, as it is somewhat more ambitiously styled, Association), and real grip, we may expect it to live, and to give effective signs of life.

But if the Society is to do good work, and justify its existence, it will have to set before it a high programme, and to be resolved to carry it out resolutely. It will not do to philander with phrenology. It will not do to meet month after month, read papers, hear papers read, discuss this subject and that, and generally expect to set up a great current by the swishing of a small withy. We must resolve to call the attention of the world to the subject; and, moreover, to rivet that attention when we have got it. At present it is the habit of indolent people to answer in regard to phrenology: "Oh, you know, the medical profession is against it, and therefore there can be nothing in it;" or else: "If there is something in it, it is so mixed up with charlatanism!" There is a very ready answer to this: everybody knows how much folly and charlatanism there is mixed up with medicine and with religion; but that is not the fault of medicine and religion so much as of human nature, and we must not mind the

retort uncourteous. What we have got to do is to show that phrenology is based on a truth in nature—that it is, in the language of Thomas Carlyle, one of the eternal verities, and that the world must recognize it as such, and that wherever else humbug may be mixed up with the teaching and practice of phrenology, we will have none of it in our Society. Then, though some may doubt our wit, they cannot despise our intentions; and when we have got so far, the rest will speedily follow. Moreover, we must eschew the running of hobbies, private views, and fancy theories, and go in for the establishment of facts. A theory may be laughed down; but all the laughing in the world, though all Olympus joined in, would not shake a fact. Our motto must therefore be: We stand by the facts. And we must resolve to tell all England of them, and all the world, and in the best way.

M. CHEVREUL.



HE organization of this gentleman is marked with very strong indications of a powerful constitution. His physiognomy gives a large face, a large, broad nose, with ample nostrils, large mouth and chin; all that the face can indicate of a powerful constitution he has. The animal vital nature, as a whole, is amply developed; his head also is broad, which indicates general force of mind, strength of feeling, and stamina of character. He is very broad between the eyes, indicating correct sight, and ideas of forms, shapes, and outlines; is also large in the organ of Size, in the corner of the eye, which gives judgment of proportions. His eyes are large, and stand out fully, which indicates a communicative disposition. He is fond of talking; has power to commit to memory, and to tell what he has read and seen. His general memory, as indicated by the fulness in the central forehead, is large; besides, Observation is large, which gives great desire to see and know what is going on in the world. There appears to be no want of breadth of intellect and comprehensiveness of mind. He is naturally original, and has opinions of his own. He is particularly gifted in criticising, and makes nice distinctions. He has apparently large Mirthfulness, and enjoys a joke. He has large Imagination; is fond of the perfect and beautiful; takes broad views of things, and keeps up with the spirit of the age. He has artistic taste and talent, and could have manifested more than ordinary artistic ability. He does not appear to be

cruel, hard, or fond of rough life, but is disposed to enjoy himself, live in the midst of civilization and where there is plenty. He has not much cunning, or capacity for art and tact. What he has is more the result of culture and knowledge than of natural suspiciousness or artfulness. His head is high, which indicates that he is quite in sympathy with other people, and wants to come in contact with and enjoy along with others. The moral brain, as a whole, is large enough to have an elevating influence on his mind, giving



him a desire to improve and become more and more perfect as he grows older. His standard of excellence is in the higher range rather than in physical courage, animal pleasures, or worldly possessions. He appears to have a highly-emotional nature, that gives a fondness for the new, novel, exciting, and sentimental. That, joined to his strong, reasoning, thinking intellect, would dispose him to look into everything new, and to take a lively interest in all the improvements in the arts, sciences, philosophy, and politics. He is a better

filled-out man, and has fewer defects of body and mind than ordinary ; which would favour a temperate life, uniform habits, and a well-balanced man in his desires. He is highly ambitious, very anxious to appear well, to please his friends, and to be popular.

M. Chevreul completed his hundredth birthday on the 31st of August, and the event was celebrated with great enthusiasm in Paris. In honour of his birthday new museums were inaugurated at the Jardin des Plantes, where M. Chevreul has been employed since 1810. A statue to the hero was also unveiled. A journalist who was enabled to see the centenarian before he completed his hundredth year thus writes about him :—

“It was getting on to nine o'clock—an hour when those at his time of life ought to have been in bed—when we entered the sanctum of the savant, which is both study and bedroom. We did not find the ‘doyen’ rolled up among flannels and pillows and hot-water bottles. He was in bed, reading a play of Molière’s, and as cheery and hearty as a young man of twenty. He has decidedly an ancient look about him. His skin is well furrowed and wrinkled, and his hand shaky, but his eyes are not dim, nor is his natural mental strength abated. His memory is something marvellous. He remembered the horrors and bloody days of the Terror as vividly as the struggles and rise of the Third Republic. Having expressed his great admiration for England, he spontaneously started off to talk about the theatres. ‘I have always had a great love for the theatre,’ he began, ‘and even now I read the old dramatists. Molière is my favourite. In my opinion, he is by far the greatest writer France has produced, and is above all other dramatists in his intelligence and in his knowledge of men and life. You have Shakspeare. Well, I like Shakspeare too, but put Molière first. I don’t know if *chez les Anglais* there is the same admiration for the classics as in France. We have always professed a great love for the classics ; but the word ‘classic’ is too often applied to things that have nothing classic about them. Then we have other schools, the Romantic and others. But I don’t find much in recent writers. They have got a great many new words, but work on the old ideas. They keep on reproducing the old ideas over and over again, and do not give us many new thoughts.’ The sterility of the present generation rather vexes M. Chevreul. ‘Il est bien facile,’ he repeated several times, ‘de donner les mots nouveaux aux choses anciennes’—‘it is very easy to give new names to old things.’

"The old man prattled on from one subject to another, speaking slowly and distinctly. 'We have in France,' he observed, 'a school that has a considerable number of adherents, who say that man was descended from the monkeys. But if you accept that doctrine you do away with the perfectibility of species.'

"M. Chevreul does not always lie in bed and read Molière. Until last December he went about as well as he had done fifty years before. Now he goes about the garden and the museums, attends the Academy of Sciences every week, and frequently reads papers; goes regularly to the meetings of the Agricultural Society and the offices of the *Journal des Savants*. He always enjoys good health, and 'he eats more than I do,' says M. Chevreul fils. He attributes his extreme longevity to his simple and regular system of living and to moderation in his habits. Early in youth he contracted a great repugnance for wine and liquors of all kinds, and has never allowed a drop to pass his lips—a point for the teetotalers. He has never smoked, either—one for non-smokers. He does not eat fish or drink milk by itself. Here is his simple dietary: two platefuls of soup in the morning; a beefsteak between ten and eleven, followed by coffee; several more platefuls of soup for dinner, with a cutlet or beefsteak, followed again by coffee.

"M. Chevreul's speciality is the question of colours, and his principal books on that subject have been translated into several languages, and have had a greater circulation in England than in France. He was not long before he was on to his favourite topic, and I quite lost him in the mazes of his 'cercles' and 'zones chromatiques,' and among the technicalities of 'chromochalcographie.' He has a profound belief in Newton, and was greatly annoyed because Mdme. de Chantilly misrepresented Newton on the matter of colours in her translation. He would insist in sitting up in bed, and giving a demonstration on the propagation of colours. His strong point was that the 'colours are in us, and the cause in the things we look at' (de hors). Although he had talked a great deal during the day, there was no stopping him when once he started on the colour question, or getting him to change the subject, and when we rose to leave he protested that we were going because his exposition wearied us. He is as earnest and enthusiastic a student yet as if he had another hundred years before him.

"No man, perhaps, has seen his country pass through so many revolutions and has lived under so many régimes as M. Chevreul. He remembers Louis XVI. His recollections

of the Revolution and the Directoire are clear, though he was not then at Paris. He can call up pictures of the glory and the dignity of the First Empire. He has lived under the First Restoration, the Hundred Days, the Restoration of 1815, the Legitimist rule of 1830, the Republic of 1848, the Second Empire of 1852, and the Third République—in all, eleven régimes, which is tolerably good for one lifetime. M. Chevreul was born at Angiers on the 31st of August, 1786. His longevity is hereditary, for his father lived till ninety-two and his mother till ninety-three. His studies in chemistry began after he left the school at his native town and came to Paris in 1803. Entering the chemical factory of the celebrated Vauquelin, he soon showed great ability, and was appointed director of the laboratory. In 1810 he was preparator of the chemical course in the Museum, and three years later was professor at the Lycée Charlemagne. Four years afterwards he became assistant naturalist at the Museum and director of the dyeries at the Gobelins. He rose rapidly, and in 1834 was director of the Museum. It is seventy-six years since he first entered the Museum, seventy since he was connected with the Gobelins, and sixty since he was elected a member of the Institute. His abilities as a scientist were recognized in England before they were in France, and he was made a member of the Royal Society when, as his son says, he was only a 'petit professeur' at Paris. Since then he has received many similar honours. Only last month he was made an LL.D. of Glasgow University. He has worked with many eminent chemists, including Sir Humphry Davy, and has produced several valuable and well-known works. His discoveries are numerous, and are chiefly in chemical oils, soap, and colours. In 1823 he received a prize of 12,000*f.* from the Society for the Encouragement of National Industries for one of his books. He was sorely tried during the last war, and for the courage and endurance he then displayed is regarded as one of the greatest of patriots. The Jardin des Plantes was the place that suffered most from the bombardment by the Prussians. The Museum was shattered and the zoological collections destroyed. M. Chevreul, in spite of his great age, however, bravely stuck to his post while the shells were flying about, and tried to gather up and save some of his specimens."

You can't keep a dead level long, if you burn everything down flat to make it. Why, bless your soul, if all the cities of the world were reduced to ashes, you'd have a new set of millionaires in a couple of years or so, out of the trade in potash.—O. W. HOLMES.

THE NEW PHRENOLOGICAL ASSOCIATION.

A MEETING was held on Tuesday night, the 14th ult., in the Imperial Buildings, Ludgate Circus, for the purpose of formally constituting a Phrenological Society. There was a good attendance, the room being crowded to the door. Mr. E. T. Craig, the veteran phrenologist, occupied the chair, and among those present were Mr. James Burns, Mr. Barker (Brighton), Mr. McKean (Eastbourne), Mr. J. Dillon, Mr. R. Hall, Mr. T. Crow, Mr. J. S. Cropley, Mr. J. Melville, Mr. S. Pryor, Mr. Holland, Miss Oppenheim, Mr. and Mrs. Piercy, and Miss J. Fowler, etc.

The Chairman called on Mr. A. T. Story, the Hon. Sec. *pro tem*, to read letters from gentlemen unable to be present. The following letters were then read :—

To the Provisional Committee of the Phrenological Society.

GENTLEMEN,—It is very pleasant to me to know that you possess a phrenological spirit, and that you are about to unite and form a Phrenological Society, the doing of which is no small undertaking. To be sure, it is a small beginning; but can, with proper management, become mighty and magnificent. What is wanted to make it prosperous is life, labour, judgment, and unity of action. It is no small thing to be a phrenologist. At present it gets no honorary degree from a chartered institution, and does not necessarily rank as scientific according to the established regulations; yet phrenology, being true, is on just as good and solid a foundation as those sciences which have an institution to back them up; for it is truth that makes everything valuable, and an institution is only an outside garment rather than a true indicator of what real truth is. The science of phrenology was brought forward to be recognized among men differently from any other science; for all other truths that have become established, whether scientific, philosophical, or theological, have come through their various professional channels, and sanctioned by the heads of these various institutions; hence men study and graduate, and are recognized by these institutions, and so are put forward in society. But Dr. Gall, being conscious that he had the truth on his side, ignored all institutions and their sanctions or condemnations, and at once began to promulgate his views regardless of the opinions of professional men; and on that account phrenology has been ignored by the professions, because it was not introduced to the world through them. Hence phrenology has been opposed and misrepresented by its opponents partly as a matter of jealousy, and it has had to fight its way in the ordinary channels of life as a democratic truth to democratic people. The influence of phrenology upon its believers is very different from that of any other beliefs. Its effects upon those who adopt it are very great, for it becomes a personal matter, and the believer at once recognizes

himself as concerned in it and benefited by it. It throws him upon his own responsibility, and stimulates him to think for himself and have a mind of his own, without quoting, "Thus says so-and-so." He begins at once to work on his own powers, to regulate his own forces, to improve and perfect himself, and is not slow to work for the benefit of other people as well. To become a phrenologist lights a candle in search of truth, and begins at the highest point of a man's organization, and directs attention not only to the brain and the form of the head, but to the mind and all its peculiarities. In order to excel and perfect one's self in the study, another candle needs to be lit, which helps us to look at the body as a whole, with all its organs and functions, so as to understand the entire relation of one organ and function to another as connected with the body, and to understand the relation that may exist between body, brain, and mind. These two sciences, thoroughly understood, introduce man to himself, so that he feels as though he knew something about his powers and for what he was made; these studies tend to elevate his mind, and introduce him to the Author of his existence; for phrenology and physiology are connected with the highest powers of man, and tend to direct his attention to all subjects that have a bearing on health and improvement. He lights but one candle more to look after the signs of character, health, strength, and disease. Physiognomy helps him to see man illuminated or manifested, so that to look at a man at a distance and see him stand, walk, or act, helps to see what the man is; for each man has his own manner and way of developing himself. You can scarcely be thoroughly interested in phrenology and physiology without being thoroughly temperate in all things, and disposed to regard all higher laws and principles; for there is an intimate relationship in the teachings of these sciences, and a high order of Christianity and virtue and honesty.

It is to be hoped that these small beginnings will grow into large proportions, and that men and women from all parts of the country will be disposed to join with us in furthering the study and development of man's organization. You have my best and heartiest wishes, and, as far as possible, my support, in carrying out your views, in making them known to the world, and in bringing as much influence to bear in favour of the science as possible.

I am, yours truly, L. N. FOWLER.

SIR,—I have read with considerable interest the correspondence and statements that have appeared during the last three or four months in the MAGAZINE respecting the proposed new Society. As a firm believer in it, and a very old amateur (since about 1840), I feel a great desire to see phrenology established as a 'science' amongst the sciences; and hoping and believing that the effort now being made—if rightly directed—is calculated to accomplish that object, I wish earnestly to take part in the work, and will do all the little it is in my power to do to help on the movement.

Unfortunately, it will not be possible for me to attend the meeting

on Tuesday next ; I am therefore compelled to take this means of expressing a few of my views on the subject.

Reviewing what has appeared in the MAGAZINE, the following seem to be the leading proposals :—

1st.—To adopt the name of the “London Phrenological Society.”

2nd.—That it shall be a Society for the study and dissemination of phrenology, with the object of giving it a status and character.

3rd.—To furnish a means of intercourse between professional and amateur phrenologists. And last—

That it “shall be open to all and sundry, who are in any way interested in phrenology, whether their knowledge of the subject be small or great.”

As I cannot be present, may I take the liberty, through you, of making a few suggestions to the meeting with regard to the objects and organization of the proposed Society.

First, then, phrenology has so far failed to establish itself in the scientific world as ‘a science.’ All the recognized scientific bodies ignore it ; its professors are looked down on by them as charlatans ; and last, though not least, the ‘British,’ and other scientific associations, recognize and discuss almost every ‘ology’ in existence except phrenology.

Under the circumstances, our first and great object should be, I think, to get phrenology established amongst the recognized sciences, and thus give to it its proper status and character. To accomplish this great object, I take it, a simply-organized Society will not be sufficient. We ought to assume a more ambitious title, and make it not only an investigating and educational but a degree-awarding institution. I should certainly go in for calling it “*The British Phrenological Association*” (with an organization similar to that of a university). And, if not out of order, I beg to propose that as its title ; and with a constitution like that of a university.

My next suggestion is that Professor L. N. Fowler be appointed the first President and Examiner. This, I think, will meet with universal approval. With regard to the other officials, I have not sufficient information to enable me to offer any suggestion. For the present, Mr. Fowler’s office would probably afford sufficient accommodation, as a centre, for the Association’s proceedings.

I shall be anxious to hear the result of Tuesday’s meeting ; and again express my regret at not being able to be present.

I am, your humble, though earnest, fellow-worker,
Kilgrimol School,
St. Anne’s on the Sea, Lancashire,
September 11th, 1886.

JOHN ALLEN.

There were also letters from Mr. Musgrove, of Oldham, Mr. A. Golledge, of Jersey, and others.

The Chairman then delivered the following address :—

Ladies LADIES AND GENTLEMEN,—We are assembled for the purpose of forming an Association for the study and practical application of

phrenology and physiology to the requirements of society and social life.

The poet tells us that—

“The proper study of mankind is man.”

And yet, until the great discovery of Dr. Gall that distinct functions are connected with distinct portions of the brain, human nature or the mind could not be understood.

History illustrates the fact that the wisest among mankind in all ages have directed their attention to the human mind, as an essence distinct and independent of organization, and distinct from all physical conditions. They had, in fact, no evidence or certain scientific knowledge to guide them; and hence crude guesses at truth have misled the multitude in all ages of the past

Through fog-land, haze, and mental mysteries.

So long as the mind was considered as an essence, and independent of organization, no true philosophy of the mental constitution could possibly result. The University of Paris adopted the notion taught by Descartes, that all men are born with innate ideas. Locke did great service in demonstrating the absurdity of the notion. But he also was in error when he promulgated the fallacy, which still prevails in our schools, colleges, and universities, and also governs human nature in daily life—namely, that the mind is like a piece of blank paper, on which you may write anything you please. Man, therefore, may form his own character, in defiance of heritage and surrounding circumstances, in their powers of perception and thought as well as in their powers of feeling and of action. Great evils, and a vast amount of injustice, is perpetrated by the agencies of society, in trade, religion, and legislation; by the uncharitable and unjust, in the collisions between natures as well as between nations, and in the angularities among individuals, in consequence of this erroneous notion.

There is an external law of necessity in heritage and evolution. You may breed paupers, or a race of criminals, as well as artists, mechanics, or men of science—men of light and leading, power, or rectitude. The institutions of a nation are what its people make them: in Greece democracy prevailed; in Rome egotism developed grasping selfishness under consuls, kings, emperors, and tyrants. It was held that men may be what they wish them to be—men of talent or of genius, if they will only pay attention—as taught by Dugald Stewart. Helvetius says: men all come into the world formed alike.

Now, character depends upon organization as well as upon surrounding influences or circumstances, and the organization of an individual would depend on the predominant activity in his parents in the first germs of existence, and which would depend upon the leading pursuits as seen in the hereditary laws of evolution. Here we begin to see the vast importance of making practical phrenology universally known, so that all persons in early life may know the sources of congeniality of disposition and the basis of character.

When we enter the market-place or the workshop, we find men are differently constituted, and have different degrees of skill; and when we study nature we find there is a constant relation between organization, capacity, and character, which may be made palpable and practically beneficial to all men of average capacity and powers of application.

Metaphysicians have arrived at erroneous conclusions through studying their own minds and experience, and assuming that all mankind were constituted, mentally, like themselves.

Dr. Gall proceeded on an opposite course, by studying organization in its relation to character. He was the first who gave the true exposition of the relations between organization and special capabilities. This discovery is the greatest and most important discovery ever made in relation to man, and is the foundation of phrenology and psychology, or the connection of mind and organization. Dr. Gall was also the first anatomist to give the true dissection of the brain.

The truth is, each internal mental operation has its organ as well as each external organ of sense, as hearing, seeing, etc., has its own peculiar nerves and organ, and hence the brain is not one organ of the soul or mind, is not a common organ for all functions, but a receptacle and seat for distinct organs. The brain is the material instrument of thought, passion, and emotion. That the brain has distinct organs for distinct functions is indicated by the fact that when long exercise fatigues one organ, relief is found by exercising another. It is proved also by the fact that there is a relation between organization, capacity, and character, made evident by a practical examination of brains or heads in active life, or of craniums after death.

When Dr. Gall began his inquiries, he found great conflicts of opinion as to the mind. The moral sentiments were treated by some in the stomach, by others in the bowels; while Pythagoras, Plato, Galen, and others, placed the sentient soul, or intellectual faculties, in the brain, Aristotle placed it in the heart; Descartes in the pineal gland; Drelincourt, and others, placed the soul in the cerebellum. There were no facts as evidence in support of these absurd conclusions.

With facts, and the collection of facts, phrenology was well supplied a generation ago; but what is now required is the use and application of the data already at our command. (Applause.) Wide regions of unexplored potentialities, and of easy conquest, are waiting the appearance of bold and fortunate investigators in the field of history, metaphysics, social science, legislation, education, wealth—its production and distribution—health, and the science of prolonging human life.

I refer to the last subject from its importance; and I am an instance of the influences of laws which have been applied in relation to the vital forces. For nine years I suffered from changes which induced the physician to intimate to my family that I was

dying. The chemical thermometer indicates the inflammation of the blood and coagulation in the capillaries ; the blood would soon fail to reach the heart, and there would be an end to the chapter. By study, observation, and experience, I have arrested the coagulation, and have added nine years to my existence. The various subjects referred to are capable of further development from the brilliant lights which phrenology throws on the elements with which they make us familiar. As the subject of phrenology might be soon exhausted, it is desirable to add a sub-title to the name of the Association, to give scope to deal with kindred subjects—such as Social Science.

At eighty-three years of age, I may be permitted to dwell, for a moment, on the past, in evidence of the potential and the practical in some of these departments of inquiry. Prompted by my knowledge of the vast importance of phrenology, I devoted some sixteen years of my life—from 1840 to 1856—to teaching the philosophy of phrenology, and its application to education and daily life, both in the class-room and on the platform ; and in nearly every town in England I demonstrated the truth and practical value of the science ; and I see some persons here who can remember some of the incidents. I hold that our present system of education is often injurious. In 1831-2-3, I demonstrated, by the aid of phrenology, that, where neither the Government, by the aid of the military force at their command, with the assistance of the landlords, priests, and clergy, could give peace and order to the starving and discontented peasantry of County Clare, and the Province of Munster ; yet, at the risk of my life, I subdued the reign of terror, by peaceful, social arrangements, at Ralahine, by giving the labourers a participation in the profits, after the rent, interest, and superintendence were paid ; and also a share in the management. The people became peaceful, industrious, and contented. We had neither sickness nor death ; while hundreds were dying around us of fever and cholera, in 1832. In 1834, at the invitation of Lady Noel Byron, I organized the first industrial and mechanical school on the Ralahine plan, alternating mental culture with mechanical and agricultural labour, without causing weariness, languor, or fatigue, to the faculties. There was neither place-taking, prizes, nor punishments. In the business of life it is worry not work that kills. A great deal of brain work that worries arises from the fact that many are put to occupations and professions for which they have little taste and less capacity. When on a visit with Mr. Thorpe, in the year 1844, at Ripley, near Harrogate, where he carried on a large manufactory of sewing thread, he told me he had lost his traveller, and I advised him to take a man out of his establishment and train him to the work. He requested me to go through the factory, the workshop, and the warehouse, to see if I could select a man suitable for the situation. I took a leisurely walk through the mill and the workshop, but saw none I could recommend. Some were deficient in a moral point of view, and others from mental incapacity. When on

the point of giving up the task, I entered the packing-room, and there found a man named Benson suited to the business. Mr. Thorpe appointed him, and more than doubled his salary. He first got into harness in short journeys, at home, and then travelled on the Continent, studied French, German, and Russ, and became a most efficient commercial traveller. Other phrenologists might cite hundreds of similar facts, in answer to those who ask, What is the use of phrenology, physiology, or an association to teach and disseminate the facts? It is a grave error in education to deal with the mind as a blank piece of paper, to the neglect of organization, or exclusively cultivate the intellectual powers, and to try to govern mankind, as theologians and politicians do, by precept. It should be remembered that children and adults always act from the impulse of the feelings, and that charity and justice are not sciences. Precepts have no more influence on the feelings than on the understanding. Precepts must be put into practice, and this alone is of practical use.

This is one reason why the advocates of social science are more practical than the mere political economist. The latter advocates buying cheap and selling dear, for getting profits out of the producer; while the social reformer insists on practical arrangements, to enable the producer to enjoy the whole of the products of his industry.

There are some that clearly perceive that the present increase in the productive powers of machinery will, by intense competition, destroy the existing conditions of society; there are others who as clearly see the possibility of a new civilization. One of these was St. Simon, and the other Robert Owen, and each proposed methods for ameliorating man's condition. But neither of these men understood or clearly appreciated the nature of man as explained by phrenology. The system proposed by St. Simon electrified its vivid representation of universal order and harmony; but it was not adapted to take root in the earth. Owen's plan was adapted for taking root in the earth, but not for captivating the fancy. The first was spiritual, imaginative, and elegant. It drew forth abundant zeal, and, as Fourierism, noble resolution and great self-abnegation. The theory was sublime, and the intentions benevolent. Owen's was somewhat mechanical. It is, however, a law of nature; is gradual and evolutionary, beginning at the root, and not at the flower; at the foundation, and not at the roof of the temple. Phrenology is the only true exponent of man's cerebral constitution; and, as the present phase of society will pass away like those which have preceded it, I hold it an imperative duty on the part of phrenologists to teach, by organized efforts, the true philosophy of human nature as discovered by the founder of cerebral physiology.

In conclusion, I would advise the Association to form branches in the Provinces, to support the movement by contributions, so as to enable the Central Council to appoint lecturers and distribute literature, to make the whole world alive to the practical value of Phrenology. (Great applause.)

At this point of the proceedings Mr. Craig vacated the chair and was enthusiastically applauded as he left the room, and Mr. Story was elected to take his place. Mr. J. J. Morrill then rose to propose the first resolution. He said it was his pleasing duty to put to the meeting a formal motion that a Phrenological Society should be forthwith constituted. The matter had been so fully discussed in the PHRENOLOGICAL MAGAZINE, and at several preliminary meetings; and, moreover, the Chairman, in his admirable address, had shown the abundant necessity there was for such an organization, that there was hardly any need for him to say anything on that head. He had himself long looked forward with hope to the constitution of such a Society, feeling that it was needed, and that, if properly started and carried out in a right spirit, it would do an immense deal of good. He had been prepared in this resolution to propose that an organization should be formed under the title of the London Phrenological Society; but after having heard read the suggestive letter of Mr. J. Allen, and having had the opinion of several gentlemen who were interested in the proposed Society, he had decided to adopt Mr. Allen's suggestion. He therefore begged leave to formally propose the following resolution: "That in the opinion of this meeting it is desirable that a Society should be forthwith constituted for the promotion of mental science, and to be called the British Phrenological Association." (Applause.) Mr. J. Webb rose to second the motion. He said it would be remembered that he had taken some active part, in connection with the Editor of the PHRENOLOGICAL MAGAZINE, in agitating for the formation of such a Society; and he thought no better time could be chosen for such a start. The public mind was open to receive instruction on the subject. So far as his experience went he did not think there was so much opposition to the subject of phrenology as might appear to some. He found the minds of many educated and professional men leaning that way. He had, when the question was first mooted, taken the liberty to write to several professional gentlemen to ask them to attend and give their sanction and support to the movement. Among others he had written to Dr. Benjamin Ward Richardson and Dr. Crichton-Browne. He had received letters in reply from both those gentlemen, and from the tenour thereof it was plain that they stood in no hostile attitude to phrenology, although the latter regretted the charlatanism that was too often mixed up with it. He had great pleasure in seconding the resolution. (Applause.)

The resolution was then put, and carried unanimously, and with much enthusiasm.

Mr. McKean was called upon to propose the next resolution. He said, the Society having been constituted, the next business was to appoint the officers, and as they should want a good President, he had great pleasure in proposing for that office the name of a gentleman known to them all, and who would, he was sure, be elected with acclamation. He need hardly say that he referred to Mr. L. N. Fowler, whose unavoidable absence he greatly regretted. (Applause.) While on his feet, he begged leave to congratulate the meeting on having done an important act—a very important act, the ultimate results of which could not be foreseen. He had for years past, as the Chairman knew, for they had had frequent talks on the subject, advocated this step. It was necessary for phrenologists to be united in order to break down the ignorance opposed to them. If they were united, success was certain, and they would live to see phrenology admitted among the acknowledged sciences. He had great pleasure in proposing that Mr. Fowler should be their first President.

Mr. Cox briefly seconded the resolution, and it was carried unanimously.

Mr. Alfred J. Smith proposed that Mr. Story should be re-elected Honorary Secretary, and that Mr. Warren should be appointed to assist him. He knew that Mr. Story's time was much occupied, and therefore it was well to have Mr. Warren associated with him in the Secretaryship. He did not know much about Mr. Warren, but he saw that he had a good organ of Conscientiousness, and that was a guarantee that he would put in good work. Mr. Brownson seconded the motion, which was carried *nem. con.*

Mr. Godfrey proposed that Miss J. A. Fowler should be appointed Treasurer. They wanted the assistance of the ladies, and he thought if Miss Fowler would accept the post, it would be a guarantee that their finances would be well looked after. Mr. Barker seconded; carried.

Mr. Warren moved that the following gentlemen should form the Committee of the Association, with power to add to their number :—

MR. J. J. MORRILL.	MR. COX.
MR. J. WEBB.	MR. J. MCKEAN (Eastbourne).
MR. A. J. SMITH.	MR. BARKER (Brighton).
MR. B. HOLLANDER.	MR. ALLEN (St. Anne's on the Sea).
MR. J. F. HUBERT.	MR. and MRS. PIERCY.
MR. A. T. STORY.	MR. GODFREY.
MR. WARREN.	MR. E. T. CRAIG.
MR. DILLON.	

The motion, having been duly seconded, was adopted.

Mr. Story proposed from the Chair that the annual subscription should be fixed at ten shillings. In committee they had talked the matter over a good deal, and they had come to the conclusion that, while it would be well to put the subscription at as low a figure as possible, they were afraid they could not manage to carry on the Society on a less sum than ten shillings. However, if it were found at the end of the first year that the Society could be worked at a less cost it could be reduced.

Mr. Dillon seconded the motion, and it was adopted.

Some conversation having taken place as to the scope and intentions of the Association, it was, on the motion of Mr. Morrill, resolved that it be an instruction to the Committee to draw up a code of rules and regulations, and bring them up for adoption at the next meeting.

A vote of thanks to Mr. Craig for presiding, and to Mr. Story for taking the Chair after his departure, having been put and carried, the meeting came to an end.

THE *PALL MALL GAZETTE* AND MRS. GRUNDY.

IT is greatly to be regretted that the *Pall Mall Gazette*, which only a month or two ago we had occasion to commend for its outspoken championship of tabooed questions, seems to have hauled down its flag of independence and fearless criticism and gone over to the legion that wait on the smiles and frowns of Mrs. Grundy. Not so long since the redoubtable organ of Northumberland Street published articles on palmistry, and this was followed up by articles on behalf of a prosecuted astrologist. The paper did not espouse these, as they are called, 'exploded superstitions,' but simply gave the advocates thereof a hearing. This is as it should be. Trusting, therefore, to this spirit of fairness, we sent the other day a short article on Phrenology, in reply to some side hits given to it by W. J. Collins, M.D., in an article entitled "Brains, Heads, and Hats"; but it was returned with 'regrets,' etc. According, therefore, to the combined wisdom of the oracular office of Northumberland Street, phrenology, backed by the authority of men like Gall, Spurzheim, the Combes, Fowlers, etc., is less worthy of notice than palmistry or astrology. Naturally, this does not greatly impress us with the wisdom of the counsels of the *P. M. G.* However, we are more sorry if, as appears, it betokens a going over to Mrs. Grundy, than for the sake of phrenology; because, like all good and true things, it can wait. Phrenology is as sure of its ultimate triumph

as Mrs. G. of final downfall. Annexed will be found the article by Dr. Collins (which contains some interesting matter), and the reply thereto refused admission by the Editor of the *P. M. G.*

BRAINS, HEADS, AND HATS.

PHRENOLOGY, viewed as bumpology, has ceased to occupy the minds of the scientific since Sir William Hamilton long took the trouble to discuss it seriously and dispose of its assertions by solid appeals to facts. It is none the less true, however, that the brain is the organ or instrument of the mind, and that some idea of actual size and relative proportions may be obtained from external measurement of the head and study of its configuration. Moreover, localization of cerebral functions is, if nothing more, at any rate a fashionable physiological doctrine, and, it would appear, was quite recently the means of guiding to a very nearly successful operation. So that while a cranial prominence assuredly does not imply a central prominence, and the phrenologist's localizations have been infelicitous as their classifications of the faculties are illogical, it may be true after all that our brains have areas allotted to definite functions, and that those may be mapped out with some precision on the cranium.

Putting aside this *questio vexata*, and addressing ourselves to a larger one, are we in a position to predicate anything definite concerning the prevalent prejudice in favour of a large head. Does a large head imply a large brain? Is a large brain, *cæteris paribus*, intellectually superior to a smaller one? Mr. Luther Holden, of anatomical fame, opines that "although the cranium does not exactly follow the brain in all its eminences and depressions so as to be like a cast of its surface, it certainly indicates the dimensions of the great cerebral mass." Dr. Humphry, of Cambridge, declares "there can be no doubt that the size and general shape of the brain may be estimated with tolerable accuracy by the size and general shape of the skull, and further that we may form a pretty correct notion of the relative proportions of the cerebral lobes by observing the proportions of the corresponding parts of the skull." Indeed, no one who has been in the habit of removing skull-caps can entertain any doubt upon the subject, and it may be taken for certain that, other things being the same, a large head means a large brain.

Next, as to the relation between brain-mass or brain-weight and mind-power, can anything be definitely postulated? The following facts are significant in this connection:—I. Man

has, not only relatively, but absolutely, the heaviest brain of all animals save two—the elephant and the whale. 2. The average weight of man's brain is $49\frac{1}{2}$ oz ; woman's, 44 oz. 3. "The brain in idiots is remarkably small" (Quain); indeed, some such have weighed but 15, 13, and 8 oz. apiece. 4. Many men of great mind-power have possessed unusually heavy brains: witness the historically famous brain of Cuvier, $64\frac{1}{2}$ oz. ; also those of Schiller, Agassiz, D. Webster, Spurzheim, Chalmers, De Morgan, etc. 5. The more intellectual nations have generally the larger skulls; of 100 modern Parisian skulls twenty-eight had a capacity of more than 1,600 cubic centimetres; of 100 negros' skulls only nine exceeded this capacity.

It has been stated that, as regards occupation, grooms and Government clerks before the days of competitive examinations rejoiced in the most limited cranial capacities. In the investigation of the size of the head of the living, the hat is a valuable gauge, and some statistics furnished by hatters give interesting corroborative evidence. I may say that the 'size' of the hat is the mean of the length and breadth; thus, a hat measuring $7\frac{1}{2}$ in. long by $6\frac{1}{2}$ in. wide, would be size No. 7. Mr. Christy, the well-known purveyor of chimney-pots and other headgear, informed me that the average size for English adult males was 7, or 22 in. in circumference. Germans have round heads, Malays are small, Portuguese average $6\frac{3}{8}$ —7, Spaniards slightly larger. Japanese exceed the English average; the order for a dozen would run thus, four 7, three $7\frac{1}{4}$, four $7\frac{1}{2}$, one $7\frac{3}{4}$. Mr. Bowen gives similar information, and adds, "Men who have to do with horses—coachmen, jockeys, livery servants—have undoubtedly the smallest heads." This size of livery hats would run from $6\frac{1}{2}$ to 7, nothing larger. Mr. Kissop, of Glasgow, says the Scotch head is larger than the English. York has the largest English range, Cambridge next, then Oxford; the professors of the Scotch universities average 7 1-16: Joseph Arch took $8\frac{1}{2}$, Chalmers $7\frac{3}{4}$. Other heads of interest are Mr. Gladstone $7\frac{3}{8}$, Lord J. Russell $7\frac{1}{4}$, John Bright $7\frac{1}{8}$, Lord Selborne $7\frac{1}{8}$, the Prince of Wales and Lord Beaconsfield each 7. It is lamentable to reflect what a golden opportunity for an extensive observation was lost in the House of Commons on the memorable 8th of April of this year! Shortly afterwards it occurred to me it might be interesting and instructive to ascertain the average hat size of the members of the London University in convocation assembled; such a body, it was hoped, might be considered as superior to the average in mind-power. Accordingly I instructed my hatter to make the necessary measurements,

and I here give the result:— $6\frac{5}{8}$, 7; $6\frac{3}{4}$, 9; $6\frac{7}{8}$, 27; 7, 32; $7\frac{1}{8}$, 29; $7\frac{1}{4}$, 16; $7\frac{3}{8}$, 3; $7\frac{1}{2}$, 2; $7\frac{3}{4}$, 1—126 hats in all. I will now add new figures supplied to me by Mr. Bowen, showing the hats required by ordinary adult Englishmen:— $6\frac{1}{2}$, 2; $6\frac{5}{8}$, 4; $6\frac{3}{4}$, 6; $6\frac{7}{8}$, 8; 7, 7; $7\frac{1}{8}$, 5; $7\frac{1}{4}$, 2; $7\frac{3}{8}$, 1; $7\frac{1}{2}$, 1; $7\frac{3}{4}$, 0—36 hats in all. And lastly, to complete the picture, here is an order for a dozen livery hats:— $6\frac{1}{2}$, 2; $6\frac{5}{8}$, 3; $6\frac{3}{4}$, 3; $6\frac{7}{8}$, 2; 7, 1; $7\frac{1}{8}$, 1; nothing larger—12 hats in all. To sum up the results in rough percentages as follows:—

	Total.	Percentage of Hats smaller than 7.	Percentage of Hats larger than 7.
London University Hats	126	34	40
Ordinary Hats	836	55	25
Livery Hats	12	13	8

The general conclusion to be drawn from the hatters' figures is therefore favourable to the opinion that large head-dress and mental capacity go together.

As to the argument that quality must be studied as well as quantity, and that variations in specific gravity, in depth of convolution, of relative proportion in gray and white matter and richness in nerve cells in the brains may vitiate results derived from a study of their size, I would request that the following consideration should be borne in mind: The specific gravity of the brain varies very slightly; it is the same in the child of 2 and the man of 100, and what is more curious, perhaps, it is nearly the same in the sane and the insane; so that specific gravity being constant, arguments from mere size become more important and significant. Again, if we regard the whole series of animals we shall be struck by the fact that the larger the relative size of the brain to the body the more complicated is the structure, the more convoluted the surface, and the richer in microscopical nervous element—indeed, quality improves with relative quantity. Again, Wagner has shown that the amount of covered or hidden surface of the brain bears a fairly constant ratio to the free or superficial surface—in fact, is about double it; so that I maintain comparison by size alone holds good, since convolution and surface vary with size, while the specific gravity remains constant. Comparison of size of heads then would appear to give as a rough, and certainly a ready, guide to mental power, or rather to mental capability; a man with a large brain may be a fool, and the small-brained may be highly intellectual, no doubt, but I submit that the small-brained start handicapped, and that the large-brained possess the capacity, which, nevertheless, may be neglected.

DR. COLLINS, in the *Pall Mall Gazette*.

BRAINS AND CHARACTER.

IN his article, on "Brains, Heads, and Hats," in your issue of August 23rd, Dr. W. J. Collins, while affirming that, "Phrenology, viewed as bumpology, has ceased to occupy the minds of the scientific since Sir William Hamilton long ago took the trouble to discuss it seriously, etc," acknowledges that "localization of cerebral functions is . . . a fashionable physiological doctrine, and . . . was quite recently the means of guiding to a very nearly successful operation." Without going into the question as to whether phrenology has ceased to occupy the minds of the scientific, it is interesting to note that Sir William Hamilton's arguments against the so-called 'Old Phrenology,' tell with equal force against the 'New'; so that he may be quoted with equal force against Broca, Hitzig, and Ferrier, as against Spurzheim and Combe.

But my aim in writing this article is to plead for a fairer and a more 'scientific' treatment of phrenology. Personally, though I have given considerable attention to the subject for very many years, I do not care one iota whether phrenology be true or not. I believe its doctrines and deductions are, within certain limits, based on a fundamental fact in nature, namely, the allocation of given functions to given organs; and I should naturally feel some chagrin to find that I had been deceiving myself so long, were it once proved indisputably that there was no truth in it; but my rejoicing that I had at length got rid of an error would far outweigh every other consideration. For it is truth only I want. And this is the feeling with which I would like to see phrenology approached by all; for it is not a matter of small importance. Millions of people (I do not exaggerate) believe in it, and are to a very large extent guided by its doctrines and inferences in many relations of life—more perhaps in America and the Colonies than here, where so many people still dare not think contrary to their doctor or their parson. Moreover, if there be any, even the slightest, substratum of fact in it, it cannot but be of value, not only medically, but morally, educationally, and metaphysically.

I grant, with Dr. Collins, that there may be something 'infelicitous' in the phrenologist's classifications of the faculties. In what science is this not the case? Are not all our classifications and arrangements of facts but the groping after a primal order that we can never hope to reach? And if this is so in the more physical sciences, is it not to be

expected that it must be so in one that is so largely concerned with abstruse and difficult-to-define mental operations? But much of that might be remedied by the attention and devotion of the best minds. Somewhat the same may be said with regard to localization. The phrenologist has endeavoured to find out facts, not to create anything. I have myself doubts about some of what we call 'organs' for want of a better term—what the prejudiced call bumps, and so go away with an erroneous idea; or, rather, I should say, I have my doubts about some of the minuter divisions. But from long and careful experience, I am convinced that there are facts connected with the shape of the head (and consequently of the brain) that are only explicable on the theory of localization of function.

Let me note one or two. I think there are very few educated persons nowadays who will deny that, broadly speaking, the frontal region of the brain is concerned mainly with the manifestation of intellect; that the coronal region is concerned chiefly with the manifestation of religious and moral feelings, and perhaps also that the back of the head is allocated principally to the social functions. Any one who has any doubt on these points, let him make a few observations among his friends and acquaintances, and he will soon become convinced that 'there's something in it.' He may extend his observations to the sides of the head, where the more purely selfish propensities, those that preside over animal maintenance and preservation, are located. If he has, for instance, a restless, mischievous, or quarrelsome boy, he will find he has great breadth between the ears. It is there that the organs called by the phrenologist 'Destructiveness' and 'Combateness,' originally named by Gall, their discoverer, 'murder' and 'fighting' respectively, have their location. Later phrenologists, striving after a better nomenclature, and one truer to function, have proposed the names 'energy' and 'force' for these organs; and they certainly are better than the former, although they too fail to hit the exact mark. However, there the functions are, and wherever they are in full development, they lead to forcefulness, energy, and effectiveness of character—to love of stir, bustle, and even fighting; sadly enough also to murder when there is not sufficient restraint from intellectual or moral faculties. The development is manifested in a high degree in the accompanying cut (numbered 431), which is the likeness of a criminal from one of the South American States. It was sent to me along with a number of others by Mr. T. Fry (of Messrs. Elliot & Fry, the photographers), with a note to the

effect that they were forwarded to him by a correspondent who was official photographer to the prisons. The man is evidently not lacking in intelligence, and even ingenuity, but he has so much Destructiveness that it would be difficult for him to restrain his temper and keep from acts of violence; and I presume his crime was one of violence, probably connected with theft, not unlikely burglary. The batch of portraits, of which this is one taken at random, numbers in all about two hundred; and I should like to give, as a test of phrenology, a description of a dozen or two of them, and then see if anything about the originals could be discovered, and compare the one with the other. All the likenesses do not show this development of Destructiveness so well, or to the same extent; but in the majority it is largely developed:



in 96 not though it shows a horrible state of demoralization—a demoralization such as could only have been the outcome of several generations of crime, or criminal indulgence.

I have dwelt on this organ of Destructiveness because it is so easily discovered, and its manifestations are so common; and if one organ be confirmed it is a stepping-stone to the whole superstructure.

Although not a professional phrenologist, I was once asked by a gentleman, whom I had never seen before, and have not seen since, to tell him what I thought about the boy he had with him, apparently about fourteen years of age. The lad was so low in the top of the head, and so abnormally developed in the organs of Destructiveness, Acquisitiveness, Secretiveness, Appetite, etc., that I told the gentleman I

feared he would never make much out of him. Taking me on one side, he said he was going to try to get the boy a berth on board a ship, as a last resort, seeing that his mother could do nothing with him. He had robbed her, run away from school again and again (the last time tearing up the sheets to get out of the window), and had finally tried to murder his mother, after running away from school, breaking into her house, and forcing her desk to get at her money.

Another fact: Only a few days ago a little girl was amusing herself by counting. Her aunt made the remark in my presence: "What a child you are, you are always counting!" The girl replied: "Well, I can't help it; I often find myself counting in my sleep." The remark and the reply naturally caused me to look at the girl's head, and from where I sat, across the room, I was struck with the protuberance at the outer corner of the supra-orbital ridge, the location of the phrenological organ of Number.

It is facts like these constantly coming under the observer's attention that force one to the conclusion that phrenology is not the silly figment and delusion that the 'scientific' would have the world believe. In conclusion, I would like to give Dr. Collins a fact. I have before me an article, written by a Board-school teacher (one who has studied phrenology attentively for years, and applies it daily in his avocation), in which he says that the boys with the larger heads easily get to the top standards; while those with the small ones never get beyond the lower standards, and some with difficulty pass any. A hint, by the way, for our educationalists. We can afford to admit more that is in heaven and earth into our philosophy.

TALENTS BROUGHT TO LIGHT, MULTIPLIED, AND RIGHTLY USED.

ONCE upon a time darkness was upon the whole face of nature; every nook and corner of it was covered with thick darkness; the atmosphere was thick with mist, smoke, sulphur, and carbon; day and night were all the same. But in process of time the sun began to disperse the darkness by gradually penetrating into the mist, and there began to be day. Creation started with complete darkness, and, as humanity was not yet in existence, all was mental and moral darkness on the earth, excepting what belonged to the Divine Mind. When the sun had gained sufficient power, grass, herbs, and trees, were added to creation; and birds of the air and beasts

of the field were added to fish of the sea. The animal creation manifested very little mind in those days; for it consisted mainly of very large, ungainly, and useless animals, that have, to a great extent, become extinct. There was a gradual improvement in the influence of the sun, and in the productions of the air, earth, and water; and in process of time the crust of the earth became hard and dry enough for the foot of man, and to produce the food for him to eat. By this time the mentality of the animal had improved much, and could be turned to account.

Man started very low in the scale of intellectual and moral qualities, for he had as yet no culture or capital in that direction. Instincts rather than talents, animal impulses rather than spiritual emotions, at first controlled man. His life was sensuous, and his sympathies low and animal in their direction rather than angelic; with fallen angels rather than pure spirits. In fact, man's mind all worked downward, and was subject to the passions at the expense of what intellectual and moral nature he had. He was in truth but a little above an animal himself, if disobedience, being ashamed, hiding away, making excuses, blaming others, jealousy, and murder, were among the first things recorded of Adam, Eve, and Cain. The sons of God married the daughters of men, and there were giants born as the result of these marriages, and the same became mighty men and renowned; and yet wickedness increased on the earth, and every imagination of his heart was only evil continually. The earth was filled with violence, and was corrupt before God; for all flesh had corrupted his way before God. These were days of darkness; man's talents were hid and controlled by passion, and developed only in building, in musical instruments, and works in iron and brass. So that there was but one righteous man found on earth who believed God and obeyed His commands, although he had his faults; but because he believed and obeyed instructions he and his family were saved. After the Flood man started on a higher plain. The lesson that he had learned let a light into his mind. Noah received instructions about building the Ark, which did much towards developing his talents and giving them a higher direction.

The sciences first received attention, especially figures, mathematics, and astronomy. Then was manifest the talent for architecture and art, especially carving, engraving, writing, and sculpture. The men in those days were very strong, and had powerful constitutions, and gave direction to the mind. They delighted in physical sports—hunting, in war, in building towers, temples, palaces, gardens, walls, pyramids, and

tombs. Such are wonders even at the present day for size, grandeur, and perfection—Egypt, Baalbec, Nineveh, Babylon, Jerusalem, Ephesus, Athens, Thebes, etc. Very fine works of art were made in early days ; a chain was made so small and perfect that no artist can make one like it at the present day.

The genius of man at this time appears to have been taxed to the utmost in every conceivable way, except in spiritual directions. Men became ambitious in poetry, oratory, music, acting, and philosophy, and vied with each other in wealth, luxury, beauty, and accomplishments.

All below the coronal brain was in vigorous exercise, and had reached a high degree of culture ; but the genius of man was like a lantern that was dark at the top, although light and transparent below and all around. The day is looked for when the talents of man will shine as a suspended light, without a lantern, to be seen in all directions, especially above. Talents may be fairly distributed among men, but they are very unequally developed, even in one man. There are many very dark corners and undefined parts without form, and void in many men's minds, although many are feeling their way, though often blundering, stumbling, failing, and losing their way for the want of more development of mind. Some are beginning to see what to do, but do not know how to do it, looking into life and its duties as through a glass, darkly, not half doing what they do at first. In fact, all the work of life is done imperfectly—education, politics, government, sanitary arrangements, modes of doing good—all are comparative failures to what they will be when a perfect mind does the work. Those who have the most talent, and that the best used, are only beginning to see what is most needed to be done.

The beginning to use the talents aright is to eat, drink, exercise, and rest, and to clothe and take care of the body properly, and in learning how to live so as to make the most of life ; then in studying those things the most necessary to know and that will best help to secure an honourable living and do the most good.

Land is cultivated by degrees, and made more fruitful, useful, and valuable. At first it is wild and unbroken by the hand of man, and the rivers are full of rubbish. In the second stage the underbrush is cut away for the hunter, with trails only for roads ; rivers are cleared for canoes and fishing. In the third stage it is cleared and fenced in, and the rivers are supplied with bridges, and advantage is taken of waterfalls with natural, but poor roads. Lastly, it is highly

cultivated, enriched, drained, and productive, with needful and useful houses, and every convenience for success ; roads paved, rivers made navigable, and every advantage taken of climate and soil and minerals.

The wild, uncultivated, natural man, living only for the day, and from hand to mouth, unclothed, and unrestrained, living only in his passions, is like the wild virgin soil. The barbarian, with limited ideas of enjoyment ; with only jealousy and low ambition as stimuli to action ; with rough nuggets of gold and unpolished diamonds hanging in the ears and nose, is like the land with the underbrush cut away, and trails for roads. The civilized man, cultivated, disciplined, and surrounded with laws, and in a condition to enjoy the labour of his hands, and to receive inspirations from a Higher Source, is like the land fenced in and cleared ; the rivers navigable, with bridges, mills, and roads. The fourth and highest degree of mental development is where Christianity is added to true civilization, with a full use of all the powers of mind and body, enjoying the anticipated results of a consciousness of a hereafter as well as of a here, a spiritual as well as a physical world, with a desire to make the most and do the best with all the powers he possesses, and to use all the products of nature, and not abuse them. His powers are neither morbid nor inactive, but healthy, and he is living to benefit others as well as himself.

The way to bring talents to light is, *first*, to take good care of the body, so that it shall be a good medium for mental manifestation, and to sustain the mind in its operations. Many bodies, for want of care, are broken down before the mind has had half time enough to develop itself or show half its gifts. Proper care should be taken to begin and continue according to the order of nature ; to rightly develop and guide the action of the different faculties as they are called out, and, as far as possible, to prevent the premature development, or perverted or morbid action, of faculties that should be in check until age requires or calls for their action. Children should be thoroughly trained as they go along ; taught as much as possible about themselves—how to take care of their bodies, and how to govern their tempers, appetites, and selfishness, and properly guide their love, ambition, and aspirations. They should be taught how to live so as to be healthy, happy, useful, and to grow to be wise, true, and pure ; to learn to live for others as well as for self, and be taught those things that they most need to know to make them practical and useful first and ornamental afterwards ; to become acquainted with physical objects and the natural sciences

first, then mechanical, philosophical, political, theological, and moral subjects afterwards.

The best foundation to build up the character on, and bring out the talents to the best advantage, is honesty and truth. When a child begins wrong, and perverts any organ or function of the body or mind, imperfection will be the result, so far as their influence go. But where the mind is kept true, and the body healthy, the whole nature comes forward harmoniously. As one raw spot of flesh where saddle or harness goes on the horse spoils it for use, so one diseased or deranged organ of the body checks the full and complete growth of the human body. So, likewise, the perversion or morbid influence of one faculty of the mind has a demoralizing influence on the whole mind, and changes its course of action. As it takes but one rotten apple in a barrel, or potato in a heap, or tainted piece of meat in a butcher's shop, to infect the whole, so it takes but one perverted faculty, or bad boy in the school, or one immoral man in society, to prevent perfection in the person, school, or society. A sore toe, a sliver under the nail, or a speck in the eye, mars happiness; so also profane language, lustful desires, and violent, cruel actions, will mar the character. Poor soil, poor light, and little water, will stunt the growth of plants and trees; so bad food for the body and the mind, bad habits and impure physical and moral atmosphere, will stunt the development and growth of both the body and the mind. As too much cold, heat, and drought, prevent vegetation from thriving, so irresolution, timidity, and fickle-mindedness, prevent mental growth; as tobacco, alcohol, and opium, tend to throw the system out of balance, so undue excitement, too much novelty, and dissipation, prevent the mental powers from acting harmoniously; as the body can be poisoned and diseased, so can the mind. Mental growth and development are slow and gradual, like the cultivation of the soil, the growth of an oak, or the crumbling of the rocks. A Jonah's-gourd development is not sound or lasting. Those who are true to nature, to themselves, and to their Creator, are more sure and safe.

Very much depends on love, courtship, and marriage, as to how much talent is created, brought out, properly used and developed, or kept back hidden and sacrificed. The feeding, clothing, and training of children, together with their habits and surrounding influences, have a powerful influence in bringing forward or retarding mental action. The true way to create, bring into proper use, and rightly direct the greatest amount of talent, is to go a-courting right the first time; get

in love to the right one the first time ; to marry the right one at the right time ; to begin to live together aright as friends, equally interested in each other and in the results of marriage ; to agree in the management and government of the children, and to live for their children instead of having their children live for them.

To go a-courting the wrong way the first time ; to get in love at the wrong time to the wrong person ; to get married to the wrong one at the wrong time ; to begin married life wrong ; to disagree as to how many children there shall be, and when ; to differ as to the mode of managing and governing them ; to set them bad examples, and allow them to form bad habits, and grow up without a trade, profession, or calling, and to show a want of interest in each other, and to criminate each other before them, is to lay the foundation for the hiding and sacrificing of more talent than in any other way.

Love is at the foundation of life ; courtship is at the foundation of marriage ; marriage is at the foundation of society ; society is at the foundation of education ; education is at the foundation of good laws and government ; good laws and government are at the foundation of true civilization. Then add Christianity to civilization, to quicken and elevate the mind, and man is in a condition to bring into action all the powers of his nature, and use them to the best advantage. Let us all strive to do our best to develop our own talents and those of others.

THE SPARROW.

THIS is an ethic as well as an ornithological study. It is necessary to premise this much, because interesting as the sparrow is from the simple natural-historical point of view, it is much more so when considered as a moral being. There are doubtless some who will regard the sparrow as without morals, and therefore not to be treated from the ethic standpoint at all. This, however, is a mistake. The sparrow has unquestionably a moral code, although peculiar, and not to be judged by man's imperfect tables of the law.

However, I do not intend here to attempt to define the sparrow's code. Let it suffice to say that it differs radically from that of man ; but chiefly in that its fundamental idea is not the recognition of property. Indeed, it takes a much higher ground ; and hence it is not greatly to be wondered at that man considers the sparrow very lax in regard to *meum* and *tuum*. It takes what it wants, asking nobody's

leave, and allows the same privilege to others. Only when it has once got something in its grip, it then permits no interference. It is very "jealous of its home, and will fight lustily for a straw that it has appropriated for its nest, or for a crumb of bread that it has annexed for its young. But it does not fence off portions of creation, and say, "This is mine; I hire the sun and the air and the rain to do my work, and woe betide those who touch what they produce for me." Hence it was no sparrow that sent the poor man to gaol for six weeks because he picked up five sticks to make a fire and boil his morning kettle withal; no, it was a biped of another feather.

The sparrow is your true democrat. He recognizes one law for all. There is the wide world for every living sparrow to pick up his livelihood in, with none to prescribe him bounds or restrictions; but woe worth the day that he interferes with another's nest, or his mate, or his young. Imagine him sitting down tamely while one bigger or handsomer took away his spouse. Why, the little fellow would fight over the injury to the last drop of his blood; and I admire him for it. I admire his sturdy, amative propensity, his fidelity, his combativeness, and—shall I avow it?—his impudence. Was there ever such a wooer? The saucy, dapper little fellow, with his brown cut-away coat and grey vest, won't be said nay, and, like the steady, persistent lover generally, ends by carrying all before him.

And what a good fellow he is too! He is in his way quite a philosopher, and, as the French say, when he can't get what he would like he makes up his mind to like what he has; when he can't have the best he makes the most of the second best. But when there is a chance for a feast, he does not sit by and chirp, "Dare I? dare I?" with his off eye looking askint on the doctor. So at the time of harvest he makes a point of migrating to the country, and there distending his little coat with good living; and when the fine days are over he returns to his urban quarters rotund and jolly, like a fat, well-to-do parson. But, unlike many of his fellow-creatures, his fat and carnival days have no tendency to make him discontented and morose when these are followed by the Lent and Ramadan of the year. Come shine or come shower—come famine or come feast, he is ever the same lusty, grey-brown bird, with his incessant chirp and chatter, his sturdy independence, and his merry insouciance.

What would the town be without him? The country might manage: there be others to fill his place; but the town minus the sparrow would be desert. Once, in a foreign city, I was indebted to the cheery little fellow for taking away my feeling of utter loneliness. I had eaten my

frugal supper at my garret window, and unwittingly had left a few crumbs on the sill. In the morning, with the first peep of day, I was awakened by hearing a familiar sound at my casement. With a bounding heart, I sprang from my bed, and hastened to behold—a troop of sparrows squabbling and chattering over the crumbs I had dropped! I never felt any more loneliness—never any more strangeness in a strange land. You are never in a foreign land where the sparrow speaks the same well-known language, let the people gabble in what lingo they may.

Curiously enough, the season that takes the sparrow away brings us the robin. At least, it is so in my garden. During the bright autumn mornings his voice is the only one I hear; but he sings not yet as he does later, when tribulation comes in the shape of wet and winterly weather. I wonder if any of us would sing if it were not for the tribulation mingled with our joys!

What a contrast between the two birds! The robin is pre-eminently a contemplative bird. What an air of sedate wisdom he has as he perches on his twig or bare stump and surveys the world around! He seems to know it too, and so has somewhat the appearance of posing, as though conscious of having a character to sustain. On this account it is, perhaps, that he strikes me at times as being a little priggish, and as saying to himself: "I cannot do as other birds do; I am the highly moral among the feathered tribes, and am quoted as an example." He may get this from his human neighbourhood, where such exemplars are common. He has a distinguished air, nevertheless, with his red stomacher and large bright eyes, which he has a way of fixing upon you one at a time, much as the Englishman focuses you with his eye-glass.

How different to the plebian sparrow! He never pretends to any wisdom; nor to morals or manners either for the matter of that. Imagine a couple of robins getting down into the gutter and quarrelling and fighting like so many sparrows! Your sparrow is the very street-arab among birds. He seems to love the dirt; he does not greatly mind the rain; he seems to love a stand-up fight, or even a scrimmage; and I am not sure but he has a Billingsgate all his own.

Nevertheless, I love the sparrow. Long ago I commenced to write a trenody on him. I only got to the length of about a dozen stanzas, and I have many times thought I would set to work and finish the poem; but, unfortunately, I have lost the copy, and all I can remember are some detached lines.

I think I was first drawn to like the sparrow from learning,

when very young, that he was sold in the streets of Jerusalem at the rate of three for a farthing. What a quantity the sportsmen of Palestine must have slain to be able to sell them at such a price! Poor little fellows, they must have had a bad time of it! But it was something to have visited Jerusalem. Some of them, indeed, must have chirped on the roofs of the golden city. I would willingly have been even a sparrow might I but have spent a brief season on the housetops of Jerusalem; yea, even at the risk of broiling and sputtering before a Jewish kitchen-fire.

It is quite in keeping with the character of the thrifty Hebrew that he requisitioned the humble little sparrow to supply his larder. But I take it that being sold so cheap it was a dish for the poor rather than for the rich; and the savoury cates of the needy are so few that one would not begrudge them an occasional feast on sparrow. Some still batten on this food. I was once induced to feast on sparrow-pie. We had caught a dozen or so by placing sieves at the sides of the ricks, where they had taken shelter for warmth, and then beating and poking sticks into the hay to disturb them; but when I came to think the matter over calmly, it struck me as partaking of cannibalism to eat a thing that lives in such close and confiding neighbourliness. With the barn-door fowl and other cattle it is different: they expect it. But nothing would persuade me to eat sparrow again—if I knew it.

There is one good thing about the sparrow as an article of diet: no one ever caught a podagra from gourmandising on it. Such diseases are imported: they grow far afield; and it is only the rich who can afford them. When the poor of Jerusalem had to confine their gameish appetite to sparrows at three for a farthing we may be pretty sure that they were healthy, if needy. But how providential that the bird was so abundant! And yet there went not one into a Hebrew frying-pan, or luscious Palestinian pie (toast, I believe, was not then invented), but its fall was noted and duly placed on record. If it ever be my lot to mount a pulpit stair and preach, I will take that for my text: three sparrows for a farthing, and all carefully booked. I wonder no one has ever thought to preach that sermon before. It should be divided thus——. But, stay! I must not show my hand, else shall I have no sermon to preach; and to be called on for a sermon and have none to give were sad indeed. Still, I should only be in the company of the ten thousand and one others who, having no sermon to preach, may yet live one, like the sparrow that, valued at less than a farthing, still chirps and is gay.

HYPNOTISM IN CHOREA AND EPILEPSY.

PROF. E. P. THWING, PH.D., in *Mind in Nature*, gives the following case of the successful treatment of incipient insanity and epilepsy by the Artificial Trance :

A friend had told me of his daughter R., fifteen years of age, who for years had been afflicted with chorea and epilepsy. A fright and a fall, together with school confinement, were the supposed factors in the etiology of the case. The family history was good, the hygienic surroundings fair. The attacks of the disease had been frequent and at times violent in degree. Earlier seizures were accompanied with vocal and physical manifestations, but latterly the attacks were those of sudden syncope, without any aura, vertigo, or warning whatever. While eating, or in bed, perhaps, R. would instantly become unconscious and remain so many minutes. On recovery, no recollection was had of anything, and no pain or special exhaustion complained of. At our first meeting only a few queries were put and a general examination of the case was had. At the second, R. was seated directly before me. Her facial muscles were at work, and her arms and fingers as well. Taking each hand firmly within my own, I held them a moment, and encouraged her to keep as still as possible, with her eyes fixed on mine. Realizing that I had to do with an enfeebled will, as well as a disordered body, I stimulated each effort at self-control with quieting and assuring words. Partial muscular repose was secured in a few moments, so that when the hands were dropped in her lap they lay motionless except a twitching of the thumbs. This, and also a continued angular movement of the elbow, yielded to manipulation and suggestion, so that only the facial distortion remained. This was soothed by pressure and gentle passes from before backward. The eyes were next attended to. Up to this point R. was in a state of normal wakefulness. Now the trance sleep was induced, as heretofore described (*Mind in Nature*, Vol. I., page 48). When first I touched the eyeballs their furious rolling was noticed under the out-spread fingers of either hand. As in all other cases, the gradual quietude of these organs will indicate deepening somnolence. So, also, the relaxation of the ligamentum nuchæ and neck muscles, which is a later sign. Within a minute the patient was thoroughly hypnotized, so that a touch of the conjunctiva and cornea was not noticed. She was then allowed to sleep extended on a sofa, and when waked her appearance was noticeably improved. Sitting

then upright, leaning against the wall, she was told to sleep, and immediately responded. No medicines were given. After one or two more treatments her self-control was so well established, she appeared again in the street after three months' seclusion, and has since attended Sunday-school. No fits have occurred, whereas four a day were sometimes had previous to these meetings.

I have no theory about the matter, but simply state the unvarnished facts as an interesting parallel to those already referred to in French practice, and suggestive of a method of therapeutics which Prof. Carpenter, of London University, recently deceased, regarded as "one of the most potent methods of treatment which the physician has at command."

Hygienic and Home Department.

THE BRIGHT SIDE OF SICKNESS.

IT is always well to look on the sunny side, and there is one in every prospect. This is so, little as we may be disposed at first thought to admit it, even in sickness. Just reflect a moment, and you will see that we are right.

An invalid, it is true, is in the daily receipt of two of the principal things of which alone it may be said, there is more pleasure in giving than in receiving. We refer to medicine and advice. In addition to being confined to his bed so much of the time, he must swallow unpalatable drugs, suffer continuous aches and pains, fever, restlessness, and insomnia; but, for all that, he may be the recipient of many kind and welcome attentions.

Who has not pleasant memories of being propped up, in an easy position, with the softest of pillows, to enjoy the delicious tea and toast so nicely served to tempt his appetite? We are profoundly sorry for the man or woman who has not such associations with sickness.

Then, in convalescence, when the momentous question is, as to what one shall eat; how anxiously we wait for a decision in favour of our pet appetizer! Most invalids are fastidious, and are apt to decide upon first one delicacy, and then another, before they can make up their minds as to what they really want; and in the end, very possibly, turn away from them all with a feeling very nearly akin to loathing.

The nurse or other attendant, who is an adept in showing up the bright side in such cases, will never ask you what you

will have. The bill of fare for a sick-room should always be a carefully prepared and well-considered surprise. At the proper moment, there then should be placed before the invalid something of which, in all probability, he had never thought.

The chances are, then, that there will be no hint of a preference for some different dainty; much less will there be a turning from it in disgust. In every instance the patient will enjoy nourishment thus served infinitely more than if it had been personally selected, or he had been waiting impatiently for its appearance.

But while this is always advisable, it is anything but that to lead one to think that something entirely different is being prepared to tempt his appetite.

Many, it is to be feared, are not sufficiently careful as to the manner in which a sick person's food is served. It is, in the first degree, essential that the appointments should be the very best possible under the circumstances. The repast should be, outwardly at least, as tempting as possible. The eye has much to do with aiding the appetite, and a few sprays of fresh parsley, or a slice or two of lemon, are wonderful auxiliaries.

If possible, the same dish should never be served twice in succession. Not only this, but the Hebe or Ganymede should, in every case, be a model of neatness and tidiness. We know of nothing more likely to take away the little appetite one might have than a slovenly waiter.

But the brightest side in sickness is manifest in the thousand and one kindly attentions of which an invalid is apt to be made the recipient.

In the first place, the members of his own household generally vie with one another in their endeavour to do all in their power that is delicate and pleasing. At such times even the most bearish of human beings will become gentle. If he be so fortunate as to have a wife, he will be so patient, and will yield so unquestioningly to her wishes, that she will be inclined to pray for a continuance of his illness. No doubt he will still be exacting, and will insist that no one but his wife knows how to wait on him as it should be done; but even that implies a great compliment, although it may have been slow in coming.

He may even think—perhaps for the first time in his life—of the trouble he is causing her, and that she must be wearied and almost worn out with anxiety. Then, if ever, a husband will resolve that, in the future, he will strive to make more smooth his wife's pathway, and lighten her burdens.

Others too, who in health, it may be, have never thought of him, will manifest a kindly interest. It is from such that all sorts of dainty little dishes will be sent in. But it must be remembered, that it is not every delicacy that an invalid can eat, let his appetite be ever so good. What he requires is something nourishing and digestible, especially if just convalescent. The best dishes are such as are prepared from sea-mosses, tapioca, arrowroot, and oatmeal. When the digestive functions are in better condition, beef, mutton, and chicken broths may be substituted. Later on, the patient will take kindly to stronger food, and will begin to see for himself some of the advantages of being a sick man.

He may be a trifle irritable at this stage; but if so, it is a good sign invariably. There are cases, indeed, where this might be encouraged with great advantage to the convalescent, and where, now and then, a slight opposition to his wishes is rather to be recommended.

But the appearance of the sick-room itself should on no account be neglected. It should be always clean, neat, and well ventilated. When meals and medicine have been swallowed, the dishes and bottles should be removed immediately. The sight of a soiled napkin is frequently enough to nauseate anyone with a 'Miss Nancy-ish' stomach. Besides this, the least disorder in the room will fret and worry a nervous person exceedingly.

But a little should be given at a time to eat; a large quantity of food, placed before an invalid, will either tempt him to an injurious indulgence, or, what is more probable, give him a disgust for the food itself.

The meals should be served punctually, and the patient never kept waiting, if it can possibly be avoided. Let it be borne in mind also that four light meals a day are not too many for a convalescent with a growing appetite.

In selecting food for an invalid, due consideration should be given to the state of his stomach. Under some circumstances, food of a laxative character is decidedly objectionable, whereas rice, in any form, is desirable. In regard to meats, and their relative values, as to the powers of nourishment and assimilation to the system, it may be safely stated that venison, when tender, is to be ranked as first. Mutton stands second in the list, and beef next. Lamb, veal, and pork, are in all cases to be avoided.

So much, in the way of aiding in supplying sunshine to the sick-room. As to receiving the same, and being benefited by it, we are free to aver, that the valetudinarian who cannot, or does not, ought to be left to die in his own way.

Properly given and received, they are two-thirds of the treatment. In every instance they are the poetry of illness, and make robust health the veriest prose in comparison.

TEACHING HEALTH TO THE YOUNG.—We have never found the slightest difficulty in obtaining evidence, after strict examination, that lads and lasses may learn very thoroughly as much of the structure of the body and as much knowledge of its functions and hygienic requirements as fits them for understanding clearly and intelligently such vital matters as the nature of breathing, the nature of foods and digestion, the circulation of the blood, the work of the muscles, etc. Boys and girls are naturally interested in science; and they are generally delighted with the study of the nature of their own bodies, and can learn more of the laws of health in a year at a tender age, if properly taught, than in ten years after they are old, and their habits fixed and not easily changed.

It is the custom in Europe to follow the fashions as set by royalty. Certainly in America no better leader can be found than the brand-new mistress of the White House. Mrs. Cleveland may be credited with exquisite taste, and the beautiful simplicity of her costumes might well be copied by fashion's fastidious daughters. In the window of a Canal-street establishment is a picture of the President and his wife. The photograph of Mrs. Cleveland presents her with her hair brushed up from her forehead, with the exception of a single curl that lies on her right temple. Young women with a heavy mange of hair falling over their eyes would do well to copy this simpler style of coiffure, always remembering that a weight of hair on the forehead deadens the expression of the face. The great beauty of the Grecian coiffure lies in its simplicity.

EAT FRUIT.—Fruit-eating must obtain more largely than it does, not as a luxury, but as a hygienic measure. Our lives are becoming impaired, and meat-eating is a luxury which is incompatible with many generations without deterioration of the viscera; and consequently our dietaries must be modified accordingly. Fruit should be kept where the children can help themselves to it. A barrel of apples will often save a fit of sickness. Three or four eaten every day will do them ever so much good. Never scrimp your children's supply of fruit if you can help it.

WARM DRINKS IN WARM WEATHER.—These are the safest and best beverages always. In most hot climates, in which we have sojourned for our sins, the use of tea, drunk quite hot, and with a slice of lemon, instead of milk or sugar, prevails extensively. Visitors to the south of Europe, during the summer months, must have profited by this custom.

Poetry.

STREONSHALL.

GREY and ruined are thy pillars,
 Empty are thy niches all;
 Mullionless are all thy windows,
 Roofless art thou, Streonshall;
 And thy weed-grown aisles reverb now
 Only to the wild birds' call;
 Or to wilder winds that whistle
 Past thy broken columns bare,
 Like the spirit of thy beauty,
 In its sadness and despair,
 Mourning for the deep decadence
 Which no future can repair.
 Yet in solitude and ruin,
 All thy greatness is not gone,
 For methinks a something lingers,
 Thy foundations ag'd upon,—
 Something of thy ancient grandeur—
 Something of what thou hast done.
 Now the wing of night outspreading
 Hushes all the land to sleep,
 Covers with its ebon shadow
 Far and wide the rolling deep;
 Still we hear its ceaseless billows
 In their measured cadence sweep.
 Now the western clouds are breaking,
 And the silvery moon appears,
 Bathing with its bright refulgence
 All thy columns, plinths and piers,
 Making thee look weird and solemn
 In thy bearded growth of years.
 On thy broken arches sitting,
 Over which the mallow grows,
 Muse I on thy changèd fortunes—
 Thy vicissitudes and woes;
 Savage Dane and Faith's Protector
 Were alike thy ruthless foes.
 Savage wert thou then, and lonely,
 Streonshall, when Hilda came,
 Bringing with her truth and beauty
 Thy dark hearts to light and tame,
 And to make thee ever lustrous
 With the halo of her name.

From the Westward and from Northward
 Came they to thy holy fane
 To list to her words of wisdom
 (None to teach did she disdain);
 And returning to their wild homes,
 Told them to their folk again.

Better 'twas, she taught, to labour,
 Merciful to be and kind,
 And to die for duty fighting,
 Than to leave great wealth behind :
 Better 'twas to suffer twofold
 Than to give a pang designed.

No benighted wanderer ever—
 Be he rich or be he poor,
 Hungry, naked, or unrested—
 Was turned harshly from thy door;
 And from haughty lord thou boldly
 Didst protect the lowly boor.

And the weary mariner often,
 As he tracked the waves by night,
 Blessed the guardian hand that kindly,
 On thy fearsome, rocky height,
 Placed the ruddy beacon—guiding
 Him to safety by its light.

Here within thy precincts also
 Holy Caedmon lived and sung :
 These lone pillars, these rent arches,
 To his fervent anthems rung,
 While his pious brethren hearkened,
 Breathless, to his raptured tongue !

Tho' the ruthless Norseman sacked thee—
 Tore thy peaceful altar down,—
 Left thee charred and black—a ruin,
 'Gainst the azure vault to frown ;
 And though oft rebuilt, as often
 Hast thou to the ground been thrown ;

Yet they never can bereave thee
 Of the honour thou hast won—
 Never take away the glory
 That hath on thy bulwarks shone,
 Though thy walls and columns crumble
 Into ruin one by one.

Shall I draw a lesson from thee,
 As the preacher's wont to do?—
 Say each work attempted greatly
 Tells its tale the ages through,
 And dies not, though he who wrought it
 Never got the workman's due.

Correspondence.

SIZE OF BRAIN AS A MEASURE OF POWER.

To the Editor of THE PHRENOLOGICAL MAGAZINE.

SIR,—I observe in your issue for June last, page 229, an article, “Size of Brain as a Measure of Power.” In it it is stated that “the average European head is to the average Hindoo as the head of a man to that of a boy; and hence the conquest and subjection of one hundred millions of the latter by thirty thousand of the former.” I am a Hindoo, and my experience, on the spot, of my countrymen for upwards of forty years differs from that of your A. G. H., and you will no doubt allow me space in your valuable Journal to say a few words with reference thereto. To begin with, the average of the Hindoo head, as stated by him, I cannot say I can verify. I do not know from what source he got his information. All the Hindoo heads that I have had opportunity of measuring by tape-measure come up near to or about twenty-two inches, and in some cases more, and therefore it cannot be “as the head of a man to that of a boy.” So much for this erroneous remark. Now for the other—that is, the conclusion deduced from this basis—viz., “the conquest and subjection of one hundred million of the latter by thirty thousand of the former.” This cannot stand good. Then the question arises, What is the cause of it? It is the lack of union amongst the people, and want of sufficient development of the organs of Combateness and Destructiveness, aided by Hope, and lesser development of Cautiousness, and other moral faculties; I may mention Benevolence and Veneration in particular; and therefore the Hindoo naturally is more loyal and submissive. He is not exactly a warlike being, but a religious one—ample evidence of which is to be found in history. But there are exceptions to this rule, as evinced in men living in the upper provinces—to wit, the Rajputs, the Sykhes, and others. Besides, Hindoostan, being a very large peninsula, is divided into provinces, and these into districts, and the people inhabiting them are divided into castes, which makes one class clash with the other, and thereby causes continual disunion amongst them, not to mention the hatred that one religious sect has for another, together with the illiteracy pervading the whole. Knowledge and learning being confided to the religious sect (the Brahmins) only is, I may say, another cause of our weakness. Even were the people desirous of preventing the conquest of the country at the time, it would have been beyond their powers to do so, owing to the lack of sufficient means of communication between themselves, either by land or by water, so that they could be collected together in a body to devise ways and means to give effect to their views. Then, again, each district has a dialect of its own, and therefore the people of one are unable to exchange their thoughts with those of another. This is another drawback to protect the country from foreign aggressions. There are other causes besides these which are great detriments in the way

of the natives guarding themselves. It is an open secret that the British conquest of India was facilitated by the aid of the natives of the country from the beginning to the present time (which no one can gainsay), and held by the policy of the Government of the country with more benefit to themselves than to the subject race, which is to be pitied. I am happy to say that things have taken, and are taking, a turn for the better interests of the country. The India of to-day is quite different from the India of bygone days; the difficulties that are enumerated above being removed more and more every day by the benevolent aid of the wise British people. What with the railways, telegraphs, roads, and, above all, the wide-spread English education from one end of the country to the other, latter-day influences have brought our countrymen more together, and solidified them to a certain extent, so that the wants of the country are now discussed, and judicious appeals are made, often with success, to the proper authorities here and in England. This is the bloodless war, to which the educated and more advanced men of the country are devoting their heads and hearts, though too often with heavy souls; their aim being the better administration of the country, and the amelioration of the condition of their much-oppressed native land, in the hope that the time is not far distant when the voices of the helpless and unrepresented two hundred and fifty million of your fellow-subjects will be heard, and their claims for full justice be attended to.—Yours, etc., PHRENOLOGIST.

MR. GLADSTONE'S PHRENOLOGY.

To the Editor of the PHRENOLOGICAL MAGAZINE.

SIR,—One of the best meetings of our Phrenological Society was held on Friday evening, September 3rd. After some preliminary business had been transacted, the president asked Mr. Lane to give us his delineation of Mr. Gladstone. This he did, in the form of an essay, stating that not having personally seen the ex-premier, he had based his criticism on some of the numerous portraits, etc., printed. He dealt, in the first place, with Mr. G's. temperament, and subsequently demonstrated his intellectual faculties and mental organization generally. Amongst other things (and I only mention this because of the after discussion), he stated that Causality was *full*, and Human Nature *large*. The writer concluded by observing that though he might have succeeded in other spheres, yet he was best adapted for a statesman.

A very interesting discussion then ensued, each member doing his best to steer clear of party politics. Though many admirers of 'the great statesman' were present, yet there was an earnest desire amongst the members to speak dispassionately, and each endeavoured to understand more about the subject in question. One friend said: "If Mr. Gladstone had such a splendid brain, how was it that he had made such great blunders?" On being pressed as to what blunders, the speaker said: "The passing of the Grocers'

License Act, and the recent attempt to grant licenses for the sale of intoxicating liquors in railway carriages. The former had led to a terrible amount of secret drinking amongst women; and even the Liberal press of to-day spoke strongly of the evil effects of that bill." Some thought that this was due to his lack of Intuition, which appeared deficient when compared with the portrait of the late Earl Beaconsfield; others thought it was due to his large Acquisitiveness; he was anxious to present a good budget. Other matters were also referred to, and the debate was ultimately adjourned.

Our Society is making satisfactory progress, several persons having recently joined.

GEO. H. J. DUTTON.

Nottingham, September 7th, 1886.

Book Notices.

A Lucky Waif: A Story for Mothers, of Home and School Life. By Ellen E. Kenyon (London: L. N. FOWLER). This work is intended to be suggestive to mothers, teachers, and others having to do with the rearing of childhood. In Bertha we see what an ideal training will do for a child whose sweet disposition has withstood the warping influence of early misery. In Lena we witness the triumph of a fine natural character over the evil tendencies of an ambitious mother's training; and in her brother Willie is exemplified the deplorable effect upon a weaker nature of an overweening maternal vanity and indulgence. The hero, Paul, bears evidence to the success with which a staunch and noble humanity may be rounded into a still more perfect symmetry by a careful attention to appropriate culture during the youthful period. The book is calculated to amuse all who are, directly or indirectly, interested in children, and is even adapted to the boys and girls themselves from twelve years up. The characters grow up in the book and are married off, thus providing that 'happy ending' which young readers so universally look for. Many of the scenes and incidents are taken from real life. The story will be read with interest by all who love the children.

Foreordained: A Story of Heredity, and of Special Pre-natal Influences. By an Observer (London: L. N. FOWLER). A new work, in the form of a story, treating graphically and sensibly of an important subject, deserving the most careful consideration of those desiring only good for the human family. Our children are largely what we make them. There rests a special responsibility on mothers, in the discharge of which this book will greatly assist them. The married, and those contemplating marriage, should read it.

At a time like the present, when the prevailing tone of current literature, particularly that of the periodical press, is distinctly low, it is a satisfaction to be able to turn to such pages as those of *Great Thoughts* (A. W. HALL, 132, Fleet Street). *Great Thoughts* is what

its name indicates. It is full from title to imprint with the best and noblest thoughts of the greatest men and women that the world has produced. There are no low jests, no cynical innuendoes, no *doubie entendres*, no attempt to raise a laugh at the expense of some sacred thought or venerable custom. *Great Thoughts* is decidedly one of the best periodicals for the home and the family that we know, and we have great pleasure in recommending it.

Facts and Gossip.

SIR GEORGE CAMPBELL has been talking to the anthropologists at Birmingham about 'homoculture,' and the improvement of the human race, by discarding "foolish ideas about love and the tastes of young people," and by matching the sexes in accordance with physiological laws. Such suggestions may seem to proceed from the more advanced science of our times; but they are not, of course, by any means modern or original. Leaving the classics alone, and going no further back than Swift, there is an example which would at once suggest itself if the contents of "Gulliver" were as familiar as the name. Among that wonderful people, of equine exterior, the Houyhnhnms, young persons meet and are joined in accordance with the determination of their wiser parents and friends, who are careful to make such matches as will not cause any disagreeable mixture in the breed. To preserve the race from degenerating, strength in the one sex is paired with beauty in the other. As to courtship and love, the very names are altogether unknown. But ordinary mortals are as yet a long way from the sweet reasonableness of the Houyhnhnms. The people of Oneida Creek made, it is true, some slight advance in actual life when they framed—probably for Malthusian reasons—a general law that the elder of one sex should be matched with the younger of the other. And this regulation would seem to have been not quite intolerable; for, though a few young people did leave the community, we are assured that, like Noah's dove, they almost always found their way back again.

A REPORT of the formal constitution of the British Phrenological Association will be found on another page. One or two notes of general interest may be added. A large number of names of members were taken at the close of the meeting, and many subscriptions paid, so that the Association may be said to be fairly launched and afloat. Without anything on the point being affirmed by resolution, it was the general opinion of the meeting that monthly-meetings should be held, at least, during the winter months, and that arrangements should be made with provincial societies and committees to give lectures in suitable centres; in short, to work an active propaganda. Due announcement of the next meeting of the Association will be given by circular to members and those desirous of attending with a view to membership.

PERSONS desirous of becoming members of the British Association of Phrenologists should send their names and addresses, with subscription, to Mr. A. T. Story, at the office of this publication, as soon as possible. Money or Postal Orders or cheques, in payment of subscriptions, should be made payable to the treasurer, Miss J. Fowler. There will be, practically, no restriction as to membership: all interested in phrenology, whatever the state of their knowledge, will be available. We trust to our friends to make the Society known as widely as possible. Any information respecting the Society or its work may be obtained from either of the secretaries, or of any of the committee.

MR. J. FRANK HUBERT writes:—"When I was in Edinburgh, about a fortnight ago, I visited the Phrenological Museum. The porter in charge informed me that it is the intention of the trustees to close the Museum, owing to the lack of interest displayed on the part of the public and others who should show interest in phrenology. I understand that the trustees (of the Henderson Bequest, I think) are making arrangements to bring about the closing of the Museum as soon as possible. I do not know what they intend to do with the valuable collections of skulls (about 800), and busts (about 400), etc. Perhaps, if the trustees knew of the formation of the 'New Society,' they might be willing to hand over the contents of the Museum to the Association. This, I should think, would be in accordance with the terms of the Henderson Bequest; but you will probably know."

IT is with great pleasure that we draw the attention of our readers to the cut of the Abbé Liszt that appeared in the September number. It was reproduced from a sketch taken from life by a young lady artist of Birmingham.

WE understand that Miss Fowler is about to write a number of articles on the Life and Writings of Gall, Spurzheim, and Combe. The first article will appear in the November number of the MAGAZINE.

ATTENTION is directed to the advertisement of Miss Jessie A. Fowler, in the present MAGAZINE. There are many inquirers for a competent teacher of phrenology; and to such we can confidently recommend Miss Fowler as a careful and thorough instructor.

THE Rev. Henry Ward Beecher, in the course of a lecture at Gateshead Town Hall, a few nights ago, emphatically condemned the atmospheric conditions of the rooms in which public speakers are expected to do their best. The famous Brooklyn orator declared that in all his forty years' experience he had never yet spoken in a hall where a thousand people could breathe comfortable for an hour and a half together. As Mr. Beecher has travelled nearly four hundred thousand miles during the last ten years, on lecturing and preaching expeditions, his recent acquaintance with public halls—to say nothing of the previous thirty years of his public life—must be

tolerably comprehensive. The result of it all is that Mr. Beecher has come to the deliberate conclusion that there has not yet been an architect born who "knew that breath was necessary to the continuance of human life." Glancing round with perspiring brow upon his audience, Mr. Beecher reminded them that two thousand cubic feet of air per person was required every hour; and added, significantly, "You won't get it here." The Gateshead Town Hall, Mr. Beecher reckoned, only held a twenty minutes' supply for the people before him, so that "by-and-by every man and woman will have something of every other man and woman in the place." Some of the audience got rather nervous, as Mr. Beecher—using still greater plainness of speech—proceeded to intimate that this "vaporous intimacy with each other's interiors is not wholesome; but it is going on, and going on now." He thought that clergymen, lecturers, and, indeed, all public speakers, had a right to protest against conditions which rendered those whom they addressed both sleepy and stupid. Mr. Beecher is doing a public service to all concerned by the masculine common sense which runs through his bold remarks on this 'heated' subject.

AN amusing incident happened at Hythe, a few days ago, when an elephant, belonging to a circus, freely helped himself to an early breakfast. It appears that between three and four o'clock in the morning the animal managed to effect his escape from his companions, and paid a visit to a house with which his memory had a pleasant association—a little shop at the corner of Market Street. On arriving at the place the elephant found that it was closed, but nothing daunted, he coolly lifted the door off its hinges and helped himself liberally to the contents of the shop—potatoes, apples, and sweets. When he had either satisfied his appetite or had exhausted the supply of good things, he retraced his steps, and on the return journey he was met by his keepers, who had in the meantime become aware of his absence. The animal in question visited Hythe about eleven or twelve years ago, and when passing this house was treated by its then tenant to a good meal of potatoes. This seemed to have left so good an impression on the animal's mind that he was led to pay another visit to so pleasant a spot with the result recorded above. About the same time the next morning he again got away, and was making for the same place, but was discovered by his keeper before he had gone far on his expedition.

A GENTLEMAN interested in phrenology would be pleased to receive information as to the best sources for the life of Dr. Gall.

NATURE never works like a conjurer, to surprise, rarely by shocks, but by infinite gradation; so that we live embosomed in sounds we do not hear, scents we do not smell, spectacles we see not, and by innumerable impressions so softly laid on that, though important, we do not discover them till our attention is called to them.—EMERSON.

THE Phrenological Magazine.

NOVEMBER, 1886.

SIR J. W. DAWSON, L.L.D., F.R.S., F.G.S.,
PRESIDENT OF THE BRITISH ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE.

 HIS organization is outside of the common run of mental and physical development ; few individuals have so pure a temperament for mental action ; few minds work so freely, are so quickly and correctly impressed, and can continue to exercise the mind with the same vigour ; few men have so limited a number of impediments in the way to acquire knowledge. It is a Shakesperian kind of organization ; there is quite a predominance of the mental temperament, the brain must act with uncommon quickness and distinctness, allowing the mind to be very correct in its action. The vital temperament is also large, which gives ease of motion and a favourable and contented state of the body, so that there is not much antagonism or tendency to extremes. The three great powers of vitality are strong, which are heart, lungs, and brains, the brain predominating over the other two ; but he generates life easily, more especially nervous force. The brain appears to be large when compared with the rest of the body ; the base of the brain is also large, which indicates industry, force, and energy of mind. It does not take that physical direction that it would if the muscular organization were stronger, but it gives force to the mind. He can sit longer and study and use the brain more continuously with less fatigue than literary men generally can ; he may take considerable physical exercise, but he does it as a philosopher more than because he cannot sit still. His brain is symmetrical ; there appears to be a uniform action of it ; there is a rotundity to the form of his head that allows of no angles and side issues or excesses. He does not get beside himself ; he knows every time what he says and does, and can recall past mental performance and studies. He is sufficiently conservative to look after

out-goes and in-comes ; he does not spend his strength on some one thing at the expense of something else just as important, but he exercises his mind to-day with reference to the duties of to-morrow and hereafter, and so spreads his energy over his whole work.

Cautiousness is large enough to give prudence, forethought, and correctness of mental action, but not enough to produce undue restraint, timidity, or irresolution. Whatever mental operations he has are distinct, and when he wishes to apply them he can go right along to work without hesitating ; and when he wants to speak he begins and goes right along rather than to 'hem and haw' and make a to-do in starting. He has a high crown to the head, which disposes him to appreciate himself and does not let himself down, but keeps up his dignity under all circumstances. Self-Esteem, however, is not of the kind that gives haughtiness, for his Approbativeness wants all, because that would be seeking public favour, or in making boasts of his accomplishments ; but both Self-Esteem and Approbativeness stimulate him to excel and make him very careful in committing himself, so as to avoid all kinds of criticism. He shows his Firmness in steady perseverance, but seldom in positive wilfulness. He can be relied upon to carry out any plan or purpose that he may have formed ; but having commenced to do a certain task he is the last one to give way to changes. Few show the influence of Firmness more uniformly and consistently than he does.

All the moral brain is large. He must have inherited a strong moral and religious tendency, probably from the mother's side of the house, for he appears to have partaken more from the female than from the masculine side. He is respectful under all circumstances, and never disrespectful or inclined to show the spirit of an iconoclast. His mind is open to impressions ; he easily receives ideas and impressions as though he were well-nigh inspired in his thinking and writing, for his mind covers more ground in height and breadth, if not in depth, than the majority of minds. He is naturally buoyant and elastic in spirit and is always encouraging himself ; his sympathies are easily excited ; he cannot turn a deaf ear to distress ; he is thoroughly philanthropic, humanitarian, and exalted in the tone of his mind. It is not the result of culture so much as of organization, for very few men since the days of Shakespeare have had so free a mind with so much scope and range of mental action as he has, with a superior conception of religion and immortality, and of spiritual influence, to that of Shakespeare. He

possesses an unusual degree of intuition of mind, great discernment of truth, character, and motives; his first thoughts on a new subject are very correct, and he seldom has occasion to reverse his judgment. His powers of Imitation are first-class; he readily sees the fitness of ideas, takes the advantage of circumstances, makes the most out of his situation; and a hint of a thing goes further with him than a



full illustration would to an ordinary mind. He has great powers of perception; not that he is given to staring and gazing as a matter of curiosity, but is inclined to observe with an object in view and to see correctly whatever he does see in looking at a horse or anything else. Where there are various qualities to be observed he takes them all into account and can describe afterwards very accurately that which

he apparently looked at carelessly. He has large Order and great punctuality ; he has fair mathematical talent, but more especially literary gifts ; he has a superior sense of place, and would delight to travel the world over. He has a good command of language, is seldom at a loss for words to express his ideas, whether in speech or in writing, and should be able to learn the languages easily and to study the origin, derivation, and meanings of words very accurately. It is seldom that we are called upon to describe a character so well worthy of high encomiums with so few defects or excesses.

It is a happy coincidence, and must be gratifying to our Colonial visitors, that a distinguished colonist is this year President of the British Association for the Advancement of Science. Sir John William Dawson was born at Pictou, Nova Scotia, in October, 1820. He graduated in the University of Edinburgh ; and, returning home, devoted himself to the study of the natural history and geology of Nova Scotia and New Brunswick. The results of these investigations are embodied in his work entitled "Acadian Geology." In 1842, and again in 1852, he accompanied Sir Charles Lyell in his explorations in Nova Scotia, aiding him materially in his investigations. Since 1843 he has contributed largely to the "Transactions" of the London Geological Society, and to scientific periodicals. He has also published numerous monographs on special subjects connected with geology. His two volumes on the "Devonian and Carboniferous Flora of Eastern North America," published by the Geological Survey of Canada, and illustrated from drawings by his daughter, are the most important contributions yet made to the palæozoic botany of North America. He is the discoverer of the Eozoön Canadense, of the Laurentian limestone, supposed to be the oldest known form of animal life. In 1850 he was appointed Superintendent of Education for Nova Scotia, and in 1855 became Principal of the M'Gill University at Montreal. He is a member of many learned societies in Europe and America. Sir J. W. Dawson's name must be well known to many of our readers by his contributions to the "Leisure Hour" and other high-class periodicals, and by some of his works which have had a large circulation in this country. In 1860 he published his "Archaia, or Studies on the Cosmogony and Natural History of the Hebrew Scriptures." This work he has since recast and with important additions. It was published in London in 1877 under the title of "The Origin of the World according to Revelation and Science." Sir William Dawson is also the

author of "The Story of the Earth and Man," in which he combats the Darwinian theory of the origin of species; "The Dawn of Life," in which he gives an account of the oldest known fossil remains, and of their relations to geological time and the development of the animal kingdom; "Fossil Men and their Modern Representatives;" and "The Change of Life in Geological Time," a sketch of the origin and succession of animals and plants on the globe. In 1881 he was created a Companion of the Order of St. Michael and St. George, and in the following year was selected by the Marquis of Lorne, then Governor-General of Canada, to take the Presidency of the Royal Society of Canada, an institution founded to aid the development of literary and scientific research in the Canadian Dominion. Recently he received the honour of knighthood.

The British Association met this year at Birmingham, and on Wednesday evening, September 1, the President delivered the inaugural address, taking for his subject the "Geological and Cosmographical History of that ocean which connects rather than separates Britain and America, and may almost be said to be an English sea—the North Atlantic." Viewed in the light of the terrible earthquake which has occurred in America, the news of which reached us while the President was delivering his address, his closing words might be regarded as prophetic: "Geological agents are never at peace, and it is possible that, after a long period of quiescence there may be a new settlement of the ocean bed, accompanied with foldings of the crust, especially on the western side of the Atlantic, and possibly with renewed volcanic activity on its eastern margin."

HEREDITY OF THE MEMORY.

SECOND ARTICLE.

AT the time the first article was written, I took pains to count the number of words which E. D. had been able to talk occasionally before she was sixteen months old, and they numbered 40, most of them German, as her mother and the servant always use that language in the house. These words were all of them uttered more distinctly the first few times that they were used. In the course of a few weeks they would be forgotten or contracted into sounds unintelligible for those not initiated. As I predicted five months ago, E. D. makes very little progress in the study of what is to her foreign languages, and I often meet children of her age who

can talk about a dozen words of English, or of German, which is better than E. D. can do, though she is not backward in intelligence.

The only other French word that she has spoken instinctively has been *pas capable*, the Canadian French dialect for *pas capable* (I can't), and she has changed the German *mich* into *mé* (*moi*), of the former language.

After publication of the first article I received the following report of a case the converse of this little girl, and one very different from what I would have expected.

“*Chicago, March 10th, 1886.*”

“DEAR SIR,—Having read your article, ‘Heredity of the Memory,’ in *Mind in Nature*, December, 1885, I take pleasure in sending you the following notes of a similar case which came under my observation some years ago while residing in Milwaukee, where I was born and brought up. F. G., a girl aged twenty-four, when she came from Germany to America, married two years later an American widower of Irish descent, who had a few children by a former Anglo-American wife. Of the children of the second marriage there were seven girls born in succession. During this lapse of time the mother had almost completely forgotten the German language. After not less than twelve years’ residence in the English-speaking part of Milwaukee, she gave birth to her first boy, to whom, of course, she always spoke English, as she had to her daughters, none of whom can speak German to this date. But the boy, from heredity as it seems, began speaking German words when he was a babbling child, to the great surprise of most of the relatives, who could not understand him, and he is the only person in the family who can talk German fluently, and he occasionally serves as interpreter for his mother now when she speaks with German people. These persons are all alive to-day and personal acquaintances of mine.

“Very truly yours, A.”

“H. D. VALIN, M.D.”

In this, as in the first case, the inheritance has been from one sex in the parent to the other sex in the child as it should be, and were the necessary conditions of more frequent occurrence, such cases would be common. Again, there is hardly any doubt that the hereditary facility for learning German was a great benefit to this boy when studying and talking that language among strangers.

The many queries and incredulous expressions of opinion made to me by various friends have taught me that a *natural*

law of heredity is not a thing generally known among the educated. In fact, I do not know of its being mentioned in text-books on physiology; hence a general indisposition to believe in this matter is to be expected.

However, I sincerely think that a complete understanding of this law will form a solid basis for a positive chronology in the study of Palæontology in the near future. That is, by means of the time required for certain variations to become hereditary in a species, we will be able to affix a definite age to each species in the past history of life on earth.

In the case of E. D., the Canadian dialect of the French language must have become hereditary in the course of about six generations.

Of the hereditary knowledge of persons, it has also been my good fortune to come into contact with a case lately.

Mamie K., aged two years and six months, born of English-speaking parents, was partially delirious from a high fever some weeks ago, when she at one time sat in bed, looked towards the door, stretched her arms towards it, and cried out: "Papa! papa!" nodding to her mother to draw her attention still more to the spot. These details observed by her mother (who had never heard or read anything on the subject) were related to me in good faith the next morning, and had left no doubt in the mother's mind of the reality of the child's vision. This little girl was born six months after the death of her father by a terrible accident, and she had never seen a picture of him.

While this case is not as clear as those reported in December, still the fact that it proceeds according to the general law of heredity, and may have been affected by a powerful mental impression of the mother, leads me to think it genuine.—*Mind in Nature*.

FRIENDSHIP AND LOVE.

FRIENDSHIP and love, if love is to be considered distinct from friendship, may be defined as the highest and truest relationships, as the kinships of soul with soul. Other relationships are but matters of circumstance, of custom, and of chance; those which are constituted by true friendship and true love are independent of and superior to all external conditions. All other unions between men are those merely of time; friendship, the union of spirit with spirit, is of eternity, because it has its roots in the immortal part of our being. Even the connection of flesh and blood, sacred

though it is, and is esteemed, is not, and, in the essentiality of things, cannot be so sacred as that which is formed by the union of souls, bound together by the indissoluble ties of common aims, common aspirations, common affections, which are the elements of soul-friendship and soul-love.

The material and the spiritual relationship are indeed often, if not always, not co-existent, and persons most closely allied to each other by the accident of birth may be complete aliens in soul. Now, as according to all spiritual ethics the soul has higher claims than have flesh and blood, it follows that those who are united to us in soul have stronger claims upon us than have those who are related to us merely in the material sense. I have read an anecdote about a German who had become Anglicized by naturalization, declaring, in replying to a toast at a public dinner in this country, that he was more an Englishman than was any other guest present, because he was one from his own deliberate free-will and choice, whereas the rest of the company were Englishmen merely because they had been born such and could not help being that which they had been born. The remark was perhaps meant, perhaps accepted, as a humorous conceit, but it was truer, probably, than either he who uttered it or those who heard it supposed. Applying the analogy to friendship, a man might say with equal truth, that his friend is more his brother than is he who is such by consanguinity, because the former is his brother by the spiritual ties of mutual choice and mutual affinity, whereas the latter is his brother merely in name and by birth.

Christ, that great exponent of the principle of living from within instead of from without, has been accused of want of filial and fraternal affection and gratitude, because when informed that His mother and brothers stood near, desiring to speak to Him, He pointed to His disciples and said: "Behold My mother and brethren. For whosoever shall do the will of My Father who is in heaven, the same is My brother, and sister, and mother." But Jesus, in making this observation was true to Himself, to that inner consciousness whose monition He always implicitly obeyed, disdaining as He did everything like conventional cant, even when its utterance might have assumed the appearance of virtue. He felt that His disciples were united to Him by the highest of kinship, and hence He did not hesitate to assert its superiority, and to express His recognition of His devoted and constant companions as truer and more immediate kindred than even the authors of His being.

Our mere corporeal relations have claims upon us for our

consideration and deference ; but their claims every true man must feel ought to be, and are, in spite of ourselves, subordinated to those of the higher kinship of soul. I may be considered unnatural, I may be condemned as cold-hearted—just as Christ has been on account of His expression of the sentiment I have quoted—when I say, as I have no hesitation in saying, that I do not endorse the common belief that reunion with our departed earthly relatives, as such, must necessarily constitute one of the chief pleasures of entering the higher state hereafter. I cannot conceive that any relationship, which merely pertains to our incarnation on earth, can count for anything in the spiritual world. Only that which consists in congeniality of soul can exist there ; and the reunion with those who are so identified with me I regard as something to be anticipated with infinitely greater pleasure than the meeting of those whose relationship to me is that merely pertaining to the earth plane.

“Why,” it may be asked, “would it not be a delight to you to meet in heaven one who had been a dear relative on earth, one who, existing in the heavenly world, must have led a heavenly life here, and, therefore, have been eminently worthy of your love and regard on earth?” “Yes,” I reply, “it would indeed be a delight to me to meet such a relative in heaven, to be assured by absolute, objective evidence, that one whom I had so loved and esteemed on earth for his or her goodness, was enjoying the continued happiness of which I had always counted him or her to be worthy. But it is not even mere goodness and heavenliness of life that constitute congeniality of soul. It consists also in harmony of feelings, in mutual, intellectual, and emotional sympathies and promptings, in a thousand things beyond mere identity of moral and religious instincts. Now, since I hold a spirit in heaven to be as much a composite being as is a man on earth, and not a merely moral and religious being, as some so absurdly and crudely suppose a happy spirit to be, I hold that I shall retain the same love of the intellectual, the æsthetic, hereafter, as I have had here, and indeed shall love and pursue them with immeasurably increased ardour and capacity. Hence, I say, that good, eminently good, and beloved by me, though that earthly relative whom I meet in heaven may have been here, yet I shall meet there with unutterably greater delight one who, while being as good as that earth relative, is in unison with me in senses in which the other is not, that is, in the intellectual, the emotional, and other essential mental conditions—conditions quite as eternal, quite as spiritual, as those which are moral and religious.”

I have sometimes caught myself thinking that, perchance the instinctive feeling of unity with which two kindred spirits meet on earth is but the exercise of 'unconscious memory'—the existence of this mental phenomenon seems to be established so far as the things of material life are concerned—of a previous spirit communion—the dim, dreamy, half-consciousness with which there is recalled a period of high converse in the elysian fields. Who can tell? The strange mutual impulse which stirs two congenial souls when they meet for the first time, and the strange indefinable sympathies which exist between human beings united by real soul-friendship, and which seem more or less independent of material conditions, strike us as closely akin to phenomena, the manifestations of which at the present day are confounding the philosophers, and appear to be opening out a new world for the Alexanders of science to conquer.

I would not resolve friendship and love into electricity, as Professor Huxley resolves eloquence into carbonic acid and water; but psychological facts, and certain analogical, physical facts, seem to indicate that there exists between those united in soul-friendship and soul-love a chord of union, some deep, mystic, spiritual sympathy, as subtle and as incomprehensible as electricity itself—the thrill of which feeling can, like the electric flash acting on material objects, fuse two souls into one; and like electricity, too, annihilate time and space. Are the records of instantaneous telepathic communications between friends remotely apart all fictions? I say they are not. And what is the legend of Pyramus and Thisbe, the Babylonian lovers, receiving each other's addresses through the intervening wall of their chambers, to the fact of intercommunion between souls through the dense, vast wall of materiality, interposed by thousands of miles! Love laughs at locksmiths is an old proverb. But I say, love laughs at such barriers as the immeasurable ocean and the eternal hills. The mysterious chord of union between friends traverses the universe, moving—like an electric cable, carried between ships—as they move; and, though seas and mountains divide, two hearts beat as two telegraphic needles, far apart, click—in unison.

For the one phenomenon is but the counterpart of the other; and here I announce a new law of correspondences to supplement Swedenborg's. He says every newly-discovered material law, as manifested on earth, has its correspondent in and is preceded by some analogous law in the spiritual world. Be it so. But I say, every newly-discovered material law, as demonstrated on this earth, precedes and anticipates

some correspondent spiritual law to be also demonstrated on this earth. Communication by electricity, and, experimentally, by magnetic currents without wires, already achieved, are but the prophesiers and harbingers of the higher truth of communion between congenial human spirits by the mystic chord or current of sympathy which unites them; and both have been known and shadowed forth in distant ages, though it is only in the nineteenth century that the world has been startled by the demonstration of the one, and but now that it is beginning to have the full revelation of the other.

The story of the gift of Pythagoras which Moore sighed for in exquisite verse, that of being able to inscribe his thoughts upon the moon, so that he might make it the medium of communication with far-distant friends, is a beautiful myth, and the dream of Strada, in his prolusions of converse between distant friends by means of sympathetic loadstones, are fanciful, but they express metaphorically a truth—a truth now for some, but perhaps in the remote future for all—when the world becomes more spiritualized, and deep shall answer unto deep of spirit; not as the material deeps answer to each other—with thunderous roar—but with that silent, subjective power, the subtle strength of which in comparison with the power of the most violent and stupendous forces of nature is as—to use an inadequate, but perhaps the most expressive comparison available—that of gravitation compared to that of the mightiest thunderstorm.

High souls have in all ages, in their moments of transcendental exaltation, realized something of the consciousness of the coming spirituality of man, of this great truth, that matter, in the ultimate sense, is but man's platform, and not his prison, something to be finally placed beneath his feet, not always to enclose him. They have dimly discerned that the dream of the universal solvent of all material things was no imagination—that the soul, and the soul alone, was that solvent. When that dream is realized the material clouds that darken man's spiritual horizon shall roll up and disappear; the elements before the fervent heat of his soul's fires be dissolved; and that soul in its newly-assumed majesty shall proclaim, like the angel in the Apocalypse, that time—and space—for it shall be no more. Material barriers shall then present no further obstacle to the communion of human spirits on earth; and a new spiritual dispensation shall set in brighter than that pictured forth in the divinest poet's dream.

(To be continued.)

BIOGRAPHY OF DR. GALL.

HIS CHILDHOOD, COLLEGE LIFE, AND EARLY MANHOOD.—WHEN HE BEGAN TO RECEIVE IMPRESSIONS AND MAKE OBSERVATIONS CONCERNING THE TALENTS, CHARACTERISTICS, AND DISPOSITIONS OF HIS COMPANIONS AND FRIENDS.

FRANCOIS JOSEPH GALL, M.D., the first phrenologist, was a man of superior merits as a discoverer and faithful interpreter of nature: one of those privileged individuals who live at the interval of ages, to teach us how far human intelligence can go.

He possessed by nature a happy organization, a point which Dr. Fossati and his biographers fully realized. Dr. Gall says in his preface to his "*Anatomie des fonctions du Cerveau*," that "when any discovery or new doctrine is announced, the question is usually asked, how the author conceived the first idea?"



Although the same experiments do not always lead different persons to form the same ideas, yet when these same experiments are collected and presented in order, they give rise to meditations in the mind of the reader which correspond so closely to those of the author; and the discovery often appears to him so natural an event that he is ready to exclaim, "Why had I not made it long ago?"

Dr. Gall says, "this is precisely what has happened with respect to my doctrine, the origin of which rests on very ordinary facts. Most of those who have heard my lectures have said to themselves, and I doubt not but most of my readers will say likewise 'How is it possible that these truths have been so long overlooked?'"

From his earliest youth he was surrounded by the congenial atmosphere of his home, which was composed of several brothers and sisters, Francois being the sixth child.

He was born on the 9th of March, 1757,* at a village in the Grand Duchy of Baden. His father was a respectable merchant and mayor of Fiefenbrun in Swabia. Young Francois did not receive in the early years of his life any careful education, or any particular aid to the study of science; but his natural bent of mind carried him into the country, the woods, and forests, to make observations on the various kinds of animals he found. These, says Dr. Fossati, who was well acquainted with Gall and attended him during his last illness, were the amusements of his infancy. In this way, without knowing of the existence of such a science as natural history, he collected an amount of positive knowledge through personal contact with nature's works that many children of his own age in towns and cities only acquire by diligent study in a theoretical way. "This spirit of observation was the key which opened to him the way to his future discoveries."

His parents were conscientious Roman Catholics, and intended to educate this son for the Church. His natural inclinations, however, were opposed to the idea; he preferred medicine as a profession. He began his studies at Baden, from whence he went to Bucksal, then to Strasburg. In 1781, when twenty-four years of age, he went to the medical college at Vienna to pursue his studies in the healing art. In the midst of a great number of school-fellows he found continued scope for observation, for among these daily companions he noticed the marked difference in their characters, natural talents, and dispositions. "This diversity," he says, "determined our indifference or our mutual affection, as well as our contempt, our emulations, and our connections. In childhood we take things as they are, and among our number we soon formed a judgment as to who was virtuous or inclined to wrong doing; modest, or conceited; frank, or reserved; peaceable, or quarrelsome; miserly, or benevolent."

He was struck with the ability some showed for their beauty of penmanship, some for their expertness in arithmetic, others for their facility in understanding mental philosophy, natural history, and foreign languages. Some were noted for the elegance of their diction in composition, and their freedom of expression; while the style of others was set, stiff, and inelegant; while some were more forcible in their arguments than others. A large number showed talents in things outside the pale of the college curriculum. Some of the students carved in wood, and designed well, or

* From letters of Dr. Spurzheim to Mr. Geo. Combe.

sketched from nature and coloured their pictures exquisitely ; some cultivated flowers and devoted considerable time to gardening ; while their more noisy companions were amusing themselves with sports, robbing birds'-nests, and catching butterflies and insects. He never found a character who was deceptive one term turn out a faithful friend the next. Gall further found he could not compete with those who learned by heart, but was invariably stripped of his honours, which he had gained by his compositions, when he was called upon to recite. Some years afterwards, as he passed from college to college, he still found that there were individuals who were endowed with an equally great talent for learning by heart. He then observed that such possessed prominent eyes, and recollected that his rivals in his school had been distinguished by the same characteristic ; but although they excelled in repeating verbatim what they had learned, they were not as a rule talented in a more general way, or by original ideas. He pointed out the fact to other students who recognized this external sign, and though the connection betwixt the talent and the external sign was not then established on scientific grounds, yet Dr. Gall could not believe that the union of the two circumstances which had so impressed his mind on various occasions were simply matters of accident.

“Proceeding from reflection to reflection, and from observation to observation,” he says, “it occurred to me that if memory were made evident by external signs it might be so with other talents or intellectual faculties. From this time all the individuals who were distinguished by any quality or faculty became the object of my personal attention and of systematic study as to the form of the head.” By degrees he thus realized the existence of other external characteristics, such as were to be found in the painter, musician, and mechanic. He also became acquainted with a person who possessed great determination of character, and observed a certain portion of the head prominently developed. This fact, it is said, first suggested to his mind the possible existence of external signs for the moral sentiments. “I had,” he says, “in the interval commenced the study of medicine. We had much said to us about the functions of the muscles, the viscera, etc., but nothing respecting the functions of the brain and its various parts. I recalled my early observations, and immediately suspected, what I was not long in reducing to a certainty, that the difference in the form of heads is occasioned by the difference in the form of the brains.” He never supposed for a moment, when making

these observations, that the skull was the cause of these characteristics—as has been erroneously represented—but referred the influence to its interior—the brain.

(To be continued.)

VAGARIES OF THE BRAIN.

UN SOUNDNESS of brain is often known only to its possessor. There is a stage of consciousness in which a person may be incessantly at war with himself, and with the prompting of a double, urging him to do and say things abhorred by his better self. “I am not conscious of the decay,” wrote a patient to his adviser, “or suspension of any of the powers of the mind. I am as well able as ever I was to attend to my business. My family suppose me in health, yet the horrors of a mad-house are staring me in the face. I am a martyr to a species of persecution from within which is becoming intolerable. I am urged to say the most shocking blasphemies, and obscene words are ever on my tongue. Thank God, I have been able to resist; but I often think I must yield at last, and then I shall be disgraced and ruined.” The famous Bishop Butler is said to have been engaged in such a conflict for the greater part of his life. Akin to this phase of unsoundness is the desire so commonly felt to throw one’s self from a height, or to give utterance at inappropriate times, as when Charles Lamb burst out laughing at a funeral. In such moments of temptation the mastery of the reason over the inclination distinguishes the sane from the insane, and it is only the sustained eccentricity of thought and mode of life which points to a condition of the brain betokening insanity. Very noteworthy are some of the early symptoms of disorder. Of one of these, the undue exaltation of the senses, an instance is given where the patient felt such an extraordinary acuteness of hearing that he heard the least sound at the bottom of his house, and was able to tell the hour by his watch at a distance at which he could not ordinarily see the hands. Sometimes incipient disease is indicated by a perversion of the sense of touch, as in the case of a patient who, from the fancy that everything he touched was greasy, was continually washing his hands. Other well-marked symptoms are the loss of memory, deterioration in handwriting, the use of wrong words in conversation, and double vision.

Delicate as the organization of the brain must be, it is surprising to read of the hard knocks it can bear, not only

without injury but even to its advantage. One man who lost half his brain through suppuration of the skull, preserved his intellectual faculties to the day of his death; and the brains of soldiers have been known to carry bullets without apparent inconvenience, and to undergo operation for the extraction of the foreign bodies without loss of power. A physician who was afflicted with an abnormal cerebral growth which pressed upon the cavities of the brain, so as to paralyze one side of his body and render him speechless, retained possession of his reasoning and calculating powers until he died. One of three brothers, all idiots, after receiving a severe injury on the head, gained his senses, and lived to be a clever barrister. A stable boy of dull capacity, and subject to fits, had his wits sharpened by the kick of a horse, which necessitated the abstraction of a portion of his brain; and no less a personage than Pope Clement VI. owed the improvement of his memory to a slight concussion of the brain.

THE VALUE OF A PRACTICAL INTELLECT.

THERE is no innate quality with which the human family is endowed that is of more intrinsic value than a practical and available intellect. It is to mental resolutions what the helm is to a ship. The executive faculties may be strong and active, the steam may be well up, so to speak, but without this necessary accompaniment to direct them in the right channel so as to result in the greatest good, their possessor is like a magnificent railway-carriage without an engine, or a rowing-boat without oars—of no use whatever. In nine cases out of ten, a man possessed of a good practical intellect, with but ordinary education, will succeed, where one possessed of the latter in an uncommon degree, but devoid of the former, will fail. "I know men of profound reasoning powers," says L. N. Fowler, "who have not knowledge of facts sufficient to give them common sense, so deficient are they in perceptive intellect. A German of fine education and rare powers of reasoning once applied to me for assistance. I was not able to obtain a situation for him, and by way of experiment I let him take a book, which we readily sold for a dollar, and told him if he would sell it he should have one-half." (*Ment. Science*, p. 5). To have a practical intellect is to have good judgment; and good judgment is the power of discriminating between good and bad, right and wrong, the useful and useless. The latter may be acquired in a degree

by long experience in matters where it is continually exercised ; the former is a natural gift—the result of organization, and comes from God. There are a vast number of people, calling themselves educated men and women, who are sorrowful to behold. The language of Festus to Paul seems to be literally verified so far as they are concerned. The madness that is said to be the consequence of ‘much learning,’ seems to have taken possession of them to such a degree that, in their blindness, the most imbecile of them imagine themselves blessed with a more than usual quota of perceptive power, superior at least to that of their neighbours. They look down upon their more sensible but less pretending acquaintances with a condescending hauteur, utterly unconscious that the latter are infinitely their superiors.

A good practical intellect can be substituted for education ; but education can, by no means, take the place of a practical intellect. Superficial learning and accomplishments can no more be called an education than the walls of a building without a roof and the necessities that render it habitable can be called a house, or a toy representing a lion can be called by that name. It may certainly be a perfect imitation ; but it lacks vitality to give it force. As in the animal function ‘the soul or life of all flesh is in the blood thereof,’ so in the mental organization a good practical intellect is the grand focus of all learning. It must be the source from whence emanate the rays of light to illuminate the path of the student in the pursuit of knowledge ; otherwise the would-be scientist, chemist, botanist, geologist, etc., is left to grope his way in darkness, and his progress retarded by the superfluous amount of incomprehensible book-reading with which he has stocked his brain. In the common avocations of life the advantage of the one over the other is clearly manifest. All the book education that can be acquired in a lifetime cannot teach one man to raise a payable nursery-stock, or another to toil, to plow, to sow, and reap, so as to make his labour productive ; or a woman to prepare a meal of victuals and bring up a family of children. Therefore, for every occupation of life, from the humblest to the most exalted, from that of the carpenter to that of the mental scientist or phrenologist, give us the man with a good, practical, and available intellect.—GEO. C. HODGSON.

HAPPINESS is not the end of life : character is.—H. W. BEECHER.

IN the treatment of nervous diseases, he is the best physician who is the most ingenious inspirer of hope.—COLERIDGE.

TRAMPS.

SINCE ever I was able to take a pen in hand it has been my ambition to write something kindly about tramps; for one thing, I think, because I owe them a debt. Or perhaps I ought to say a couple of them. It happened in this wise. Having once, towards evening, wandered to the end of the town, I there stood for awhile and looked into the world beyond. To me at that time—a creature scarcely out of petticoats—it was an unknown world; I had never, that I remembered, been more than a few paces beyond the bridge; and on the thither side of the windmill that was, as it were, the vanishing point of the perspective, led up to by the turnpike road, there was for me nothing but mystery. Before that evening the mill marked in my childish cosmogony the end of the world. It had never occurred to my untravelled mind that any one could have been behind it, and so I had never inquired. But as I stood and looked up the grey road, far away I saw a small black spot appear; then two black spots; then I was aware that the spots were moving; they grew bigger; they gradually approached; and behold, they proved to be a man and a woman.

I looked upon the twain with awe. They were dusty and travel-stained; the woman carried a basket on her arm, and the man a small, dyspeptic-looking bundle, dangling behind him from the end of a stick. They seemed tired, and on nearing the bridge they sat down upon the grass at the side of the road,—the poor-man's domain—nearly all that the world has left him, in fact, and that is going bit by bit.

If the two wayfarers had been beings from another planet I could not have watched them with greater interest. Anxious to run away, yet longing to know if they had come from the country beyond the mill, I stood watching and waiting. I was half expecting something unusual to happen; but all that occurred was that the woman produced a lump of bread from her basket, and the man a clasp-knife from his pocket; and so they went to work, in the most commonplace manner, and made their evening meal, washing it down with a draught of water which the woman fetched from the brook. As she came up from the water our eyes met; hers were of a pale blue, reminding one of a couple of speedwells steeped in whey, mild and ox-like; and I was at once disarmed of my fears. I left them still sitting on the wayside grass, apparently in eupeptic meditation, and soon forgot them in my dreams.

The following morning, as I was playing with a companion on the grass where the tramps had rested, I found ten penny-

pieces, and my companion picked up two or three more. It was the first and last treasure-trove that ever fell to my lot, and I fear the old adage, 'lightly come, lightly go,' was never better exemplified than in this instance; for I speedily transferred the greater part of my lightly-gotten wealth to the till of the old crone of the sweetstuff shop, and it was only when an over-indulged stomach began to revolt that I sought the maternal bosom for comfort and solace. It was then that I learned the enormity of my crime: conscience had never had any individual existence before, and it sprang into being from a sick stomach.

It does not take much to make a village talk; and my find, my luxurious revel in sweets, my sickness, etc., gave the gossips material for wonder, speculation, and admonition for at least two days, until, indeed, the next cow calved. As I learned afterwards, it was surmised that the tramps, or trampers, as they were called in those parts, had lost the money I found. They had, it would appear, when the angels of God had turned down the lamp of day and drawn the curtain of sleep, stretched themselves out on the bed that kings and princes—the great ones of the earth equally with the poor and lowly—have ere now been pleased to press, and, perhaps, rolling over in an uneasy dream, the man's pocket had opened and allowed the coins to slip out.

I was sorry for them, especially when I thought of them making their bed upon the hard ground in order, perhaps, (as it was represented to me) to save the price of a lodging, that they might have the more money for their children. Who knows? People do stranger and even wilder things than that for their children's sake. To me, at that time, however, nothing could well have indicated a higher degree of self-sacrifice than to be willing for anyone's sake to tempt the night. For then night was, to my mind, an unmitigable terror: peopled with all the horrors of a child's prolific fancy, it was the very stable and breeding-ground of nightmares. It took many years of reasoning and resolute daring to overcome the fearsome terrors of the dark; and I never fully effected the conquest until I had made the earth my bed and slept out the night with the stars.

It is strange how many things one may learn by becoming a tramp, even if it be only for one round of the clock. I believe that men first learned to pray while they had yet no bed but the ground to lie upon. When a man prepares to lay himself down on that bed he must first go on to his knees; and what more natural, when he is about to put himself, as it were, unarmed into the hands of any enemy that may be

lurking in the dark, than that, while yet but half-way to the ground, there should come over him a feeling of his utter helplessness, and a yearning for the protection of that Sublime Power that he had seen, as long as he could remember, swing the burning sun round its daily circle and emblazon the weird, still night with its myriad stars? Man began to forget his prayers in proportion as he surrounded himself with walls and built high beds.

It is a good thing to lie in the open sometimes and to keep near the ground: better to have joints swollen with rheumatism than a heart with pride. Man may so surround himself with his art as to shut out God. It used to be a childish imagination of mine that Nature was God's spouse, and that He loved her so well that He never went far from her lap, and that there man found Him best.

I would have everyone become a tramp now and again: nay, I think it would be good for us all if we could change places with each other every now and then—the rich man with the poor man, my Lady Longtrain with the daily drudge, the curled and scented darling of the ball-room and the opera with the waiter-on-Providence and chance good-nature at the street corners. What a growing of hearts there would come of it!

The road is a sort of university, and one may learn there what no ordinary school can teach. I have been to that hedge-school and know, and what I have picked up there I would not exchange for all the first university in the world could teach me. I learned, for one thing, that there is no end of human nature in the tramp; and you cannot find that anywhere without having a chord in your own bosom struck. I think it was the sympathy thus created that has given me ever since a sort of weakness for the tramp: I do not mean, of course, for all kinds of tramps; for it need hardly be said that the genus 'tramp' may be divided into two species—the tramp proper and the scamp improper. In this essay I refer more particularly to the tramp proper.

It ought not to be set down against the tramp that scamps intrude themselves into his ranks, except in so far as we all have to bear—more or less—the sins of our neighbours. Scamps, indeed, sneak into every guild—even into those reserved for royalty itself: nay, I have long doubted whether these royal guilds harboured anything else. To say, I would not be a king, might savour of 'sour grapes,' but that there grow no grapes on that tree—only Dead-Sea fruit. Kings are really to be pitied; they have no chance. If they endeavour to become 'poor in spirit' in order that they may

get the attendant blessing, it degenerates into meanness of spirit. O the mean spiritedness of kings—and emperors! And verily they receive their reward; for they see gods—in themselves, and bow down and worship them.

It was not my intention, in writing about tramps, to treat of kings. And yet, why not? They are all tramps like the rest—poor trampers on the same broad highway, that ends for all alike in the narrow four-foot-ten doorway into eternity; and though at the exit of some of them we make a great ado, and beat on the door, and cry out: “Lo, it is his majesty! it is his most gracious majesty!” there comes no reply out of the silence. But beyond, as the figure crawls out into the darkness, a stern voice accosts him with: “Alexander, wherefore stolest thou thy namesake the king?” For there is no diplomacy beyond the grave; God’s messengers and ambassadors calling things ever by their proper names; and be it Alexander, Amadeo, William, or another, he then sees himself truly for what he is—perhaps for the first time. It is very pitiful to be a king.

Who knows but at the final weighing-out and adjustment of forfeits some poor despised tramp may prove to be of right kingly metal? For the kingly nature comes not exclusively of royal lineage. Nay, the seed is in human nature, and it will grow up, now here, now there, and mostly where we least expect it. Too rich a soil is not good for it.

There are those who regard the word tramp as the synonym for poultry-snatcher. This is a libel. I have known tramps who, as regards honesty, would have graced the civic chair. I do not account it a sin if a poor wayfarer make his matutinal repast upon a turnip taken from a wayside field. A young turnip eaten fresh from the soil is so sweet and succulent, especially with a piquant hunger as sauce! One of the guild of whom we have all read did not reprove His companions for that they plucked the ears of corn when they waxed hungry by the way; and acts do not become sins by lapse of time, or change of latitude.

But there are some who have a nice feeling in this respect. There was B——, for instance: if he took a swede he would do a bit of weeding in payment; and when he rested in the churchyard, he felt bound to devote a little attention to one of the graves by way of recompense. If all men were as desirous to give an equivalent for what they received, what a delightful sort of world it would be!

A churchyard was B——’s delight. He was naturally of a silent disposition, and he appreciated this quality in others. I first met him in a churchyard. Having walked a long

way—for I too have been a tramp, and measured many a league of the round earth with my crural compasses—and feeling tired, I turned into the dead-garth for a rest. It was an ancient, yarrow-grown graveyard, thickly planted with stone-labels of the dead. I see it now. There was the little church, with its squat wooden spire (so much like the fool's cap we used to wear at school), and its loud-ticking clock that, as one lay on the grass, struck one as being the pulse-beat of eternity. Around were the tent-poles of the silent village army—those who had set out for the eternal home, and were here enjoying a temporary bivouac, waiting for the trumpet-call giving the order to fall in; and on a vacant space which the sheep of the villagers' Sunday dinner had cropped smooth sat B——, putting his canaries through their rehearsal. Disturbed by my footsteps, they took refuge in their cage—all but one, which, perched on its stage manager's large thumb, felt secure, and from that proud eminence eyed me askance, and, as I thought, with not a little impertinence.

How long it is since that day! I hardly think the earth can have spared B—— till now. He was no longer young, and he had had bereavements. Many canaries had he trained—and lost. Tender to every living thing, he had for the feathered tribes, and for the canary especially, a love that was sublime in its unselfishness.

Dear B——, whether still here, or in the great Future of man's aspiration, I salute thee! Wherever thou art, there is a soul without a flaw—so far as finite man may judge. Hast thou thy canaries with thee, I wonder? That was where thy dubitations came in when thinking of the future. Thy question ever was: Should we meet there *all* we had loved? Thou wast thinking of thy birds. I verily believe thou wouldst pine in heaven if thou hadst nothing bird-like to train and love. Much as thy little village audiences liked to see thy performing birds, none watched them with such admiring eyes as thou. Their little tricks, their simple play, were ever fresh and new to thee. And to throw thyself down upon the churchyard turf on a fine summer's day, and put them through their exercises, or teach them some new trick—that was thy supremest enjoyment. Nor was it the tame canaries alone that came at thy call. None that I ever knew lived in such close intimacy with nature: the birds, the foxes, and the squirrels were thy companions, and a fine day with these amid thy favourite woods and meadows was bliss enough for thee. Thy name for the Great Being was the Maker of Fine Days. Noblest of tramps, I could almost believe thou wast a new incarnation of the gentle Gautama!

The canary, though thy first, was not thy only love. Many a time hast thou told me of Molly, of your brief courtship—a courtship so quaint and whimsical that one would have laughed at the humour of it, but for its sadness. I might recount it here as another picture of tramp-life but that this is no place for tears. I believe thou didst love churchyards because, to thy disingenuous mind, it appeared that we were there nearer to those who had gone before; and so thou couldst best commune with the spirit of her who had stirred in thee so romantic a devotion. Poor B——! No knight of old, neither in life nor story, ever gave lady of his choice so chaste a worship. Nothing in this life is more beautiful than a love that outlives the object or the reciprocation of it. It is as though a harp-string once attuned to harmony should reverbrate in sweetest music for ever.

EXPERIMENTAL GARDENING.

(SOME EXPERIENCES.)

I am the fancy and experimental gardener of this establishment.

It was I who planted the sweet-pea seeds against all the fruit-trees in the orchard, and got the professional and practical individual, who is paid to attend to these matters, about my ears in fine style in consequence.

You see it's my mother's garden, and I am the stay-at-home son, who, having nothing better to do, (or who doesn't do anything better, eh ?) spends his time pottering about the place, making all sorts of innovations and experiments.

"'Tain't no wonder as yer don't get no fruit on them trees," the Practical Individual already alluded to, cried at me. "Don't yer know as the insect crawls up them pea-vines, and gets on the buds and the bark and kills the tree? Them peas o' your'n breeds all sorts o' vermin in the trees, and then they don't do me no sort o' credit."

Of course I stuck up for my method of gardening.

"But the peas look so pretty" I declared, "and—and Miss Cicely is so fond of them."

Now I contend that if I am not a good gardener at least I am a good diplomat. I know very well that the Practical Individual (whom I shall hereafter designate by the initials P. I., as it saves time and space) believes there is no single woman, or married either, in the whole world to equal Miss Cicely. She is the pink of perfection in his estimation, and the apple of the old man's eye. It is all because one winter

she gave him some wonderful specific for his "roomatics," and now he swears by her.

"Well, in course, if Miss Cicely likes the blooms she must have 'em." He said this with a visible softening, but he immediately hardened his heart towards me. "Howsomever, I can find plenty o' places to grow 'em better nor under my fruit trees, an' where they won't do no harm, and get finer flowers too."

And after that I want you to understand that that terrible old man, for he is old as well as "roomatic," dug every one of my peas, and sowed some fresh ones around the verandah, just where I had made up my mind to have nasturtiums!

I'm very fond of birds. Especially song-birds. I think blackbirds and thrushes "things of beauty and joys for ever."

The P. I. thinks otherwise.

Of course he does!

"D'ye think you're going to have any cherries or strawberries with all them birds in the garden?" he asks, with a supercilious sneer of superiority. "I s'pose you'll get up every marnin'" (he means morning, but the P. I. is not a philologist) "and frighten 'em away."

I pay no attention to his implied insult. Fancy comparing me to a scarecrow, even by inference! And I stand five feet eleven in my stockings, and have been called the handsome one of the family! Of course I took no notice of the impertinent remark!

On the contrary, I go round the garden with a basket of hay in my hand, and in every bush, tree, and shrub I judge as a likely place for a nest I place a handful within easy reach of the birds, should they feel disposed to make use of my gratuitous assistance.

This is another of my experiments.

And even this that terrible old P. I. will not allow to bear fruit. He won't even let it have a chance.

"I can't a-bear (why he will prefix the letter "a" to words, I can't, for the life of me, imagine; perhaps it's for the same reason that he says marnin') "to see all that rubbige a-hangin' and a-litterin' over the shrubs and a-making messes all over everythink." And he deliberately pulls all my hay down and takes it off to the weed heap at the bottom of the garden.

It is rather hard lines on my experimental notions, to have all my most cherished efforts nipped in the bud, so to speak, blasted in their youth; but, fortunately, I am somewhat corky in temperament, and it doesn't matter how much I'm pushed

down I'm bound to come to the surface again with some new experiment.

I have a great fondness for all yellow flowers. I like yellow tulips, yellow jasmine, laburnam, sun-flowers, marigold, yellow flag (though my disposition is not at all a jealous one), and I even see beauty in the buttercup and the dandelion.

I can't bear (not "a-bear") to destroy a dandelion when it is in bloom. I don't think I would actually go to the extent of deliberately cultivating the *taraxacum dens leonis*, but when the gorgeous flower stands up proudly in my path I cannot find it in my heart to show my human superiority over it, and level it with the ground.

"You oughtn't never to let one o' them things come to a flower," says the P. I., with a delightful disregard to all the rules of Lindley Murray. "Wherever they flowers they seeds, and they're the most raxening things in the garden, 'ceptin' bindweed and couchgrass."

I do not at all know where the P. I. got his verb to "raxen," but it is one he uses very frequently to express the character of any weed which grows quickly, covers much ground, and behaves generally to the detriment of flowers and vegetables.

However, in the matter of dandelions, I feel called upon to take up the cudgels for the defence.

"The flower of the dandelion," I say, "is a very handsome one; its golden yellow richer, rarer, and more glorious than any, except the sun itself. Its leaves form a delicious and wholesome adjunct to the nutritive salad, and its root, when subjected to pressure and distillation, renders a juice of the highest value in medicine. Therefore you ought not to speak in terms of disparagement of the dandelion, nor to mention it in the same sentence with bindweed and couchgrass."

I think I have floored old P. I. this time; but I flatter myself without my host. I am bitterly mistaken.

"Wall, if yer likes the dandelion so much, ye'd better grow it under glass so's the seed won't fly about, an' then ye can enj'y the beauty of the flower, an' the salad, and the medicine, root an' all, as much as you like."

And with that he walks off and cuts up a dandelion with his Dutch hoe, right before my eyes, and so another of my pets is blighted.

The worst of it is that, if I make a complaint to my mother of the old man's rudeness, she tells me immediately:

"Well, you know, you are so eccentric in all your ideas! You do try such odd experiments, and you have no sympathy with the old man, and he really is a good gardener and takes a great interest in the garden."

So it is of no use appealing for any help in that quarter, therefore I just go right ahead in my own way, feeling convinced that some day I shall win the battle.

I have a great belief in the efficacy of the pruning knife. I am sure that the closer a tree is pruned in the thicker it will grow. So last May I bought me a nice new pair of pruning scissors, because I think them so much handier than a knife, and went to work on the roses.

Unfortunately, that ubiquitous and never satisfied P. I. came upon me just as I had begun on the first rosebush, a very fine Marechal Niel, which trails its long and unwieldy length all over one side of the house.

"Wot are ye a-doing of now?" he almost shouted at me.

"Pruning this tree," I answered, never deigning to interrupt the musical click of the sharp shears.

"Pruning!" he shrieked. "Do ye want to kill the tree? Wot do yer think Miss Cicely will say when she asks me for roses?"

"I am pruning. I do not want to kill the tree; and when Miss Cicely asks you for roses you will be so good as to give her all she wants."

Click! Click!

"Stop! stop! you mus'n't prune a rose tree just as it's agoin' to bloom!"

"Oh, nonsense! Do you suppose I don't know what I'm about? Do you think you're the only gardener?"

At this moment, as luck, or ill-luck, would have it, Cicely herself (Cicely is my sister, you know, and she upholds the wretched P. I. in everything. I believe it's only in order to get plenty of flowers out of him!) came round the corner, and, of course, added her entreaties to the almost weeping demands of that old idiot. So I had to give that up.

Another fond dream dispelled!

And, would you believe it, because that rose-tree has been just "a mask of roses" (to use that idiotic old P. I.'s own words) this year, they want to make out it is all because I wasn't allowed to prune it as I wished!

Hitherto, for many years, we have been very successful with our melons, cucumbers, and grapes; but I am firmly convinced that we should be far more fortunate if we gave the plants and vines more air.

Full of this opinion, the other morning, being a good one for my experiment (somewhat overclouded, with a sharp, bracing, easterly wind blowing that made you long for a smell of the "briny"), I determined to make the trial.

Immediately after breakfast I went round to the cucumber

house, feeling sure that the miserable humbug P. I. wouldn't be about, and quietly opened every window. At least I had opened two when I heard the thin squeaky voice at my elbow :

"Want to kill the 'cumbers do you? Well, you're goin' the right way about it. Ain't satersfied with 'em, eh? Want to see 'em all shrivelled up an' nipped with the east wind. Now, look 'ere, I'm goin' to Missus straight arter I shets them winders, an' I tells her as I've gard'nered this garden for eighteen year, an' ain't never had no complaints made, but it's come to this, as if I'm to be interfered with by you an' your experimenx, you can do the gard'ning an' I takes myself off, an' I'd like to see wot kind o' flowers and froot an' vegetables you'll have then!"

And with this parting shot he actually went and spoke to my mother, as he said he should.

Of course once more I had to give in, and the cucumbers, melons, and grapes are to swelter in an artificial heat for the rest of their lives.

Next time I met the old brute he positively had the effrontery to tell me I'd better have a bit of garden marked off for me "o' purpus to try my experimenx in."

But I'll be even with the old curmudgeon yet. T. L. R.

PHRENOLOGY FOR CHILDREN.

THE TEMPERAMENTS.

- (a) What do we mean by the word temperament?—(b) How were the temperaments once classified?—(c) How have their names been divided and simplified for present use?—(d) How do the two classes correspond?—(e) How are they blended in our characters?—(f) Do they affect the working of the mind?—(g) Can they be altered by encouraging one that is weak and restraining another that is strong?—(h) How do they show their characteristics in different people?—(i) What comprises the motive temperament?—(j) What comprises the vital?—(k) What comprises the mental?—(l) Do the different nations show a distinct temperament?—(m) What is the Roman temperament?—(n) What is the Greek's?—(o) What is the Jew's?—(p) What is the German's?—(q) What is the Scandinavian's?—(r) What is the Englishman's?—(s) What is the American's?—(t) What is the Scotchman's?—(u) What is the Irishman's?—(v) What is the Frenchman's?—(w) What is the Italian's?—(x) What is the Spaniard's?—(y) What is the Russian's?—(z) What are the temperaments of some of the lower animals?

- (a) Certain state of constitution which has a great effect on the energy and activity of the brain and system.

(*b*) The lymphatic (stomach); the sanguine (lungs); the bilious (liver and fibrous); the nervous (brain).

(*c*) The motive, or mechanical; the vital or nutritive; and the mental or nervous.

(*d*) The nervous, or mental, possess fine hair, small muscles, sharp features, and preponderance of brain-power, animated face, with great refinement and sensitiveness; the motive, or sanguine, strong muscular power, lively spirits, and often red or light-chestnut hair, and bony frame-work; the vital, or lymphatic, shows vitality, or dependence upon the two great cavities—the thorax and abdomen—on which depend the heart and lungs for respiration and circulation; the abdomen, the assimilation of nourishment. This temperament shows plumpness, light hair, ruddiness of countenance. When the abdominal organs predominate there is more tendency to the lymphatic temperament, which generally shows a softness of muscular force, pale complexion, and round form, languid actions, and slowness of circulation, and the brain works slowly under this temperament.

(*e*) Mental-motive; mental-vital; vital-mental, etc.

(*f*) Very considerably.

(*g*) Yes; and great care must be taken in exercising them.

(*h*) By causing some to work more actively than others, and by retarding the activity of the mental powers. For two persons of the same size may work differently under different temperaments—for instance, a large brain, under a lymphatic, or inactive vital temperament, will not work so well for any length of time as a smaller brain with a nervous, or sanguine, temperament.

(*i*) First, bones (support); second, ligaments (connections); third, muscles (bundles).

(*j*) First, the lymphatics (lymph); second, the blood-vessels (tubes); third, the glands (filters).

(*k*) First, the organ of Sense (which gives impressions); second, the cerebrum (oral mass); third, the cerebellum (nerve-centre).

(*l*) Yes.

(*m*) The Roman may be considered to have the motive (the mental gaining the ascendancy in a large number).

(*n*) The Greek.—The mental temperament, with some modification.

(*o*) The Jew.—Predominance of the bilious, or vital.

(*p*) The German.—Strong degree of the sanguine-vital, with a combination of physical strength and mental ingenuity. The German, by nature, is slow; is an inventor, investigator, and thinker.

(*q*) The Scandinavian and Dane have the sanguine-motive temperament ; are quicker than the Germans, with combination of vital temperament.

(*r*) The Englishman.—Vital temperament is the national temperament ; the exceptions being a mental predominance, the result of high culture, or a lymphatic tendency caused by a moist climate ; is prudent and reserved.

(*s*) The American.—Motive, or mental-motive ; is active, intuitive, and generous, and a lover of locomotion.

(*t*) The Scotchman.—Temperament, motive, with a combination of the sanguine, or mental-motive ; in the educated classes, ardent, impulsive, sensitive, and urbane.

(*u*) The Irishman.—Predominance of the vital temperament ; ardent, excitable, and witty.

(*v*) The Frenchman has a bilious, fibrous, mental temperament, with a combination of the sanguine, sufficient to give vivacity, versatility, brilliancy, and cleverness. He has the energy of the motive, but not its steadfastness and persistence.

(*w*) The Italian.—Mental temperament. The finest examples of culture, beauty, and taste.

(*x*) The Spaniard.—Combination of bilious-vital, which shows in his character, which is firm, self-reliant, proud, and grave.

(*y*) The Russian.—Temperament is the vital, or, in the higher classess, mental-vital, with a combination of the motive, to give great toughness and endurance of constitution. He is noted for breadth of all the vital organs, and even broad headed.

(*z*) The temperaments of the lower animals are as follows : The tiger and wolf are carnivorous, blood-thirsty, cruel, and cunning, and have the motive temperament. The bear, not being exclusively a flesh-eater, is fond of fruits and honey, and has the motive-vital temperament. The lion has the motive-mental temperament, on account of his intelligence. The fox, the same as the lion. The deer and antelope are grass-eaters, and herbivorous, and have the mental, or nervous, temperament. The beaver and woodchuck, the vital temperament. Birds—eagles, hawks, owls, night-hawk—have the motive temperament ; the wild pigeon, quail, and grouse, vital temperament. The horse, the motive, and in some cases, motive and vital. Domestic cattle, the vital ; the Jersey, vital-mental. Sheep and hog, the vital. Dog, great variety. Mastiff, powerful in muscle, motive temperament ; bull-dog, motive-vital temperament.

J. A. F.

GENERATION AFTER GENERATION.

IN an instructive article under the above title in the *Gentleman's Magazine*, Grant Allen, gives a number of interesting facts on the question of the ratio of increase of the human race. He says:—

“As a matter of fact, it can easily be shown that no species on the average ever produces more than two adult and productive members for each pair in each generation. For, if it did produce more, the species would be indefinitely increasing in numbers: it could never come to a standstill. It must end by replenishing the earth with a vengeance. But no species, on the average, ever does increase in numbers, except for a comparatively short period, or within a comparatively limited area. It must soon be brought to a standstill by reaching its natural limit of expansion, when competition between its members (chiefly for food, or, in the case of plants, for raw material) must necessarily prevent its further multiplication. Here, again, the familiar instance of the human race is a little misleading. We ourselves happen to belong to a fraction of that race which is here and now temporarily increasing in numbers, and so we have acquired the habit of talking loosely about the ‘natural growth of population,’ and forming corresponding concepts quite at variance with the underlying biological truths of reproduction. The fact is, even in our own race—I mean the English, not the human—the actual expansion is but very slight; and it is rendered possible at all only by the existence within now practicable distances of unsettled or partially settled cornlands, sufficient for the supply of the constantly increasing surplus. Were it otherwise, competition among ourselves for the strictly limited stock of food would soon check the further growth of the population.

“Now, for the human race, in Europe at least, it is fairly certain that an average of not less than five children to each family is necessary in order just to keep the population stationary. Six or seven to each family are needed for any perceptible increase. This seems at first sight a large average: but it has been independently arrived at by several observers, through different methods of calculation; and a little consideration will serve to show its high *a priori* probability. For, in the first place, we have to allow for the ordinary heavy rate of infant mortality, nearly one-half the children born dying before they reach the age of twenty-one, even in England. Thus, if each family had only four children, every one of the survivors, reduced at twenty-one to

two for each, would have to marry, without exception, and bear an average of four more children apiece, in order to keep the population just level. But this, again, allows nothing for celibates, old maids, nuns, soldiers, premature deaths in married life, and casualties generally, for which we must make a rough provision of at least one more child per family. In England, such an average of five to a household suffices to keep the population fairly stationary: anything above that figure tends to increase it, and, at present, as we all know, it is actually increasing."

THE PHRENOLOGICAL ASSOCIATION.

THE first regular monthly meeting of the new Association took place in the Memorial Hall, Farringdon Street, on Tuesday evening, the 12th instant. In spite of the very inclement weather there was a good attendance. Mr. A. T. Story was voted to the chair. The articles and bye-laws of the Association were brought up for consideration; and after careful discussion, article by article, they were adopted (subject to revision at the first general meeting in the new year) on the motion of the chairman, seconded by Mr. J. I. Morrell.

The articles and bye-laws as adopted are as follows:—

ARTICLES.

I.—That the Society be called the "British Phrenological Association."

II.—That the object of the Association be the Study and Investigation of Phrenology and kindred subjects.

III.—That its head-quarters be in London; but that it seek the affiliation of similar Societies in all parts of the British Empire.

IV.—That its Officers shall consist of a President, an Organising and Corresponding Secretary, and a Recording Secretary, a Treasurer, and a Council of not fewer than ten Members, with power to add to their number; all Officers to be *ex-officio* Members of the Council, to be elected annually, and to be eligible for re-election.

V.—That the annual subscription to the Association be 10s. for gentlemen, and 5s. for ladies and persons under twenty-one years of age. That subscriptions be payable by half-yearly instalments, and that the financial year date from September 29th.

BYE-LAWS.

I.—The Association shall meet on the Second Tuesday in each month, at 7.30 in the evening, to discuss such subject or subjects,

in connection with the objects of the Association, as may be previously appointed.

II.—Five Members shall form a quorum.

III.—The Association shall empower the Council to arrange for such Special Meetings, Lectures, etc., as may seem fit and proper for the advancement of the objects of the Association.

IV.—It shall be one of the objects of the Association to supply Lecturers, Teachers, etc., and to send them to places where asked for or required (subject to such conditions as the Council shall arrange).

V.—That for this purpose the Council shall approve any of the Members of the Association as properly qualified to lecture or teach in its name, and that such qualification shall consist of (*a*) a sufficient knowledge of Phrenology, and (*b*) a satisfactory moral character.

VI.—That any Member of the Association wishing to possess a certified qualification shall give such references to character as the Council of the Association may deem fit; shall submit thereto a thesis on the Science of Phrenology, as a test of his or her sufficiency of knowledge; and shall, if desired, make a Phrenological examination of some person or persons there present, or submit to such other examination as the Council may deem proper. The said thesis shall be read at a General Meeting of the Association, unless the Council decide to the contrary; when it shall always be open to the Member to demand an appeal to a General Meeting. A vote of two-thirds of the Members present shall be conclusive in the Member's favour.

VII.—Certificates shall be issued to Members who have passed the test in question, signed by the President and such Members of the Council as shall be designated for the purpose.

VIII.—The duties of the Officers shall be as follows: The President shall take the Chair at all General Meetings, when present, and at Council-meetings, unless for business purposes it be desired otherwise. The Organising Secretary shall organise Meetings, and carry out, subject to the Council, the Association's propaganda; that the Recording Secretary shall keep a record of all Meetings, Business, etc., and shall be the custodian of any Books, etc., that the Association may obtain by gift or otherwise; that the Treasurer shall keep all Monies, and give an account of the same at the Annual Meeting.

IX.—The Association shall have power to remove any official for sufficient cause, or to dismiss any Member from the Association who may be deemed to be no longer a fit and proper person to belong thereto; but that it shall require a vote of two-thirds to dismiss.

X.—After the 31st March, 1887, Members shall be admitted by election at a General Meeting. That a vote of one-third shall exclude a candidate.

XI.—Members shall be entitled to introduce friends at any General Meeting, but non-members shall not be allowed to vote.

XII.—Any kindred Society, (ex-metropolitan,) shall collectively be entitled to the benefits of Membership of the Association by paying 20s. per annum.

The question of granting certificates *honoris causa* was discussed. It was thought that the bye-laws relating to certificates gave the Council power to grant such certificates.

Mr. Jas. Webb read a highly interesting essay on "The Utility of Phrenology."

Mr. A. Hubert, who wishes to secure the Association's certificate, examined a couple of heads to the satisfaction of the meeting.

Mr. Warren proposed and Mr. Hollander seconded a vote of thanks to Mr. Webb for his valuable and instructive paper. In putting the resolution to the meeting, the chairman remarked that the Association could hardly have had a better essay than the one they had heard as an introduction to the work they had undertaken. Mr. Webb had shown how intimately phrenology associated itself with all the various relations of life. He had shown how it associated itself with the question of education, with business, with morals, with politics, with metaphysics, with sociology, with marriage, with punishments, with insanity. In regard to education, we all knew what an expensive machinery was being set to work to educate the young; but many, and phrenologists in particular, doubted whether much of it was not misdirected. The education of the day was too much one of the intellect alone: it was a teaching of A, B, C, 1, 2, 3—a dealing too much with vocables: it did not take in the whole man: it did not teach the limbs, it did not teach the hands and the eyes: it was too much an education that resulted in making clerks. And so they went from the school to the counting-house, bent their backs over a desk, and there spent their lives. What we wanted was an educational system that taught children to use their hands and their eyes, and not merely to read and write. So with reference to metaphysics, the world was all wrong in its metaphysical systems; it had been building up vague, unsatisfactory systems and then pulling them down again for generations and generations. Their basis was some imagined idea, and they toppled down of their own weight. We could have no true system of metaphysics that was not based on phrenology. In the same way we might show the import-

ance of phrenology in regard to marriage, not merely in reference to the question of adaptability, but in regard to what might be called man-building. Therein lay the whole question of the perfectability of society. So with reference to sociology, jurisprudence, etc. The subject was a large one—so large that had we a thousand members, instead of between forty and fifty, each one might take a special branch of the subject and find therein enough to occupy his whole attention. He hoped the Association would meet this great subject in a way that it deserved. It was now in its infancy: it was taking its first steps: the outside world would judge of it by those initial footsteps. If they went to work honestly, earnestly, without frivolity, or diletantism, and with a set purpose to make that great subject known for what it was worth, the world would soon learn to respect them; and from respect it would gradually come to believe in and see the value of what they taught. He had much pleasure in putting the motion to the meeting that a cordial vote of thanks be given to Mr. Webb. The resolution was carried. A vote of thanks to the chairman, proposed by Mr. Morrell, brought the meeting to a close.

Hygienic and Home Department.

THE DELICATE BABY.

AS many babies are born delicate as have delicacy thrust upon them, by improper feeding and mismanagement. The declaration that the corrupt tree cannot bring forth good fruit reaches far and deep. The sickly stock which yields healthy seed is phenomenal. Inherent fragility, serious illness, mental or physical shock sustained by the mother—any one of these causes accounts satisfactorily to the casual observer for the condition of the infant that is put upon the racecourse handicapped by physical suffering. That it is not the fault of the helpless atomy that he enters the lists at all, much less against such odds, brings heartache with perplexity. Without this complication the hole in the millstone cannot escape the ken of the purblind. Like mother, like child. What else could be expected?

Now and then—and, unhappily, the 'now' is nearer to the 'then' than we could desire—we are confronted with a case that defies rule and gives the lie to legitimate precedent. A

mother whose health is vigorous, constitution sound, and mode of life regular, bears a puny, wailing baby that holds to existence by a cobweb. The father is robust, his habits good. Both eye the small morsel of mortality in a passion of sorrowful surprise. It is no starveling in love, banned by either parent, that has been sent to them. As days of weariness succeed sleepless nights, and the little one is still swimming for its life, it is not strange that parental love finds utterance in fierce questioning of Divine love and wisdom.

A young mother, in the throes of anguish like this, writes to me :

"I did not sleep last night, and have been on my feet all day, waiting on baby, or standing by her in the forlorn desire to do something for her, borne down by a sense of helplessness that wearies me more than severe active service would have done. Her food does not agree with her ; she sleeps fitfully, awaking with a start every few minutes. While awake, she moans and cries and struggles incessantly. She is just the core of my heart, and it racks me cruelly to see her in agony, yet be unable to relieve her. I have come to the point of questioning seriously if parents have a right to bring children into a world where there is even a chance that they may suffer as my innocent baby does."

She subjoins : "The strangest part of it all is that my own health is and has been always—I had nearly written—*heartlessly* perfect. Would to Heaven I could give half of this affluent vitality 'to eke the being out' of the darling who is dearer than life! I cannot help feeling that I have, in some occult way, defrauded her."

Even enlightened physicians do not always care to examine closely into such 'occult' causes.

I presented the situation of my friend to one of the best of men and doctors the other day, stating the peculiarities as briefly and strongly as I could, for, like all busy practitioners, he was pressed for time.

"Both parents healthy," was his summing up ; "mother intelligent in care of herself, active, cheerful, happy. One of the many unaccountable things science is continually running against. You really must *not* undertake to explain everything upon philosophical principles. Every doctor will tell you that."

If he had paused to think, he would have shut the door more gently upon earnest research, perhaps have left it ajar, knowing, as he and every thoughtful person does, that *nothing* is causeless.

A shrewd nurse dismissed a similar case yet more summarily.

The unconscious transgressor was what housewives call an 'ambitious woman.' Her health was superb, and, so far from lessening her active labours, she taxed nerve, muscle, and brain relentlessly that she might submit the more patiently to the month of enforced idleness she anticipated. This she styled, playfully, "clearing the decks for action." Every night she went to bed 'tired out,' trusting to sleep to repair wasted forces by the morning. The hour of trial found her more than ready. Her work—domestic, social, charitable—was in such a state of forwardness that she could dismiss forebodings and responsibilities for six weeks to come. Her baby was feeble, attenuated, nervous—a weazened caricature of healthy infancy she wept to behold. The heavy drafts upon her own strength had been honoured loyally by her constitution. She came out from the ordeal unharmed.

"But," said the honest nurse, wiping her eyes as the mother wrapped the thin fingers, so like lax bird-claws, about one of hers, plump, white, and strong, and kissed them grievously, "you took all the cream for yourself and left the skim-milk for the baby."

These are definite and positive pre-natal wrongs. One and all, they are too little thought of and investigated. The care that begins with actual birth is a laggard.

I have not time now to touch upon a subject which is still less understood. I refer to the length and breadth of the hereditary penumbra, the doom that overpasses one, or even two, generations, to curse the third, that glooms a line for centuries.

The author of "Enigmas of Life" dreams thus:

"A republic is *conceivable* in which all candidates for the proud and solemn privilege of continuing an untainted and perfecting race should be subjected to a pass, or a competitive examination, and those only be suffered to transmit their names and families to future generations who had a pure, vigorous, and well-developed constitution to transmit. . . . Every damaged or inferior temperament might be eliminated, and every special and superior one be selected and enthroned, until the human race, both in its manhood and its womanhood, became one glorious fellowship of saints, sages, and athletes."

This is Utopianism, pure and simple, but the right keynote vibrates through the reverie and tempts us to forgetfulness of the stern truth that we must take up life as we find it if

we would better it. Closing Mr. Greg's fascinating volume with a reminiscence, more sad than comic, of Bret Harte's parody which adds pangful pathos to Whittier's lament—

The very saddest words of tongue and pen
Are, 'Tis, but it hadn't orter been,

we come back to the truism, some babies are *born* delicate.

MARION HARLAND.

HOUSEKEEPING FOR GIRLS.—It is astonishing that mothers should be willing to send their daughters into the world unfitted to fulfil the practical duties of life. Many years ago I went to visit a family in which there was a method of instruction for the daughters pursued by the mother, a shrewd, sensible woman, which has always seemed to me to be well worthy of imitation by every mother who has her daughter's future happiness at heart. This mother was a thorough housekeeper, a widow who, in addition to her household duties, was carrying on the business of her late husband in a building adjoining the house. She had four daughters. She gave them the best education the city afforded, and it being the seat of a college, the schools were uncommonly good. When the eldest daughter graduated from school, the mother took her into the kitchen, where she was thoroughly instructed in all the mysteries of that kind of work; taught her all other kinds of housekeeping work, even how to select poultry, butcher's meat, etc., and how to preside at table. When she was competent to do it, she alternated, week in and week out, with her mother, in taking entire charge of the house as mistress. When the other daughters graduated, the same thorough instruction was given them, and when these girls married, as they all did, housekeeping was no bugbear to them or cause for trouble and anxiety to their husbands. Their parlours were the resort of the best people of the place, and their house was a home in every sense of the word. Will every other mother go and do likewise?

HOW TO PRESERVE THE EYESIGHT.—Avoid all sudden changes between light and darkness. Never begin to read, write, or sew for several minutes after coming from darkness to a bright light. Never read by twilight or moonlight, or on dark, cloudy days. When reading, it is best to let the light fall from above obliquely over the left shoulder. Do not use the eyesight by light so scant that it requires an effort to discriminate. The very moment you are instinctively prompted to rub your eyes, that moment stop using them. If the eyelids are glued together on waking up do not forcibly open them, but apply saliva with the finger. It is the speediest dilutant in the world; then wash your eyes and face in warm water.

NEGLECT OF CHILDREN'S TEETH.—Children's teeth are often neglected by parents, who give the young mouths little attention until decay and the child's complaints of toothache warn them of

their duty. Even if they know there is decay going on, they dismiss the subject with the thought that they are only the first of temporary teeth, which will soon be replaced by the permanent ones. This is a great mistake, as the regularity of the second set depends largely upon the healthy condition of the first, which should be retained in their places until the second set is ready to appear, when they will generally drop out or become loosened and are easily removed. Much mischief is done by premature decay and the extraction of the temporary teeth. Many think that they should be removed to make room for the permanent teeth—a dangerous mistake, which should be avoided if after trouble would be prevented. One of the most beautiful provisions of nature in the human economy is that for the removal of the first teeth by absorption of their roots to make room for the second to advance. Sometimes this absorption does not go fast enough, and the second tooth is observed to be coming through before the first is loosened. In such a case the dentist should be consulted, who, if he has made a proper study of this frequent condition of things, will very readily correct it.

FOOD, WORK, AND SLEEP.—A writer says that a man does not need riches, honours, or office, but he does need food, work, and sleep. A man should use every means to promote life. Among these means are the three things mentioned. When a man denies himself sleep, food, and the exercise work gives brain and body, he robs his life of its full term. Let him be cheerful also. He is like an engine—it will run well and long if it is well oiled. Contentment and cheerfulness are the oil which keeps the nerves from wearing out. Busy men and women think that time taken from toil for sleep and recreation is time lost. It is really the cement put in to fill up the joints to keep out the weather and preserve the building.

COLD BATHING.—The use of cold water for ordinary health purposes—we are not speaking of its use for the strictly medical purpose of reducing the temperature of the body in certain states of disease—is purely reactionary. The cold bath is only useful, or even safe, when it produces a rapid return of the blood to the surface immediately after the first impression made, whether by immersion or affusion. The surface must quickly redden, and there must be a glow of heat. If these effects are not rapidly apparent, cold bathing is bad; and no such effects are likely to be produced unless the circulation be vigorous and both the heart and blood-vessels are healthy. Great mistakes are made, and serious risks often incurred, by the unintelligent use of the cold bath by the weakly or unsound. Moreover, it is necessary to bear in mind that there is seldom too much energy to spare after middle age, and it is seldom expedient for persons much over forty to risk cold bathing. We would go so far as to say that no one above that age should use the tub quite cold unless under medical advice. It is possible to be apparently robust and, for all the average purposes of life, healthy, and yet to

have such disabilities arising out of organic disease or weakness as to render the recourse to heroic, even in the matter of cold bathing, perilous.—*Lancet*.

NEURALGIA AND HEADACHES IN GIRLS.—Nothing is so terrible as severe neuralgia, and beyond a doubt girls acquire it often enough by the conditions of school life. Headaches in a school-girl usually mean exhausted nerve-power through over-work, over-excitement, over-anxiety, or bad air. Rest, a good laugh, or a country walk, will usually cure it readily enough to begin with. But to become subject to headaches is a very serious matter, and all such nervous diseases have a nasty tendency to recur, to become periodic, to be set up by the same causes, to become an organic habit of the body. For any woman to become liable to neuralgia is a most terrible thing. It means that while it lasts life is not worth having. It paralyses the power to work, it deprives her of the power to enjoy anything, it tends toward irritability of temper, it tempts to the use of narcotics and stimulants. So says Dr. Nelson, and so say I. A girl who finds herself subject to neuralgia should at once change her habits if but to grow strong in body. Of what use is education with ill-health? A happy girl must be a healthy one. The Greeks educated their girls physically—we educate ours mentally. The Greek mother bore the finest children the world ever produced. Dr. Holbrook, in his great works on marriage and parentage, gives a chapter on the Grecian education of girls. He claims it comes very near to the education we need for them to-day, and we quite agree with him. It developed beautiful women, and their beauty lasted till old age. The beautiful Helen was as handsome at fifty as at sweet sixteen.

THERE is an old saying that has frightened a great many people from taking the rest that nature demanded for them. “Nine hours are enough for a fool.” They may be; and not too many for a wise man who feels that he needs them. Goethe, when performing his most prodigious, literary feats, felt that he needed nine hours; what is better, he took them. We presume it is conceded by all thoughtful people that the brain, in very young children, say three or four years of age, requires all of twelve hours in rest or sleep. This period is shortened gradually until, at fourteen years of age, the boy is found to need only ten hours. When full grown and in a healthy condition, the man may find a night of eight hours sufficient to repair the exhaustion of the day and recreate him for the morrow. But if he considers that he needs more sleep he should take it. There is surely something wrong about him; perhaps a forgotten waste must be repaired. His sleep, evidently, has not been made up, and until it has, and he can spring to his work with an exhilaration for it, he should sensibly conclude to let his instinct control him and stay in bed.

IN answer to an inquiry concerning his habits of living, Mr. John

Burroughs, widely known as a naturalist and man of letters, writes:—"I gave up the use of meat on the advise of my physician two years ago, and my health has been much better since. I find I need less physical exercise, that my nerves are much steadier, and that I have far fewer, dull, blank depressing days; in fact, all the functions of my body are much better performed by abstaining from meat. In summer I make very free use of milk, I eat eggs, oysters, fish, and fowl; oatmeal, hominy, beans, and a great deal of fruit of all kinds. When I can get good buttermilk I want no better drink; there is great virtue in buttermilk. One year ago I gave up the use of coffee, and I find I am greatly the gainer by it. Certain periodical headaches with which I was afflicted I attributed to coffee. It seems that the only part of my organization that needs stimulating is the secretive; meat and coffee clog and hinder these functions, while a fruit and vegetable diet favours them. One must study his own animal economy and adapt his habits of eating and drinking and of work to it. What suits me will not suit all."—*Health Monthly*.

Poetry.

ON the battle-field of life
 Soldiers fall on every hand;
 And with those who fell in strife
 Barrowed over is the land.

There's no spot whereon we tread
 But contained a mortal heap—
 Once was pillow for the head
 Of one who took his last long sleep.

There is on high no single star
 But to some poor human soul
 Has been glorious harbinger,
 Beaconing his heavenly goal.

Facts and Gossip.

At the meeting of the British Association, Mr. Preece contributed a paper entitled "A Magnetic Experiment." His daughter accidentally drove a needle into the palm of her right hand, breaking it into several pieces. All these pieces were extricated but one, and this could not be found by probing. It remained in her hand for a fortnight, causing much pain and inconvenience. An examination by Professor Hughes, with his induction balance, though giving faint indications of its presence, failed to localise it. Mr. Preece tried several forms of this apparatus, but failed. He then strongly mag-

netised a very fine needle, and suspended it to a light arm by a small paper stirrup and a single cocoon fibre. The damaged hand strongly deflected it, and by moving the hand about the needle invariably pointed to one position, which was marked with a spot of ink, a free and deep incision was made in this spot, and the piece of needle, quarter of an inch long, was found and extracted. The needle went through the opponens digiti minimi muscle, and was found deeply embedded under the deep palmar fascia. The operation was performed by Doctors Pocklington and Page, of Wimbledon.

DR. BURGGRAËVE, a learned professor of the University of Ghent, has just published a remarkable work in which he endeavours to prove that anybody who will take the trouble to follow his instructions may become a centenarian. His system is merely a system of renovation, and is simplicity itself. The great panacea for all ills which he professes to have discovered is salt, the rational use of which, he says, is a sure preserver of life. He affirms that good health is not a matter of chance or constitution; the laws which regulate human life are calm and regular phenomena, and all we have to do is to take care that they shall develop themselves without obstruction. According to his theory, salt is the great regularizing agent. If the blood be too rich, salt will clarify it; if the blood be too poor, salt will strengthen it and furnish it with the necessary elements. Dr. Burggraëve quotes several examples in support of the sovereign virtue which he attributes to salt. Formally, in Holland the greatest punishment which existed for offending soldiers was to give them unsalted bread. After a few months of this régime the culprits almost invariably died. In Saxony, at the end of the last century, a terrible epidemic reigned solely through the want of salt. The Dutch *savant* furthermore assures us that salt is an infallible cure for consumption and cholera. [The Russian peasants once saved themselves from a plague by putting salt in their milk.] He estimates that the quantity of salt which every adult in ordinary health should consume daily is two-thirds of an ounce. In conclusion, he asserts that if the world would only take to salt, centenarians would become almost as common as new-born babes.

THE membership of the British Phrenological Association grows almost daily. The Association now numbers nearly fifty members. Persons wishing to become members, or to learn anything about the Association should address the Hon. Organizing and Corresponding Secretary, A. T. STORY, 49, Wilson Road, Camberwell, or at the Office of this Journal. As the Association's finances are not in a very flourishing condition as yet, we would suggest to correspondents the advisability of accompanying their inquiries with a postage stamp for reply. The Bye-Laws of the Association adopted at the last meeting are now ready, and may be had on application.

The next meeting of the British Phrenological Association will

take place in the Memorial Hall, Tuesday Evening, November 9th, at 7.30. Mr. ALFRED T. SMITH will read a paper on "Some Abnormal Developments," and the Hon. Organizing Secretary will have some suggestions to make with reference to "Some lines of work to be taken up."

The *Lancet* says:—It has been suggested to us that the effect of the athletic exercises now common among girls, if these are really beneficial, should have begun to appear in the physique of women of the present day, and to show itself in greater fitness for the duties of maternity. Medical men in practice might, no doubt, throw some light upon this question. To our own mind there seems good reason to believe in the generally beneficial effect of all such means of educating muscular power, if they be used in moderation. Besides their intrinsic property of increasing vigour and agility, they necessitate a greater freedom from the rigid restraints of dress which were usual twenty years ago. They imply, moreover, a liberal allowance of fresh air, and, by encouraging vital changes throughout the body, combat that dislike to food which is so common among young girls of listless habits. Thus in various ways their tendency is to strengthen and stimulate the whole system. There can, we think, be little doubt that the woman who has grown up under this wholesome training is the fitter in consequence to bear the lot of her sex in married life. Her nerve will be stronger, her muscular power greater, and each natural function proportionately more active. It is, indeed, not very clear at first sight that such a contingency of childbirth as the use of instruments in delivery can be thus influenced. In such cases other factors must be considered; but there are doubtless some conditions of structure, such as those dependent on spinal mischief, which would be favourably affected by gymnastic movements and games of like character. One thing, however, must not be forgotten—namely, that moderation in amount and fitness as to times are essential to the success of all such training.

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

L. H. and J. K. S.—This photograph is not a very good one to judge from, being somewhat faded. It indicates, however, great similarity between the lady and the gentleman. They might be brother

and sister. The similarity in character is remarkable. In the case of J. K. S., he is frank, candid, open-hearted, honest, easy-going, good-natured, loving, affectionate, fond of thinking (not so fond of working physically), youthful, agreeable, quick to see a joke and laugh, quick also to cry (or to show pity), and bubbling over with life and good feeling. He may be too easy, good-natured, indolent, fond of good living, spendthrift, luxurious: there are where his faults lie. The lady is quick-tempered, generous, outspoken, energetic, industrious, very honest, and with a good deal more depth than polish.

G. W. (Glasgow).—The photograph of this girl is not very good for delineation. It is too light, and the outlines too indistinct. A few points, however, may be touched upon. In the first place, the physique does not appear to be over good. Neither the lungs nor the stomach appear to be very strong. She needs very careful training. Only the plainest and simplest food should be given to her, and she should have daily some sort of light gymnastic exercise, to develop and strengthen her muscles and to enlarge her lungs (see Board-School Gymnastics). She does not breathe enough. She appears to have quite a will of her own, and to have plenty of self-control under ordinary circumstances; but she is very nervous, and probably irritable. She has a great amount of imitation, and can learn to do most things she sees others do.

J. S. (Ireland).—Dear Madam, you have put up your hair in such a manner that it is impossible to judge of your phrenology, especially of your intellect or your moral character, except as regards conscience. You seem to have a very strong sense of justice, and to be hopeful; and I should judge from your eyes that you are kind-hearted (I am sure you are affectionate); but how you are for reverence and faith one cannot judge; nor can one judge whether you are very clever or not. You seem to be fond of fun; and I am sure when there are sports on, you are not moping in your chamber. You are sharp-witted, sprightly, have plenty to say, and your tongue thaws easily; domestic, fond of good things, loving, rather jealous, and, apparently, fond of a dance.

E. T. L.—A good head. Impossible to tell all its points under this head. There are very few weak points. Your faults come from your strong organs rather than from deficiencies. You ought to have made your mark in the world. If you have failed, it is because you have not put forth sufficient energy in a given direction. You have so many strong organs, and so much general ability, that the fear is you have dissipated your energies by not having concentrated sufficiently. You could have made your mark in literature or art. You are a good critic where you know, and you have great originality. With a little more fire, you would have made an orator. Ardent in love, intense in feeling, clear in thought. To tell you all one would have to take half the *MAGAZINE*, and charge you—well, more than twopence.

W. H. B.—This young fellow has considerable artistic ability;

could certainly become a good photographer, and produce fine artistic work; but he should not be satisfied with photography, unless he is prepared to make a thorough art-study of it. His best gifts lie in the direction of drawing, designing, carving, and sculpture. He has some literary gift; but he has more ability in dealing with material—as, for instance, in art-pottery, moulding, and the like. He has the indications of great originality. Tell him to lose no time; but try himself in one or two branches, decide on the one in which he has the most taste or facility, and then stick to it. The reward will be worth the effort.

G. R. (Littlehampton).—You have rather a good head. Some of the salient features are marked, and must have a striking effect on your character. You are firm, steady, persevering, naturally conscientious, proud-spirited, somewhat kind-hearted, energetic, alive to what is going on, quick to see differences, full of resources, and indefatigable in your efforts. You would make a good business man, especially if you got into a line that you liked, and that gave scope to your energies; are also fitted for management. Your best gifts lie in the direction of contracting, building, architecture, and such lines of business as would require you to deal in and understand materials. You also possess abilities for debate, for law, and affairs. Put your aim high, and keep a good rein on your emotions. You are affectionate and romantic.

FRANK and NELLIE.—Fairly well developed. Some of the compatibilities are very good; others are less good, but they are such as can be overcome. Frank is of a fine intellectual and moral type; Nellie is more social and will need to do all she can to rise to his level in these respects. Frank on the other hand will need to take into account her more social emotional nature. Nellie must not be jealous; Frank not over sharp.

S. (Ealing) possesses a fine temperament and a natural high tone of mind. The moral qualities are well represented, and you should be known for your feelings of sympathy, generosity, justice, and hopefulness. You have a well-balanced intellect, and are capable of becoming a good scholar. Are quiet, neat, and orderly, a good accountant, fairly ingenious, very tasteful, imitative, and desirous of improvement. Are a good talker, fond of literature, and capable of much brightness of thought. Read carefully—the best books—and think over them well, and you will in five years' time have grown out of your present intellectual self.

G. B. N.—Yes, he is jealous, and very hot in his temper when roused. He should have a very patient, loving, devoted, quiet-tempered, highly moral, and religious wife. He has considerable powers, but he has a strong, impulsive, company-loving disposition, and will want an anchor of the best possible quality to hold him steady. He ought to be a teetotaler, have plenty to do (should work twelve or fourteen hours a day at least), and associate with the best kind of people he can.—(*Ed. P. M.*)

THE
Phrenological Magazine.

DECEMBER, 1886.

MR. WILLIAM WOODALL, M.P.



It will be seen from the portrait of this gentleman that he is endowed with phrenological developments of more than common excellence. To the tyro in the study of phrenology we would point out the remarkable balance there is between the parts.



Let him note first the remarkable height of the head above an imaginary line drawn horizontally backwards from the centre of the eye through the upper lobe of the ear. It is very rarely that such height and at the same time such evenness of development of the top head is seen. The height directly above the tip of the ear indicates large Firmness, and in connection with Conscientiousness, great steadiness and stability of character. The fullness in front of these organs shows the faculties of Veneration and Hope to be also well represented ; and the height in front of these,

the organ of Benevolence large, thence a high and consistent moral character. Behind Firmness we see the indications of good Self-esteem and Approbativeness; giving together a character for pride, manliness, self-respect, independence, and power to manage his own affairs, as well as great suavity, tact, ambition, and desire to please and be thought well of. He could not well be an unpopular man, unless it were with those who are totally at variance with his religious and political opinions, and do not like his independence.

Turning from the moral to the intellectual qualities, we see in the depth of brain from the root of the nose backwards to the opening of the ear, more than common power and uniformity of intellect. There seems to be no special lack—the perceptive faculties are well represented; and although Mr. Woodall might not have made a great and original investigator in the domain of physical phenomena, he is well qualified to excel in some special branch of study requiring a clear, perceptive intellect. He is a good observer, has a retentive memory, and an apt way of putting his ideas into words. Indeed, his Language is one of his best gifts. He may be too genial to make a great orator; but he has the very best qualifications to make an after-dinner speaker. The other perceptive faculties are good; Order and Calculation are specially well represented; and the critical faculty is excellent. It is in the latter direction that the strength of the intellect is specially shown. He quickly sees into the heart of a subject, gets the points of it, and is able to analyse it in all its bearings. This quality, together with Causality, gives him considerable originality and comprehensiveness of thought. Wit is not large; but he has enough sense of humour to keep him well on the line which is said to divide the sublime from the ridiculous.

His intellect, taken as a whole, qualifies him for business, for scholarship, or for public affairs; he would make an excellent diplomatist or a good Minister of Education. His mind is open to new ideas; but he is by no means a *gobe-mouche*, ready to swallow any new thing that may be 'run' as a nostrum. He is suspicious of the new thing until well weighed and tried; has a judicial mind, and would have made an excellent judge. Though his sympathies are active, they do not run away with him; and though he is strong in his religious feelings, he is tolerant of the views of others, and would give the freest scope to conscience.

Socially, Mr. Woodall is a lover of home and country, fond of the domestic circle; but also fond of general company. Friendship is one of his most prominent qualities;

he likes to gather people about him and to see them enjoy themselves. He is a great admirer of the opposite sex ; but his admiration is well under the control of intellect and moral sense. He may not, possibly, be known as a ladies' man, because the character has something of vulgarity about it, and he is the very antipodes of all that is vulgar ; but a woman never appealed for his championship in vain. He may not be particularly attached to pets, but he is fond of children and would be likely to make their cause his.

His faults arise from his impulsiveness (restrained, however, by caution), from his pride, and, perhaps, from that kind of vanity that cannot bear anything like neglect or a slur ; from his impatience of opposition, and from a certain suspiciousness of nature that, while he courts attention, causes him to doubt its motive. He is possessed of a great deal of energy, business tact, and power to manage men ; he knows what property is worth, and does not squander it recklessly. At the same time he is generous, and is capable of doing a great deal of good by a little expenditure. He is not a fighting man, and yet he never yields. Possessed of good 'staying' qualities, he will probably live and remain in harness to a good old age.

BIOGRAPHY OF DR. GALL.

IT was the aspiration of Gall's youth to determine finally the physiology of the brain, and determine the correspondence between the moral and intellectual powers of the mind with the organization ; and how the extraordinary talents, propensities and abilities which were discernible on the exterior of the head could be accounted for in the brain. He therefore determined to either prove to himself that his ideas were groundless and that he was working upon facts which were worthless, or else that he had started on the right road to ascertain the truth. If he had been left to himself and to nature, he would not have found it difficult to accomplish his work. "But," he says, "it too often happens that the more scientific a man becomes, the farther he departs from the simple truth ; and this is precisely what I found." His growing convictions were shaken in proportion as he studied the predjudices and errors of the various philosophic writers of the day, by whom he was assured that all our faculties come from external sensations, and that all are born with equal faculties ; the difference being simply a matter of education or accidental circumstances. "If this be so," thought

Gall, "there can be no external sign of any predominating faculty; and, consequently, the project of acquiring in this manner a knowledge of the functions of the brain and its parts is a mere chimera." In order to meet this difference of opinion when comparing it with his own observations, he was forced back to his first method of work. He recognized that his brothers and sisters, as well as his schoolfellows, were differently constituted in brain-power, though they had equal educational advantages; still they showed distinct peculiarities and talents, over which their education had not had a great deal of influence. "Why, therefore," he asked himself, "if the metaphysicians are right in the views they hold, do not all my schoolfellows excel equally well in the same studies?" His teachers did not evidently give much weight to the idea, that all scholars possessed the same capacities for receiving instruction; for one was pressed with studies which another found impossible to grasp, though both started in the same class. Some also excelled in branches of study that their educational instruction left entirely untouched. He says, * "the more progress I seemed to have made, the more everything appeared to conspire against me. Here a consequence presented itself which refused to harmonize with the opinions of philosophers; and there many fancies were raised against the dire influences which my researches were to exert on morality and religion." He probed his own thoughts and questioned his own integrity with great stringency. He questioned his own ability to interpret rightly the language of nature, and wondered whether it was a ridiculous pretension for a young man to hope that his efforts would reveal to him things which for ages had escaped the researches of the greatest observers. Again he queried to himself: that supposing his labours were not utterly useless, was it not "a rash enterprise to oppose opinions so long established in the various sciences, and to contradict the anatomists, physiologists, philosophers, metaphysicians, lawyers, etc.?" It was not for fame or distinction that he resolved to announce his discoveries; he was simply actuated by a love of truth, and inspired by a conviction of the purity of his views, that he gathered boldness and confidence to persevere with his experiments. Some persons said to him, "How are we to know that your doctrine of the function of the brain is the truth?" He replied, "Truth as well as falsehood has its proper physiognomy. This doctrine owes its birth to incontestable facts;

* Gall's "Anatomie, etc., du Cerveau."

these facts have revealed the general laws in virtue of which they take place. They have proved themselves independently of the facts from which they are deducted." He examined and compared a large number of animals' skulls and their different faculties, and he found that there were various dispositions among dogs of even the same race and litter. The same thing was observed among birds. He therefore concluded that the propensities and faculties, both of men and animals, were innate.

He could not recognize the generally accepted idea with regard to the moral sentiment being consigned to the thoracic and abdominal viscera. Although Pythagoras, Plato, Galen, Haller, and some other physiologists placed the sentient soul or intellectual faculties in the brain, he found that Aristotle placed it in the heart; Van Helmont, in the stomach; Descartes and his followers in the pineal gland; and Drelincourt and others in the cerebellum. Gall, with these ideas before him, decided to continue his researches as he began them, urged on by his fondness for observation and reflection, gathering together all the facts he could, through whatever opportunities offered themselves, before he felt able to arrange them in order. Being so thoroughly convinced by the facts that had come under his own notice of the natural diversity of the talents of human-kind, he found still another obstacle in views expressed by various writers. Instead of assigning a separate talent for art, music, and drawing, only general terms were admitted, such as those to express perception, memory, imagination, and judgment; and while endeavouring to recognize the place or seat in the mind for these general terms, he found innumerable difficulties. Dr. Gall therefore determined to abandon all previous theories, prejudices, etc., and to work out his observations entirely upon natural facts, depending only upon nature.

He had at this time ample scope for his observations, as he was a physician to a lunatic asylum in Vienna, and thus availed himself of opportunities to examine the insane. He also visited prisons and schools, and was introduced to the courts of kings, to colleges, and to seats of justice. He took particular pains to examine the head of any one with an extraordinary endowment or deficiency of mind. It was in this way that he continued to build up, almost imperceptibly, his theories about the manifestations of the mind. As he continued to make these matters a daily study, he recognized the necessity of discovering what internal influences were at work, and realized that the physiology of the brain was valuable inasmuch as anatomy was joined to it. It was from

seeing a woman who was afflicted with hydrocephalus, and who had been troubled with it all her life, that he declared his conviction that, "the structure of the brain was different to what was generally supposed." He began his anatomical researches by gaining permission to examine the skulls and brains of many after death whom he had known during their life-time. He found that on the removal of the skull the brain (covered by the dura mater) presented a form corresponding to the appearance of the skull during life.

Many imagined that he first dissected the brain, and pretended by that means to have discovered the location of the mental faculties; others supposed he mapped out the skull in its various groups, according to his imagination, and that his fancy gave to each group certain organs. Neither conjecture was correct: he went to work on a very different plan, and ascertained, step by step, the resemblance between the particular talents, dispositions, and characteristics, and particular forms of heads. He next ascertained, by removal of the skull, that the figure and size of the brain were indicated by these external forms; and it was only after these facts were determined that the brain was minutely dissected, and light thrown upon its structure.*

The first published articles on his inquiries concerning the head, appeared in October 1798, in a German periodical. These articles were written in the form of a letter to Baron Retzer upon the functions of the brain in man and animals. They are divided into two parts, and are unique in themselves for possessing the fundamental principles which he, from the first, laid down and worked upon. He included in them his new ideas on medicine, on morals, on legislation, on everything which related to the physical, moral, and intellectual nature of man. In the *Journal of the Phrenological Society* in Paris, Dr. Fossati wrote, "that this paper of Gall's forms a valuable document for the history of the science; and should convince every one that to Gall alone belongs the glory of having discovered the true physiology of the brain." Not having room in this short biography for more, we shall only quote the leading points which Gall introduces into his sketch to his friend, concerning his proposed work on the *Principles of the Physiology of the Brain*.

Part I. treats first of the faculties and the propensities innate in man and animals.

II.—The faculties and the propensities of man have their seat in the brain.

* *Phrenological Library*, Vol. I.

III. and IV.—The sentiments or higher faculties are not only distinct and independent of the propensities, but both ought, consequently, to have their seat in parts of the brain, and independent of each other.

V.—Of the distribution of the different organs and their various developments, arising from different forms of the brain.

VI.—From the totality and development of determinate organs results a determinate form, either of the whole brain or of its parts as separate regions.

VII.—From the formation of the bones of the head until the most advanced period of life, the form of the internal surface of the skull is determined by the external form of the brain: we can then be certain of the existence of some faculties and propensities, while the external surface of the skull agrees with its internal surface, or so long as the variation is confined to certain known limits.

The first Section of Part II. contains an application of general principles. The establishment and determination of the faculties and propensities existing of themselves, and the necessary means by which to discover the seat of the organs.

1st.—The discovery of certain elevations or certain depressions when there are determined qualities.

2nd.—The existence of certain qualities together with the existence of certain protruberances.

3rd.—A collection of models in plaster.

4th.—A collection of skulls. Gall truly remarks here:—
 “We find many difficulties with regard to human skulls. You know how every one fears for his own head. Men unhappily have such an opinion of themselves, that each one believes that I am watching for his head as one of the most important objects of my collection. Nevertheless, I have not been able to collect more than twenty in the space of three years, aside from those taken in the asylums and hospitals.”
 “Why,” he asks, “has no one preserved for us the skulls of Homer, Ovid, Virgil, Cicero, Hippocrates, Boerhaave, Alexander, Frederic, Joseph II., Catherine, Voltaire, Rousseau, Locke, Bacon, and of others?”

5th.—Phenomena of the diseases and lesions of the brain.
 “I have also much to say on this subject. The most important is the entirely new doctrine of the different kinds of insanity and the means of cure, all supported by facts.”

6th.—The means of discovering the seat of the different organs by examining the integral parts of different brains and their relations.

7th.—He says: "I come at last to one of my favourite subjects, the gradual scale of perfection, from the zoophyte to the simple polypus, up to the philosopher and the theosophist; through the animal kingdom of insects, birds, fishes, and mammalia, until he reaches man, that is to say, fools and philosophers, poets and historians, theologians and naturalists; but it has cost me more than one reflection before I could elevate him to the rank of the king of the earth." He further taught the principles concerning the strange communication of the muscles with cerebral organs; for "when certain cerebral organs are put in action, you are led according to their seat to take certain positions, as though you are drawn by a wire; so that one can discover the seat of the acting organs by the motions." This theory, which Gall expected to be disbelieved at first and made light of, has been worked out by G. J. Witkowski, M.D., Member of the 'Faculté de Médecine,' Paris, in his work on "The Structure and Functions of the Brain, Cerebellum, and the Medulla Oblongata." He places the centre of movements of the tongue in the anterior frontal lobe, by the inferior frontal fissure; the centre of the movements of the face and eyelids, on the anterior of the second frontal convolution, close to the superior frontal fissure; the centre of movements of rotation of head and neck, on the first frontal convolution, above the parallel frontal fissure; the centre of movements of superior and inferior members, on the fourth frontal convolution; and the anterior parietal convolution, on each side of the fissure of Rolando; the centre of movements of the eyes, on the parietal convolution; and the centre of movements of the ears, on the temporo-sphenoidal lobe.

Many experiments by Dr. Ferrier have also helped to localize muscular movements in cerebral convolutions. Gall then comes to his second section of Part II.

Point I treats of national heads.

2.—Of the difference between the heads of men and women.

3.—On physiognomy, under which head we find Gall no less than a physiognomist, though he was called a craniologist, and the science he discovered, craniology. This title he considered inapplicable, as the object of his researches was the brain. "The cranium," being "only a faithful cast of the external surface of the brain, and, consequently, but a minor part of the principal object of my study."

Gall began his first course of public lectures at Vienna in 1796, and continued them until 1802, when the Austrian Government issued an order that they should be discon-

tinued, as his doctrines were considered dangerous to religion. At the same time a general regulation was issued which prohibited all lectures got up by private individuals, unless permission was obtained from the public authorities. Dr. Gall, did not try to gain this permit, but a few years afterwards began travelling. It was noticeable, however, that his previous lectures had excited great curiosity; and publications on the subject were permitted "provided they did not reflect on the government for issuing the general order." Among others, Froriep printed "an Exposition of the Doctrine of Dr. Gall," in 1802; Marteus printed "Something on Physiognomy," at Leipzig; and Walther published "A Critical Exposition on the Doctrines of Dr. Gall, with some particulars concerning the author," at Zurich in 1802.

It was not until 1800 that Dr. Spurzheim became associated with Dr. Gall—first as pupil, until 1804, afterwards as co-labourer; and although he proved himself to be of great assistance to Dr. Gall in his dissection of the brain and in making the subject known to the English speaking public, we shall simply refer to his name here and there as occasion requires and reserve all detailed comments until we examine his life and labours separately.

In his "Autobiographical Notes," Gall says: "On the first day of the year 1805, my father, who was still residing in Tiefenbrunn in the G. D. of Baden, wrote me these words: 'It is late, and night cannot be far distant; shall I see you once more?' Nothing but such an invitation, joined to the ardent desire which I cherish of again seeing my beloved parents after an absence of twenty-five years, could have induced me to leave my friends and my patients for a few months. I wished also to avail myself of this opportunity to communicate my discoveries to the learned men of the north of Germany. That my interview with them might not terminate in propositions and discussions without proof, I took with me a part of my collection."

He was surprised with his reception everywhere. He was introduced to sovereigns, ministers, philosophers, administrators, artists, and others, who added to his collection and enabled him to gather fresh facts and experience. The invitations which came to him from the universities at this time were too tempting to resist; and his journey was considerably prolonged beyond the time he had first arranged. During the period between 1802 and 1805, the subject of phrenology had progressed considerably, and many of Gall's lectures were published throughout Germany; besides important works by other writers in French on

similar subjects. One by Bischoff being an exposition of Gall's doctrine upon the brain and the skull, followed by remarks of C. W. Hufeland,—published in Berlin.* A second work, published in Dresden, by Bloede, called "The Doctrine of Dr. Gall upon the Functions of the Brain."

On March 6th, 1805, Gall and Spurzheim began to lecture in Berlin, and they continued travelling and lecturing together until 1813, during which time they visited Potsdam, Leipzig, Dresden, Halle, Jena, Weimar, Goettingen, Brunswick, Copenhagen, Kiel, Hamburg. In 1806 they visited Bremen, Munster, Amsterdam, Leyden, Dusseldorf, Frankfurt, Wurzburg, Marburg, Stuttgart, Carlsruhe, Lastall. In 1807, Freyberg-en-Brigaw, Donaueschingen, Heidelberg, Mannheim, Munich, Augsburg, Ulm, Zurich, Bern, Bâle, Mulhausen. In 1807 they visited Paris, and Dr. Gall, assisted by Dr. Spurzheim, delivered his first course of lectures there, surrounded by a large number of skulls, casts, and enhanced by an extraordinary number of anatomical and physiological facts; and afterwards made his permanent home there. "Great was the ardour," says Chenevix, "excited among the Parisians by the presence of the Germans. Every one wanted to get a peep at them; every one was anxious to give them a dinner or supper; or be a candidate for an invitation to a breakfast, distant only three months and a half; at which he sat a wondering guest." The next year, 1808, they presented a brief memoir on the anatomy of the brain to the French Institute, which was then in its highest state of glory. "In proportion as Bonaparte cannonaded, it had grown enlightened." And as he was the leader of all military rule and discipline, so was M. Cuvier chief of the anatomical department; and, therefore, he was the first one to whom the lecturers addressed themselves.

M. Cuvier at first seemed well satisfied with a special course of lectures he attended, and watched them dissect a brain for him and a few friends, and expressed his approbation of the new doctrine before M. Chenevix. As soon as Napoleon heard that his greatest comparative anatomist had attended these lectures, his anger and indignation was so roused against him, that Cuvier, when preparing his report for the Institute upon the labours of Drs. Gall and Spurzheim, varnished the true facts respecting the anatomy of the brain, and even excused the Institute for taking the subject into consideration.

* The latter work has been translated and printed in the PHRENOLOGICAL MAGAZINE, 1883, and since in pamphlet form.

He lightly touched upon what was new, and dwelt upon the most remote similarity he could possibly find: being a great lover of liberty himself, he but too willingly submitted his opinions to those of his sovereign. Chenevix says, "That so mutilated and lame, so unjust and unsatisfactory, did the whole report appear, that the authors of the new doctrine published an answer in which they accuse the committee of not having repeated their experiments. Such was the reception which the science of phrenology met with from the Academy of the great nation." Napoleon possessed great intuitive power, and selfishly did not want others to partake with him of the knowledge which taught insight into character; he therefore did not help forward the new discoveries; he received his first impressions of Gall's views during his first visit to Germany, where a certain metaphysical juris-consult at Leipzig told him "that the workings of the soul were too mysterious to leave any external mark." When answering the report of the Institute, Gall had this fact in view, and closed one of his sentences with these words:—"And the metaphysician can no longer say, in order to preserve his right of losing himself in a sea of speculation, that the operations of the mind are too carefully concealed to admit of any possibility of recovering their material conditions or organs." On returning to Paris, Napoleon found fault with the members of the Institute who had taken up the new doctrine. "This was the thunder of Jupiter overthrowing the pigmies." He, succeeding in heaping up absurdities and influencing others to consider all the efforts Gall had made, came from a charlatan, etc. The journals also took up the chorus, and sounded their alarm by throwing ridicule upon the subject.

The Journal of the Phrenological Society in Paris considered that Cuvier was a phrenologist; and we do not doubt it; all of his works show it. "Though political causes had a tendency to influence Cuvier against the doctrines of Gall, nevertheless, these two celebrated men were made to understand and esteem one another; and towards the end of their career they did each other justice. Gall had already one foot in the grave when Cuvier sent him a cranium, 'which,' he said, 'appeared to him to confirm his doctrine of the physiology of the brain.' But the dying Gall replied to him who brought it, 'Carry it back, and tell Cuvier that my collection only wants one head more, my own, which will soon be placed there as a complete proof of my doctrine.'" In 1809, the year following the one in which Gall and Spurzheim presented the French Institute with the joint memoir, de-

scriptive of the nervous system and the anatomy of the brain, their large and comprehensive work began to appear, entitled, "The Anatomy and Physiology of the Nervous System in general, and of the Brain in particular; with observations upon the possibility of ascertaining several intellectual and moral dispositions of men and animals by the configuration of their heads," in four volumes, with an atlas of one hundred plates.

We are told that "two and a half volumes were completed jointly by Gall and Spurzheim, and ultimately finished by Gall in 1819." In the meantime, Spurzheim had left Paris to visit Vienna and Great Britain, where he stayed until July 1817. After his return to Paris Gall gave one private course of lectures in his own house, and two public courses: one at l'Ecole de Medicine, and the other in the hall of "l'Institution pour les Aveugles." The blind are known for their quickness of intellect as a rule; and if any from the Institution heard the lectures, Gall doubtless found them attentive and appreciative listeners: like the members of the College for the Blind at Norwood during a phrenological lecture.

Two years later, in 1819, Gall was asked by the Minister of the Interior to lecture for the benefit of the medical students in Paris, which he consented to do, free of charge, in the operation and lecture room in the Hospice de Perfectionnement, for his first course. But after that he obtained the use of the large examination room of the Institution des Jeune Aveugles, which accommodated between two and three-hundred; and so eagerly were the tickets called for, that they were all issued before the course began.

Between 1822 and 1826 Gall published an edition of his work, "Sur les Fonctions du Cerveau," etc., in six volumes, in which he gives the ideas and valuable experiences that he collected in his years of travel. Dr. Combe describes his last days as follows:—"In March 1828, Gall was seized with a paralytic stroke at the close of one of his lectures, which so weakened his strength that he was unable to rally, and gradually passed away on the 22nd of August, in the seventy-second year of his age. His remains were followed to the grave by an immense concourse of friends and admirers; five of whom delivered addresses over his grave, as is the custom in France. His death gave rise to a succession of eulogiums, and public sentiment was warmly and loudly expressed in his favour." He was laid in the fine old cemetery of Père la Chaise, Paris, where a fine bust helps to mark his grave—which we have had the honour of

seeing. His skull is now with his collection, which belongs to the Antiquarian Society of Paris.

“Whatever opinions we may form of the system of that illustrious man, it must be acknowledged that he has made an immense stride in the sciences of medicine and of man.”

THE BRITISH PHRENOLOGICAL ASSOCIATION.

THE monthly meeting of the Association took place in the Memorial Hall, on the evening of Tuesday the 9th ult., when, in spite of the inclement weather and the fears of riot (it being Lord Mayor's Day), there was a good attendance. Mr. Fowler was in the chair. A letter was read by the Hon. Organizing Secretary from the widow of the late Dr. Donovan, in reply to an invitation to attend the meeting, regretting, on account of age and failing health, her inability to do so; and asking the Association to accept the gift of a copy of her late husband's work, “A Handbook of Phrenology.” The present was accepted on the motion of Mr. Morrell, seconded by Mr. Godfrey, and Mr. Story was desired to thank the donor for the same.

Mr. Alfred J. Smith read a highly interesting and suggestive paper on “Some Abnormal Developments” (which we hope in a subsequent issue to publish). A discussion on the subject of the essay ensued, and a good many valuable facts were elicited. A hearty vote of thanks was accorded to Mr. Smith, on the motion of Mr. Godfrey, seconded by Mr. Dillon, for his contribution to the instruction of the members of the Association.

Mr. A. T. Story made some suggestions with reference to work to be done. He said: “I wish to occupy your time for but a very few minutes; and that in order to point out two or three ways in which useful work may be at once commenced by the Association. While one of the purposes of the British Phrenological Association is, undoubtedly, to meet here, and hear papers read and lectures delivered for mutual instruction and strengthening, in regard to knowledge of and faith in phrenology; we have, I take it, a still larger purpose before us, and that is to make phrenology known to, and its importance appreciated by, those who have not the advantage of being members of this Association. This has been sufficiently affirmed by the members of the Association, and so needs not to be further insisted upon at this time. The question merely arises: ‘In what ways

can we best work for the spread of accurate knowledge on phrenology?' Two methods present themselves—one is by literature, the other is by lectures. Into the question of literature I do not propose to enter here; we have the PHRENOLOGICAL MAGAZINE, which is as good a medium for the advocacy and dissemination of phrenological views as we can have; and I should be glad to see the members of the Association, individually and collectively, do all they can to make it known and read. To those desirous of having copies for presentation to beginners in the study, or to those who have not even gone so far as that, special advantages will be given. In other words, copies will be supplied at a nominal figure for distribution. Coming now to the question of lectures, I may say, that at the last meeting of the Council, I threw out the proposition—which was heartily agreed to—that we should, during the winter months, endeavour to get up a series of monthly lectures, to be held in different parts of London; and that for this purpose we should use the talent—latent or otherwise—that we have in our midst. I do not propose that the Association should burden itself with any great expenditure: that, in the present state of our finances, we should not be justified in doing. The way in which we ought to go to work should be this: members might look about in their own districts and see if societies would be willing to have a lecture on the subject, or hear an essay read; or they might see what small room could be hired, and at what cost; and then the Council might take it into consideration whether the Association would be justified in going to 10s. or 20s. expense upon a lecture. As I should not propose to give free lectures, it would be hard if we could not get some of our expenditure back again. We might sometimes even do more than reimburse ourselves for our outlay; some members might even be inclined to arrange and deliver a lecture on their own initiative, when, of course, the Association would only be too glad to give them its moral support and countenance. I am myself about to deliver a lecture at Ilford next Monday evening, and I need hardly say that I shall be pleased to see any member present. With reference to lecturers, we have such good material to hand that it would be a pity not to use it. We have Mr. Webb, who is an old hand in the lecturing field; we have Mr. Smith, who has to-night given us a sample of what he can do; there is Mr. Morrell, who, I hope, we shall be able to induce to mount the platform for us; then we have Miss Fowler, who has also broken the ice in this direction; we have also Mr. Fowler,

who will, I have no doubt, when in town, give us an occasional lecture. I myself will do what I can ; and if the effort be not altogether adequate, it will be earnest. I see several others, including Mr. Godfrey, who will also, I am sure, be glad to give their aid.

Well, this, then, is my suggestion, and such as it is I leave it with you. There is one more point I would like to advert to, and that is the taking advantage—whenever possible—of the newspaper-press for the advocacy of phrenology. As an instance where good might have been done by a letter to a newspaper, I may mention an article which appeared in the *Morning Post* of the 4th. It was violently against phrenology, and as ignorant as it was violent. I was too busy at the time to write a reply ; and it may have been that a reply, if sent, would have found its way into the waste-paper basket. But this is not always the treatment you receive. You do occasionally find a fair newspaper ; and when you do, a judicious paragraph may be of great service in directing attention to the subject. I have recently been trying—I have not yet seen with what success—to influence the Scottish Press to take up the question of the Henderson Trust Fund. That is a fund, as you probably all know, for the propagation of phrenology by lectures, etc. At present the trustees appear to be doing nothing ; we even hear that the Edinburgh Museum is to be closed. Now this is a scandal ; and we as an Association, established to watch the interests of phrenology, should be justified in directing public attention—or, at least, the attention of phrenologists—to the actual state of affairs, and so bring pressure—if necessary—to bear on the trustees. I have nothing more to say, further than to urge, that whatever we do should be done judiciously, thoroughly, and with a constant eye to the importance of the investigation in which we are engaged.”

After some conversation on the subject, Mr. Story's suggestions were adopted, on the motion of Mr. Morrell, seconded by Miss Fowler.

FRIENDSHIP AND LOVE.

The mystic identity of soul with soul in friendship has its obvious analogy in marriage, for, like the union of which marriage is the symbol, it can only exist between two. Aristotle says, that friendship is one soul in two bodies ; and Confucius, that it makes one man of two ; while Swedenborg, in his “*Conjugal Love*,” speaks of his seeing in heaven,

in a vision, a man and his wife, whose relations towards each other, as described by the man, are those of "two bodies but one soul." The definitions of Aristotle and Confucius are certainly meant to be exclusive of the idea of real soul-friendship existing between three; and the comparison in Swedenborg is an application of the same idea to love. Friendship demands unity for its object, as does love; and the intervention of a third individual will immediately and invariably, as though by some certain automatic law, check all flow of soul which is going on between two others.

Addison says in the *Spectator*:—"There is no such thing as real conversation but between two persons;" and the authoress, W. M. L. Jay, of an American religious fiction, entitled "Shiloh," expresses, in that work, the same sentiment still more forcibly, thus:—"Struggle against it as I may, my affections, my sympathy, and my emotions will always refuse to utter themselves freely in the presence of a third person—a looker on—no matter how congenial to me may be that person's self, nor how thoroughly in sympathy with the spirit of the moment."

It has been said, that if three men were to be wrecked on a desert island, it would not be long before two of them combined against the third and made him their slave. It might be said, that they would be just as likely to reverse the procedure and make him their chief; but there could be friendship in the deepest and truest sense only between two of them. As there can be complete mutual contact betwixt the poles of but two magnets, and those of a third cannot have any full magnetic contact with the others, so it is in the case of two true friends. The third person, like the third magnet, is out of the polarity of the other two by the grasp of friendship, the hands; as in the kiss of love, the lips are, as it were, the poles of the magnet; and to these, at the moment of meeting, there rushes the full plan of that magnetism, which is the mysterious cohering element that unites soul to soul. The emanation of od-force from the finger-tips, as seen by Baron Reichenbach, may have some explanatory relation to the fact, that hand-shaking has come to be the expression of friendship; as in former ages, when it sometimes constituted marriage, it was of love. From the meeting lips of ardent lovers there may be a flow of the same odic fluid; and, perhaps, it were not too curious a speculation to conceive that haply the confluences of the magnetic element in joined hands or lips may some day be predicated by another Reichenbach.

There is something strange and mystic about this duality

of friendship, as existing in its truest sense—in the impossibility of three persons being included in that union—which endues it with a deep and ever-renewed interest for the human mind, and disposes me to pursue the subject yet further. It appeals with all the charm of mysteriousness to that eternal and unsubduable longing in man to penetrate to the soul of things, that underlies all this phantasmal show of material conditions. We will suppose, as before, two friends to be holding soul-felt communion together, and a third person to make his appearance. What a disturbing, neutralizing, deranging force does his presence become! In the midst of their fervent breathings they are paralysed as by a spell; and they who have been so enthusiastic, so eloquent, the moment before, what dull, commonplace mortals they now seem! At the approach of the stranger, if observed, there is the instinct to flee, which only courtesy or some feeling of an ulterior kind restrains. I am not ashamed of the secret relations between me and my friend being perceived; not ashamed of any candour of utterance, which may have been overheard by a third person who may present himself when we are holding high and deep communion with each other, any more than the ardent pietist is ashamed of his devotions when they are interrupted by someone: but, like him, I feel an inexpressible embarrassment and sense of profanation, as it were, in being rudely disturbed in the midst of the full outpouring of the secret soul.

It may be said, “But your comparison is bad: for a man prays earnestly and from the heart in company so that all can enter into the spirit of his prayer; therefore, could not three friends have together the high communion you speak of, all entering equally and fully into the spirit of it?” Ah! but does even the most pious and earnest man pray in company as he prays when he is alone with his God? He cannot. Even his praying amongst others will be comparatively conventional, will, perhaps, unconsciously to himself, be a concession, in some measure, to that external man to which one always addresses one’s-self when not appealing directly to the soul, as one appeals in the case of a bosom friend—will be a concession, perhaps, to the prejudice, and perhaps even to the cant of the world. Thus, it will be seen, that my parallel still holds good.

But, as I said, the advent of a third person when two friends are in full communion of soul together, has a strange paralysing effect: he is like a non-conductor, suddenly introduced in an electric circuit, which cuts off the current. If

he observe this fact and be a man of fine feelings, he will realize his true relation to these friends, and not make the useless attempt, which has constantly been made since the world began, and has as constantly failed, namely, to penetrate, without the spiritual key, to that which belongs, as does the soul-union of friends to the domain of spiritual mysteries ; for spiritual mysteries never were and never can be thus divined. If he be a gross material-minded man, he will, perhaps, make the attempt, imputing the sudden reserve on the part of those on whom he intrudes, which his coming creates, and which is a matter of spiritual law and beyond their control, to their will, and acting accordingly. But in the very endeavour, he will but find himself hurled back from the threshold of the penetralia he would profane, hurled back with a power less violent, but as sure and as mysterious as the electric force which Jules Verne's hero of the submarine ship applied to repel any invader of his floating retreat. Let no one palter with the fires of soul by attempting to explore that within it which is forbidden to his knowledge ; for they have a terrible power, and, if heedlessly invoked, they may blast and blight as with a lightning stroke.

A third person has no more power equally to divide true affection and confidence on the part of two bosom friends than he would have to divide the affection of a devoted lover ; and has no more right to attempt to do such ; for the attempt is a profanation. Our indignation is excited not merely by the inquisitorial character but also by the ignorance and stupidity of the attempt, founded, as it is, upon a gross obtuseness of spiritual perception and inability to conceive of the true nature of friendship. If the outsider accept his position and appreciate the friends' relations to each other, they respect him ; if he seek to break, as it were, by his intervention, the continuity of their soul-union, they feel disposed to hate him. But, in any case, on his appearance, there at once begins, perforce as it were, a series of commonplaces and platitudes and formalities, which are the barriers that the higher souls set up to prevent the too close contact with them of uncongenial souls, and preserve themselves from unhallowed violation. He gets pleasant talk, civilities, compliments, perhaps, but not one hint from our secret heart ; and not all the tortures of the moral racks which the world, having discarded their material prototypes, knows so well how to employ, in its vain yet ceaseless endeavour to reduce and level what it cannot understand or reach to its own common and base standard

of familiarity, can extort for itself such a hint in the spirit in which it is given to the true friend.

There is a clairvoyance and clairaudience between two friends by which they can see and hear in each other what a third person cannot, and could not, even though he could be present invisibly and hear all their sacred communings. He understands the letter of them, perhaps, but he vainly endeavours to divine their spirit. The undivided all-souledness of true friendship might be well allegorized by a parallel from the work of the Swedish mystic, "The Future Life." He there tells us, that when spirits turn themselves towards man, they can converse with him at any distance; but when they turn themselves from him and speak one with another, not a syllable can be heard by him, though they be close to him. The like is allegorically true, so far as the relations of two friends to each other, and of a third person to them, are concerned. Between friends, even when far apart, there is a flow of soul, because their spirits are, as it were, turned to each other; but when two friends speak one to another, face to face, in the language of the soul, in the presence of a third person, he hears not their discourse in the full spiritual sense in which they do, no matter how close he be. The inquisitorial materialistic-minded man, who cannot understand anything of the nature of occult sentiment, may fancy that the mastery of the secret of their souls cometh by observation; but all his efforts thus to compass the knowledge are vain. He may endeavour to attain it by watching and prying; and by exposing the souls he would explore to much torture and suffering, he may get a certain result, which he will flatter himself is that he sought for, and which will lead him to suppose he has laid bare those souls and discovered all. The pain which the sufferer will manifest under the infliction will be taken by the inquisitor as chagrin and mortification at the discovery of the truth; but it is the veriest mockery of delusion with which he thus complacently satisfies himself. At the instant of his triumph he is farther off the end of his search than ever, and the result he thinks he has obtained is, in the essential sense, no result at all. It is like that obtained by the vivisector in his attempt to master the innermost secrets of animal organization: he slashes and tortures the poor brute he experiments upon; but, by the very process he employs he destroys certain conditions which are essential to the normal action of the nerves and muscles.

He who would dissect and analyse spirit mysteries by

mere material modes of research gets but the external body, not the real soul of them, and hugs it self-complacently to his bosom as the truth, when he in reality, is deluded by a well-seeming phantasy. For it is ever thus that God, by allowing the putting forth as the substance the material shadow of the truth, and thus deluding the gross senses of those who seek to solve His secrets by such media, preserves, in the same manner as the Eleusinians of old did their secrets, His mysteries from the desecration of the profane.

Men draw distinctions between love and friendship ; but, it has seemed to me, always, without any *à priori*, or aught but arbitrary, ground for the distinction, whether it be a true one or not—and some eminent thinkers have not hesitated to declare the passions to be one and the same. Indeed, it has sometimes appeared to me, that if there be any distinction, it is more in form than in essence ; and that it might not be too fanciful a conception to suppose that friendship is but the milk of human kindness, flowing from congenial souls towards each other, and love but the same thing with, perhaps, sometimes, a dash of what Byron calls heaven's brandy thrown into it.

I remember reading a statement that many unhappy matrimonial alliances had been caused through friendship between young couples being mistaken for love. But might not the unhappiness result from the friendship being unreal ? Is it not just as likely that mere intimacy should be mistaken for friendship as that friendship should be mistaken for love, especially considering that the exclusiveness of social custom with regard to the sexes would preclude two of the opposite sex from having the same facilities for ascertaining whether a friendship was real or not, as would be the privilege of two of the same sex ?

But there are reasons deducible from actual life which go far to strengthen, if not to absolutely establish as true, the suspicion that friendship and love are one. Have there not been cases in which a female, from simple or complex motives, has passed a great part of her life disguised as a male, and formed a pure bosom friendship with one of the male sex ; and where their friendship, on their sex identity being at length disclosed, has stood revealed as love ? It may be said, that before the discovery was made, there was really a certain subtle magnetism, pertaining to sexual love, which prompted their affection for each other. But this supposition seems to be precluded by the fact that there have been instances in which persons who had unsexed themselves in the way mentioned have absolutely been fallen in

love with by individuals of their own sex, who have been imposed upon by the deception. Such facts, if numerous instances of them could be adduced—and perhaps they could be—would seem to be conclusive evidence that, though love and friendship may differ from each other in external manifestation, they are in the essential and spiritual sense identical.

In my opinion the application convertibly of the names friendship and love to attachments, whether between those of one sex or those of opposite sex, would exalt and dignify both, and elevate them into a more spiritual atmosphere. On the contrary, the arbitrary manner in which a division has been drawn, arraying on one side attachments called those of love, and on the other attachments called those of friendship, men and women representing the one, and men and men, or women and women, the other, has, to my mind, degraded the whole ideal of love; and, to a certain extent, the character of woman, by giving to the idea of sex in connection with love, an unnatural, obtrusive, and distinctive prominence, which is repulsive. This everlasting obtrusion of the sex idea as the concomitant of the passion of love is one of the most morbid features of the age. The world is diseased on this subject, and has degraded love, as it has degraded theology; as it has degraded poetry; as it has degraded art, by its coarse materialism—its putting the material before the spiritual, the outermost before the innermost, the accidental before the essential. Love seems to me but a providential adaptation of friendship for the perpetuation of the species; and the sexual law is one duly to be observed and deferred to in its place as a law of our being. But, it is not the essential of love; it is but its least essential and most ulterior element. And it must be remembered, that this law is not merely an ordination for the preservation of the race through present individual pleasure of married couples; but it is a law whereby beings may be multiplied, who may themselves, in their turn, taste the joys of soul-communion with each other quite apart from the sex idea; so that through such union and through co-operation of souls, may be gradually brought about that millennium of spiritualization which is to come for the world, and so that more and more may be continually brought into being to participate in them. Thus we see, therefore, that the very sex principle itself is but an argument, not for its being the essential, which brings, or ought to bring man and woman together, but for its being an ordination for an end higher than itself—true symbol of the gradual evolution of human-



kind!—for an end in promoting which it is in itself tending to demonstrate the principle that love is friendship, or, at least, something essentially apart from sex.

A great deal too much has been made of the recorded commandment to Adam to be fruitful and multiply, as an authority for making the sex element that primary and essential condition of love; the making of it which is the cause of the, at least, undue distinction drawn between love and friendship. But, though the account of Adam and Eve, if acceptable at all, can only be accepted allegorically, we will assume that it is true in the sense of being a divine authority for man's moral and social guidance. It must be remembered that it is not stated at first that God created the woman that they might be fruitful and multiply. It is recorded, that she was created because the man was alone, and it was not good for him to be so. She was created to be a companion, a friend to him, as though this was the primary object of her creation; and it was not until after that the commandment to increase and multiply was given—as though that was but a subordinate, though, in the then thinly-inhabited state of the world, necessary, sequence.

Poetry and fiction have in all ages sought, by throwing around love a halo of romantic though often vague sentiment, to idealise and transfigure it into something holier and more ethereal than friendship. But I fear, that while in abstract theory exalting and sublimating love, they have by the very confirmation they have given to the arbitrary distinction they assume, but contributed to that result which in more realistic theory and in practical life has, as I said, accrued from the distinction—the degradation of love. The distinction has been demoralizing in its influence, because, as I said, it has tended to emphasize and intensify the sex idea in love to a degree which is morbid and revolting, and is a depraved inversion of the natural order of things.

In no way does this distinction assume a more morbid phase than in inducing the conception, as it does, that friendship of a purely platonic character, such as that which existed between Rousseau and Madame de Warens for many years, at least, and that of Comte for Clotilde de Vaux; for instance, ardent but pure, can hardly exist between two of opposite sexes, a conception which has had the effect of most anomalously and unjustly narrowing the field for the choice of sex partners, as compared with that for the choice of friends, which has resulted in incalculable loss of beauty and harmony in human life, and has led to a chaos of confusion in both social ethics and social existence—indeed, this

importation of the sex idea into even the intellectual and spiritual relations between the sexes has, perhaps, conduced much more to immorality and demoralization of thought and feeling on the subject of love than the freest communion between the sexes could have done.

Love should be one with the bloom of the violet and the blush of the rose—sweet, natural, and pure; and no more should the sexual element be introduced into the poetry of love than is the idea of the same law in flowers obtruded into our poetic admiration of the beauty of the violet and the rose. The flowers fulfil the laws of their being, and are not conscious about them, even so far as their degree of “consciousness” goes, any more than they toil and they spin. The law is a natural one of our being, but not one to be harped upon, except only in a necessary and scientific way; but this everlasting making of it a matter of self-consciousness between married couples, and of outer consciousness on the part of the world, is an abnormal sign, is morbid, is repulsive, and is demoralizing; and when man becomes more spiritualized, he will realize that it is so.

How coarsely animalism has entered into the conception of love may be deduced from the marriage service. I and my friend are one in spirit; but what says holy Church, in its matrimonial rite, of the relations of man and wife—that they are of one flesh! There is nothing mentioned about unity of spirit; unity of flesh is the highest conception that our spiritual authorities have been able to formulate concerning that union which they call the holy estate of matrimony. It is true that this is the Pauline idea of marriage; but then, even St. Paul could conceive no higher reason and motive for marriage than was expressed in his utterance, “It is better to marry than to burn.” But how literally the view of the matrimonial state taken by the Book of Common Prayer has been construed is proved by the fact that a learned ecclesiastic has of late years gravely adduced against the passing of the bill to prevent the marriage of a man with his deceased wife’s sister the argument that it would be a legalisation of incest, since the sister would be of the same flesh as the deceased wife, and, therefore, as himself.

(To be continued.)

STEPS TOWARDS PERFECTION.

BY L. N. FOWLER.

THE perfection of man must have been the object of creation. Our Creator could scarcely have conceived of anything short of perfection. It was not necessary that He should make man perfect to begin with; it would not have been in harmony with everything else that He did. Our Creator planted seeds, so to speak—He established the principle in every department of creation, and left that principle to be worked out and perfected. If man had been made perfect to begin with, there would not have been anything for man to do: he would have been a machine in the hands of his Creator: he would have been fated to be as he was. But man was established, the principles of his nature were established, with the idea of his growing into a perfect man—growing up into a full development of his power. Every man has that capacity.

There is a double work to do in the perfecting of the body and the mind. In the first place we need to perfect the body; and in the second place we need to perfect the mind. We cannot so well perfect the body when the mind is imperfect; but if the body is perfected in its growth, in its discipline, and in its right use, then there is a chance for the development and perfection of the mind. The probability is, that man begins his existence when he is born, and his soul and body are united; and that he has not been transferred from any other body to perfect his soul. Many believe that: that man in a certain state did not perfect himself, and has been transferred to another body to perfect that work. We are not prepared to admit that idea.

Man, then, so far as we know, starts out a newly-organized being, both in body and mind, with a physical beginning; but the spirit, being immortal, has no end; but requires an eternity to grow and perfect itself. Man started his journey through life with all the qualifications and aids that were necessary to do all that is required of him to do. Now, we cannot dodge that, and admit that God is a perfect being—man has it in his nature to be all that God expects him to be; or else God expects what is impossible. If he is deprived of any of those gifts and aids it is his fault, and not that of his Creator. The child is born a partial fool: that is not God's fault.

There is no mystery in the work of perfection of character; it is all straightforward work, hard, up-hill work, from the beginning to the end. If you have an idea of perfecting

yourself, it means work all the time. The order of nature is from the little to the larger; from the young to the old; from the weak to the strong; from the ignorant to the learned; from the foolish to the wise; from the low to the high; and from the imperfect to the perfect. That is the order of nature. When God created man he was not pronounced perfect; we have an idea that man was made perfect to begin with. You cannot get that anywhere except in your imagination; the Bible says no such thing. It is written: "And God saw that it was good:" it was good seed placed in good soil. It was a task commenced properly. God had done all that He intended to do when He started humanity with fundamental principles to be carried out afterwards; and if you get the idea that God made man perfect, and he fell down from that, that is your imagination. He was made with all the elements of perfection; but he was not made perfect. A correct definition of perfection of character can only be approached; and the time will probably never come that man can be seen beyond a state of improvements, either in this life or the life to come. When man cannot be improved he is a god, and capable of sitting by the side of his Creator.

To thoroughly understand the composition of the body, we need to know the chemical elements of which this body is composed. To understand its mechanism, we need to know it anatomically; and physiology makes us to know the various functions of the body and their use. To become thoroughly acquainted with the mind, we need to study it in detail, to understand its parts, and workings, and uses, and functions, and adaptations. It is necessary also, to understand the quality of the organization and its harmonious action: for the better the quality and the more harmonious the action, the more easily can man's character be perfected. The mind cannot be perfected in a poor, broken-down, impure, diseased body. What will all the sick people do, then? Do the best they can. A good crop requires not only good seed and soil but a good sun and sky. To perfect anything requires influence from all approaches; to perfect man for this life, is one thing only; to perfect him for the life to come, is another thing. Man is not perfected in holiness all at once; I do not care if he is full of the Holy Ghost, he is not necessarily a perfected man in his organization. To be full of something is not necessarily to be perfect. I say, man is not perfected all at once.

To make a start for a holy and true life is not taking the whole journey; to enlist as a soldier is not fighting the

battle ; to begin to love and obey is not to secure all the Christian graces ; beginning to start on a journey is not to have taken a journey ; to be forgiven of past sins, vices, and crimes, and bad habits, does not so change us, that it is not necessary to struggle over tendencies and temptations after conversion. Conversion changes the actions of the organs, and gives us a love-nature towards our Creator that helps us to love and obey Him. But a conversion does not mean taking away our native powers of mind and giving us powers that we never had before. The young man who, for the first time, loves a woman that he wants for his wife, is the same young man all the way through, up and down, out and in—only that he is in love. His nature is quite out in that direction. The whole spirit of the man is the same in business and everything else. You cannot say that there is anything taken away : you cannot say that there is anything added to him. He is the same man, only a power of mind he had before has been brought into action and centred in an individual. The man has the power in himself to love God before He loves him ; a fool cannot love God, because he hasn't it in his nature to do so—I mean a real fool. So it is the calling out of what is in our natures ; it is the turning of the power into another channel ; it is using the gifts we have in another direction when we are converted to God. You assume any other principle than that and you assume a machine in the hands of God ; and that God made a mistake in making man, and saw that He could not move him and would have to make him over again. So we say, man does not need to be changed in the functions of his nature ; but he needs the functions of his nature guided and sanctified.

Being born spiritually is something like being born physically : in both cases growth is required, and time is necessary. Size, strength, knowledge, experience, and what Christian graces come quickly, one after another—sometimes years apart. No one can perfect himself alone. Make a monk of yourself, if you like, and go all by yourself and live entirely alone : you may cultivate a broad spirit and commune with God, perhaps, with more sincerity ; but you are not a more perfect man for the world. It is contact that stimulates and brings out the mind. If a child were born and never came into contact with the human mind, with the human voice, with human action, that child would be imperfectly developed—not developed at all. But in proportion as we come into town and come in contact, and exchange thoughts and feelings, and have our minds sharpened this way and that way, by coming in contact with various conditions of

mind, is the mind more developed and more perfected than if it lived alone. Let a man drive a fast horse, and he is more of a man than if he drove an ox team, because he has to be more wide-awake. The ox team will go along itself.

We are creatures of imitation. It is a matter of great importance with whom we are associated, what we do, and where we live; as well as what kind of habits we form, and knowledge and experience we receive. Sometimes one faculty monopolises over all the others and absorbs the energy of the mind—one, two, three, or four faculties may monopolise the whole mind. There cannot be perfection where there is only one man to do the thinking of the whole community; there is only the thought of that one man. But when the whole community do their own individual thinking, each man has a mind of his own. There is more thought in that community than if one man thought for the whole community; everything depends upon whether the feelings are pure or perverted. One, however, does not perfect the character; but one besetting sin unrestrained is enough to prevent the character from being perfected.

Man as created has many different faculties and powers. The lowest are appetites; the next are passions; and then come the affections. After these come pride, ambition, and that class of aspirations; the intellectual faculties come next, and then the moral faculties; the religious sentiments are the top sheaf. The order of nature is: begin with the lower and work up until all the faculties shall be brought into full action and right direction. When you build a house you begin with the foundation, not with the top-stone. So it is with character. We cannot begin in the babe with his conceptions of God: we have to begin in the babe with his conceptions of something to eat, and regulate the appetite and habits of the child as its nature requires.

The passions in their highest use give courage, energy, boldness, industry, economy, shrewdness, reserve, prudence, and a disposition to provide for future wants. All these qualities need to be cultivated separately and collectively, and exercised legitimately in harmony with the right use of other faculties of the mind. Their perversion, that is, the perversion of the passions, is a positive obstacle in the perfecting of the character; for they make disturbances of peace, they commit murders and are hypocrites, are covetous; and all that they do in their perverted state is in opposition to perfection of character. That is the reason why there are so many wicked men in the world; they are under the control of a perverted base of the brain, have a perverted

appetite, eat and drink that which is injurious, pervert selfishness, grab everything and claim everything, and cheat right and left ; tell lies and deceive, and so forth. These are the results of a perverted mind—not the natural use of them.

The affections come next after the selfish propensities ; and they have a powerful influence over the whole mind, and enter largely into all mental operations. What are your affections ? Watch them and you will see what your character is. Perverted or wrongly-directed affections damage the health and derange it, and the action of the whole mind as well. A man cannot love wrong, no matter where, without being wrong somewhere else : he cannot go into bad company but what he is bad somewhere else. The affections induce conjugal attachment, parental love, friendship, and love of country.

Ambitious qualities are next in order, and occupy the crown of the head. They give love of personal display, desire to excel, ambition to please, and to be popular and a favourite. They give a sense of glory, regard for fashion and position in society ; also pride, dignity, self-love, independence of feeling, love of authority and power, and desire to take the lead and be responsible. That is what ambition does. The ambition of some goes for glory on the battle-field ; the ambition of some goes for distinction upon a platform ; the ambition of some is altogether of an intellectual character ; the ambition of others is altogether of a moral character. When the ambition of man takes a moral direction, he is guided by a better spirit than if he had merely the ambition to eat, and fight, and drink, and so forth, and get glory in that direction. These powerful and influential faculties need to be guided and regulated by still higher and more important faculties. We want the ambition guided by a power greater than ambition ; for when acting with the lower faculties and qualities of the mind, their influence is directed against, is antagonistic to, perfection of character, to true self-appreciation and ambition, to excel in doing good and in being good.

Once a skull was handed to me to declare its character. I said : Supposing the organization was perverted (and I inferred it was, because it was rather a low moral brain, and only a practical intellect) there were three things for which this man should have been distinguished—the one was for eating and drinking, the second was for fighting, and the third was for bragging. They said that was precisely the character of the man : he was noted for his drinking, he was noted for his fighting, and he was noted for his bragging, too.

That man could not rise very high : could only eat and fight, and brag about it.

The intellectual brain, located in the frontal lobe, introduces us to the external world ; to things, their qualities, value, uses, and combined actions ; to laws, principles, truths, and their workings and applications. It acts as a check on the passions, and guides to the surface feelings, and as an aid to the sentiments and to the moral and religious emotions ; for the intellect works with the moral and the emotional ; or it may act with both. Thus it will appear, that the mind has its grades, its higher and lower powers with their grades. The higher their locality in the brain the more important the faculty.

Man is a religious being, and has moral qualities of mind. These are the climax, and should have the greatest influence ; and the mind is not perfected until all the faculties are modified by them.

Man has a religious organization. He is not only a religious being, but he has a religious organization ; just as he has an intellectual organization, and has a social organization. It is a part of man to be religious just as it is a part of man to be social or intellectual. He has five faculties that are called moral and religious faculties ; they are strong or they are weak, according to the size of the organs and their culture. It is rather humiliating to think of man's religious nature depending upon his organization ; and yet it is true. A man can be a moral as well as an intellectual fool. There he is an intellectual and a moral fool (pointing to a skull). That chimpanzee has more intellectual capacity than that man (referring to an illustration) : that chimpanzee could take care of her child when that man could not take care of his—could support that child when that man could not support himself. He is an idiot, intellectually and morally.

The moral sentiments crown the list of mental powers. Conscientiousness, which is the first of the moral faculties we shall notice, is a regulating element, and gives sense of justice, equity, and truth, and leads to circumspection and consistency. It disposes one to lay down a line of conduct and a rule of action, and act upon them, and scan motives as well as actions, and to regulate self accordingly ; it leads man to harbour ideas of reward and punishment, law and obligation. Such a quality of mind, if active, strongly developed, and rightly directed, must have a powerful influence in regulating the appetites, and all the passions, and affections, and aspiring qualities. A man is tempted to do a certain thing, but something happens that he doesn't do it. Why ? Not necessarily

because he is afraid of the police. Some are cured by the police: all the conscience they have is in the policeman. They desist from doing wrong not from any quality of mind that says "you must not do that: it is wrong." But you and I know perfectly well, that we have something within us that keeps us from doing wrong, independently of the laws of the land and the police.

All the faculties I have spoken of before—the sense of justice, of obligation, of law, and of rewards and punishments—make men think of the results of actions, as well as the motives and the stimulus to action. Yet, this is not the highest stimulating, regulating, or controlling power in the moral brain; there is a consciousness of a Creator spread through the entire inhabitants of the world. It belongs to the whole human race to have a consciousness of an Allah, a God, a Supreme Being, a Creator of the world, a Supreme Power that rules over all, and to Whom we are constantly indebted. Man feels that; and that he is indebted to Whoever, or Whatever brought him into existence and gave him an organization. This feeling gives exalted ideas, and makes man look up in feelings of aspiration towards a higher Being than ourselves. Now, if we had no ideas of God, we should not look any higher than ourselves; we would have nothing higher than a man unless we worshipped the sun, as some people used to do. They worshipped God through worshipping the sun as one of His agents; but Veneration gives us high aspirations towards a higher Being than ourselves; and, at the same time, by stirring up ambition in a moral direction, it gives us a desire to rise and to approach, and become so much like our Creator, as to be able to reflect His image. The reason why man is inclined to do better and to rise higher, is because he has a consciousness of something higher. Supposing there was a perfect lady came into this town, perfectly behaved and perfectly dressed, and of a perfect appearance—every woman in the town would want to be like her. Isn't that natural? We want to be as perfect as the most perfect we see; and when we have a consciousness of anything more perfect than we are, it is a stimulus to us that we want to be like. If there be a splendid man, with all the powers and properties well cultivated, well directed, with all the powers that belong to such an organization, every boy, every young man, every old man, will want to be as perfect as that man. Now, we have the idea of a perfect God—a creating Power, possessing all of the elements, all of the qualities, and all of the principles that belong to creation centring in Him. We are not satisfied to be as we are: we

want to be as God is. This is really the first quality of the mind that makes man look up and aspire. The next faculty in the group draws a dividing line between soul and body; for it gives a consciousness of spirit in possession of flesh, and a spirit-world in possession of a physical world, and spiritual influences in possession of physical influences. This faculty is called Spirituality—giving a consciousness of spirit. It is a faculty of the mind. This faculty opens a new field for mental action; it, joined to our consciousness of a Creating Power, whom no man has ever seen, leads us to conceive Him to be a Spirit, over-seeing and pervading all His works. Man would never think of a spiritual world if he had no faculty to give him a consciousness of it. There being a faculty to give that consciousness of a spiritual world is a proof that there is a spiritual world. We are now losing sight of physical self and beginning to think more of what we can't see with our physical eyes; for our spiritual eyes are now open, and we are longing to know more about this mysterious future life. The longer we live, the older we grow; the more we find out, the more we want to learn; but we would despair, knowing how short and how uncertain life is if it were not for another faculty of the mind. This longing to know would be no pleasure if there were not another faculty added, and that faculty is Hope—right next door to Spirituality. It says, there is a never-ending future of spiritual existence before us, and the longer we live and travel in the right direction and follow higher aspirations, the nearer we will approach to perfection of knowledge and of spiritual truth and influence.

(To be concluded next month.)

DOLLS.

THIS, I wish it to be understood, is not a satirical essay. The word 'dolls' as here used, is employed in the simple, unqualified sense in which children understand it. I make this explanation because there are some women who, being of the nature of playthings, ornamental rather than useful, frequently get the name of dolls—and not without deserving it. No, I speak of the genuine, bona-fide doll, the delight of children and the willing tribute of parents to the great primary maternal instinct of the race. As a boy, I was a ruthless Blue Beard to the doll kind. A doll fresh from its wrapping tissue exercised a perfect fascination over me. I

hungered, so to speak, to be at its vitals ; and at each step in the process of dismemberment I would laugh triumphant. Then, horrified at the abortion I had made, I longed to strangle it and put it out of sight. It is very much the same with the fairest specimens of God's handiwork: man admires to destroy, and when the defacement is complete, he uplifts his hands in horror. How truly the man is foreshadowed by the boy !

Once I remember a little playmate had three dolls, and I hanged them all. Poor little Lucy ! how she did cry over her beloved ones—beloved the more because they were limbless and helpless ! So woman-like : for the girl, too, is the mother of the woman. I was astonished at the flood of tears she shed ; and she would not be consoled for all my comfortings till I had fetched her a handful of cherries. I could not make out whether her emotion was real or feigned. I did not know then, and I have not found out to this day. The tears were real enough, because some of them fell on my hand ; but it shall take a fine chemistry to tell the tears that are the dew of a feigned grief from those of a real one. But the cherries staunched the warm flood. How woman-like was that, too !

When God created woman He said : " Let her name be sphynx," and it was so. And the real riddle she propounds to the world is : " What is the strongest thing in the world that is yet the weakest thing, and that when it is the weakest is still the strongest withal ? " She herself has only gleams and glimmerings of the right answer. I do not quite know whether it will be for hope or despair when she shall wake to a full comprehension of the proper solution.

But, Lord, how far I am wandering from my dolls !

Let me here note what I believe has never been remarked on before, namely, the fact that, as in the actual, so in the doll world—woman predominates. Indeed, as doll proper, man can scarcely be said to exist. I have pondered, and still ponder for a solution of this mystery. I would not for the world go to the makers for a solution : like the philosophers of old, I prefer to think it out. It may take long, but I feel sure I shall arrive at the truth at last. I have sometimes wondered whether it might not be a blind, instinctive acknowledgment of the perfection of sex, and a prefiguration of the time when there shall be but one gender, and that the female. It would much simplify the learning of grammar ; but that would be no great matter, seeing that woman knows no syntax. She would then require to heed it less ; for in a world without men where would be the need for her to mind her stops ?

What a peaceful world it would be, too!—so like that of the dolls—as wooden and as doomed.

It can hardly be said of the first creator of the doll (whoever that great aboriginal artificer may have been), that

“*His* prentice han’ he tried on man,
And then *he* made the lasses, O!”

For he seems to have tried his prentice hand on woman, and there stopped! as too many of us do now—try our prentice hand on woman’s heart and never rise from that to manhood.

I always check my boys when I see them hacking up their sister’s dolls with a jack-knife, or otherwise maltreating them; Lucy’s poignant grief always coming back so forcibly to my mind. I do not like to see boys playing with dolls, like their sisters. I believe with the Poet Laureate, that

“The bearing and nursing of children is woman’s wisdom,”

and the girl must needs get her hand in with the doll ere the baby come. I have no notion of a girl who has a distaste for dolls. Before you decide to marry a maiden, young man, find out how she treated her dolls; whether she was diligent in making their clothes, careful in attending them in sickness, and watchful of their company and surroundings. The sparkle of her eyes may make your heart dance with delight; but there is peace and comfort for old age in diligent fingers and a constant eye.

As I was saying, I do not like to see boys playing with dolls; but I like to see them respect these wooden homunculi. Perhaps I am too particular in this respect. The fact is, I once knew a man who spent his leisure in the dressing of dolls; he was noted for his taste in this line, and neighbours were proud to have puppets of his dressing; but no good came of such effeminacy; and when on the decease of his grandmother he sold her corpse to the dissector, every one justly observed that it was exactly what might have been expected.

I should have no objection to boy of mine taking a piece of wood and a jack-knife and whittling out a doll for his sister or his cousin to play with, but I would not have him put a rag upon it—unless he wished to become a tailor or a man-milliner. I wonder parents do not encourage their youngsters to do such things: better to cut out a doll than to cut one up. We can all destroy; but how few can make! And yet, what more authentic sign of a man than to be able to create! Some of us seem to think the only requisite credential of manhood is to pro-create; but

there the very beasts of the field can beat us. We have to get higher than that for true manhood.

One of Lucy's dolls that I so incontinently hanged was compounded chiefly of papier-maché and sawdust. It was French. The head was papier-maché and hollow; the body and limbs were stuffed with sawdust. She had a pretty face; but, as I observed, there was nothing in her head. The other two were, as regards the head and trunk, hewn out of a single piece of wood: there was no hollowness there, and they were as durable as the ages. These were German. I like to see my children with these rough, honest, Teutonic dolls, in preference to those smooth-faced, ever-smiling, hollow-headed French ones—for one thing, because they wear so much better: the sawdust ones especially being liable, on the least prick, to run their lives out on to the floor and become a flaccid heap of rags;—for another, because they are thereby accustomed to choose the solid before the superficial—to prefer 'Ein Solides Mädchen' to 'Une fille gaie!'

It is a peculiarity of us English that we do not make dolls, except it be those monstrosities in wax. How characteristic! The German the plain, simple, democratic article; the French the showy, unsubstantial one; and the English the aristocratic, baby-faced 'miss.' In the long run I fear the rough, wooden-headed German confect will triumph over the French papier-maché and the English wax. They will stand wear and the rough weather, which the others will not.

I had intended to stop here, and say nothing whatever of the flesh-and-blood variety of doll, and should have done so, but that poor C——'s doll came to my mind. C——, good, easy man, when of ripening age, became enamoured of a rare creature, with a pair of bright dazzling eyes, but unfortunately no heart. It is a good thing, perhaps, in this world to be without heart, like the dolls; but it was bad for poor C——, because he was all heart. How quickly he aged under her flinty coldness. His summit was peaked with snow long before winter should have come; yet no angry or petulant word ever escaped his lips. Before company he would pretend to take her brutalities as jokes: she was so fond of a bit of fun, he would say; and to hide his tears he would feign a laugh. How often did he laugh so that the tears ran down his cheeks! Poor fellow, he paid dearly for his doll!

I do not know what she had in place of bowels of compassion—something of the nature of the sawdust of the French doll, I should imagine. Compassion or sympathy

she certainly had not. Whether she had love or no, I will not undertake to say: she may have had; but then love is so poor and earthy a quality in comparison with sympathy, that is, the divine love decanted into earthly vessels. It is a rare possession. There is enough of that spurious make-shift quality called benevolence; but it is a very different thing to true sympathy. Your benevolent person will give money in order to be spared the trouble and pain of compassion. The poor are ever the most sympathetic; if you are in trouble, in lieu of being able to do anything more effective, they will shower smiles upon you. It is curious to note how, when you are racked with mental pain, or dull and heavy with anguish, they will put themselves out to approach and smile upon you. It is as though they knew the sunshine was temporarily gone out of your life, and they would give you some; for a smile is an unconscious imitation of sunshine.

When D—— lost his young wife, and used to go daily to satisfy his yearning heart over her grave, poor Ted, the daft-boy of Caverton, would run to open the churchyard gate for him, and wait there till he returned, that he might repeat the same service as he came away. D—— was wont to tell, years after, how the poor lad would smile upon him, and it seemed a comfort to him even at that length of time. When Doll opened the gate for C——, it was with no such smile.

The last time I saw him he was looking ill and ghost-like. Said Doll, in her sharp, complaining tones, "Don't you think he ought to make haste and get better, with such a nice little wife to nurse him? But he doesn't. I never knew such a stupid, ungrateful man." "I certainly ought to, with such a nice little wife," said C——, with a smile; adding, with an effort at gaiety, as he turned to me: "But, please God, Christmas comes, we will tap the elderberry wine, and that will set me up."

Christmas came, and the elderberry wine was duly tapped, but Doll drank it alone. C—— had tasted another vintage and was at rest.

Hygienic and Home Department.

HOW TO KEEP CHILDREN QUIET.

"I WISH there was some way to keep those children quiet on a rainy day, or when it is too warm for them to be out in the sun playing," said a weary mother the other day to her friend, a neighbour.

"A very easy matter, my dear," replied her friend. "Chil-

dren must be amused, or they will become cross and naughty: so would you or I. Suppose you were doomed to stay all day, or half a day, in one room; were not allowed to read, write, or sew; could only sit on certain chairs and handle certain articles; there was no one to talk to, or nothing but a game of solitaire for us to play. Why, we'd be almost crazy. Any one—man, woman, or child—in good health, must have something to do during their waking hours. Yet how few mothers try to furnish this something to the busy hands and active brains of the little ones. You notice children out in the street or garden. Are they ever still or quiet? No. It is true they find amusement in the most trivial thing. Now, I have thought about all this, and have arranged one room in the house, the play-room, exclusively for my children. The room is the large one on the top floor. It is all I have to spare, and as I could not afford a good carpet I painted the floor and left it bare. A poor carpet would be worn out in six months. In the winter the room is heated by a little circular stove, and over this is put a wire screen, so there is no danger of the children burning themselves. The walls are painted a delicate gray, with a pink border, and I have a wainscoting that is one of the chief charms of the room.

“What is it? Well, I collected all the pictures I could out of magazines, illustrated papers, etc., and pasted them on the wall from the floor almost as high as the mantel. Pictures of animals and birds, and those of child life, are, of course, the greater number. I put the coloured prints down near the surface, so that the smaller children could enjoy them, and they are pasted on so nicely that tearing them is impossible.

“Then,” continued this nice little mother, “I have five boxes in the room, all of different sizes. These boxes have covers that fasten down and are padded on the top, with a flounce around the edge, so that when the box is closed they have the appearance of little ottomans. Each child keeps his playthings in a box, and it is their particular property. A nursery rug with all kinds of animals cut out of cloth, with the name embroidered underneath, is among the furnishings of the room.

“My children amuse themselves for hours in that room, with only excursions now and then to the kitchen for something to play ‘tea-party’ with; and I flatter myself that they learn considerably from pictures, also neatness and order with their playthings.”

Facts and Gossip.

THE *Reformer*, of Glasgow, says:—"James Coates, M.D., Ph.D., of the American University of Philadelphia, now so many years a resident in Glasgow as a Phrenologist and Public Lecturer, has been the first Phrenologist in the United Kingdom to receive *honoris causâ* the Diploma of the British Phrenological Association, London. Mr. Coates does not practise medicine. He is rather a disciple of the Silician peasant Priessnitz, and therefore a firm believer in the virtues of the water cure and its concomitant in Dietetics, including total abstinence from all alcoholic stimulants in health and disease."

PROFESSOR HART, having made important discoveries in the dietetic treatment of disease, is enabled to prescribe a system of living and rules of life which are pleasurable to follow, and by obedience to which the individual may attain a maximum of health, strength, and enjoyment of life never before realized. (*See advertisement on another page.*)

THE next meeting of the British Phrenological Association will take place on Tuesday, December 14th, at 7.30 p.m., when a paper will be read by Mr. A. T. Story, entitled "Character from Temperament."

Answers to Correspondents.

[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 stamps) of 3s. 6d., for six months' subscription to the MAGAZINE. The leading traits will be given when 1s. in stamps is enclosed with the photograph, and the MAGAZINE containing the delineation will be sent.—ED. P.M.]

J. W. S. (Manchester).—You possess a predominance of the motive and mental temperaments. Your vital organization is scarcely up to the mark. You are liable to spend vitality faster than you generate it; for you are a constitutional worker, and do not give yourself sufficient time to rest and recruit. You must pay special attention to your diet—to rest and recreation. Your brain is developed in the superior part more than in the basilar. The animal brain is scarcely strong enough. You are very much given to thinking, and to mental action; are characterized for your strong will-power, and great determination of purpose, and disinclination to give up your plans and operations; are naturally given to reverence

and respect, and have strong feelings of kindness, but are scarcely circumspect enough. You take upon yourself too much work, promise too much, and are liable to be carried away by the excitement of the occasion. Must strive to have one power harmonize with another, and your mind, as a whole, harmonize with your bodily powers. You would be in your element as an agent in some moral enterprise, or to have the charge and superintendence of some institution or work; should not be confined to a close, indoor life.

T. T. (Gilfach Goch).—This lady has a vigorous-working, spirited organization, is thoroughly in earnest, and puts her whole soul into what she does; is exceedingly ardent and intense in all her mental operations; has practical talent, and is disposed to do everything in a methodical manner; has quite a correct, artistic eye and judgment; is versatile in talent; has favourable qualities for music, and fair command of language. She has rather a superior organization for business, or for managing and superintending. If a teacher, she would keep the scholars wide-awake, and be up to the mark in engaging in any public enterprise; could not be slow or indifferent to success. She could adapt herself very favourably as a wife to a professional man who had some public sphere to fill, and wanted a partner to assist. She cannot go through the world in a quiet, easy way; will not live a monotonous life; she either wants a large family to look after, or to have some other position in society where there is an ample amount of energy required, and ambition to gratify. She appears to be well balanced in body and mind, and has a favourable organization for health and strength.

L. J. (Gilfach Goch).—You have much general power of body and mind; but, under ordinary circumstances, it is latent, and requires vigorous motive to call it into action. You will appear to better advantage as you grow older; will find it necessary to learn one important lesson, and that is—sometimes to submit to circumstances, and turn the shoulder, and let the passer-by go without hitting him. You are liable to be too set in your way, and too uncompromising. You also possess a very strong degree of independence, desire to be your own master, to drive your own team, and to have your own way. When worked up you are thoroughly executive and forcible, but frequently show a reticent disposition, and do not care to inform others what your plans are. You need an industrious, practical, common-sense woman for a wife. She should be lively in disposition, kind and tender-hearted, decidedly industrious and economical, with a blending of the temperaments, and no excess of either. You must encourage more conversational talent, be more easy, graceful, and bland in manner. You could learn a trade, be a good accountant and financier, or do any kind of business that requires method, system, ingenuity, and power to make up estimates and calculations.

M. A. F. (Northampton).—You are favourably proportioned in organization; have balance of power; are not subject to extremes; yet are quite susceptible, ardent, earnest, and sincere. The leading

feature of your character, naturally, is that of circumspection and consistency. You are rather slow in deciding on any important changes, but are very steady and tenacious of your purposes when they are formed; are governed naturally by the superior qualities of your mind; are not any more selfish than is necessary for self-preservation; can show a great amount of spirit if the occasion requires, but can control your temper and other unpleasant qualities when necessary; are comparatively discreet, and disposed to keep your own affairs to yourself; still have but few in whom you fully confide. You are fully developed in all the moral qualities; must have inherited a high tone of mind from your parentage; and, if you are not positively pious, you have strong inclinations in that direction, and could not live an irregular life with any pleasure to yourself. You have versatility of talent; can adapt yourself to different circumstances quite well. You are characterized for faith; are easily impressed with new subjects; have rather strong imagination; are given to reflection; characterized for judgment, power to plan, manage, superintend, and, as a teacher, would exert a good influence over your pupils. You are more philosophical than scientific—more given to the exercise of judgment than to mere perception. Your memory, as applied to common occurrences, is not first-class; but, as applied to thought and principles, is excellent. It would be well if your companion in life had a predominance of the perceptive intellect, was an energetic man, and rather positive in character. You could adapt yourself to married life, especially as a parent; but you have a superior desire to do good in the world and make yourself as useful as possible, and it would seem to you as though you were almost making a sacrifice were you to give up the chances for doing good to devote yourself to a limited family circle.

MISS B.—You have a very distinct character, which you derive from the masculine side; are like your father, or your grandfather on your mother's side; and the family must be noted for strong individual qualities. Your head is unusually high above the ears, which favours firmness, and a disposition to take the lead and to be the master spirit; are well qualified to be number one, and take the responsibility. You never trifle, although you may be lively and full of fun. You are highly ambitious, and anxious to do your best; are very mindful of character and reputation. You should be known for your practical common sense, your powers of observation, and ability to see and know what is going on. You gain much information by contact with the world; for you see intelligently when you do see; are a good judge of things—their qualities and uses—are rather remarkable for your method, sense of arrangement, and power to systematize. You seldom make a mistake. When animated on a subject, you are free, easy, and copious in your style of talking, and have the qualities for a public speaker. You are not wanting in mathematical talent. Latterly, you have been much given to thinking, studying, examining the cause, and going back as far as possible to the origin of things, and you are beginning to be noted for your

sound sense and your regulating power. Conscientiousness manifests itself more particularly in regulating your own conduct, in disposing you to do as you agree, to be honest and true to others; but there is some danger of your taking a little too much on yourself, and attempting to do more than you really ought to do. You have cautiousness enough to be prudent, but not enough to give timidity; for you always have courage enough to do what you feel you ought to do. You are comparatively frank, candid, and open-hearted, yet you know how to keep things to yourself; are never cruel and revengeful, and if severe, it is from sense of duty; are a warm-hearted friend; are no coquette. You are specially adapted to having the charge of children; would make a most affectionate mother; and if you were placed at the head of an orphanage you would be quite in your place.

S. M.—You have a highly nervous vital temperament; are rather easy in your gait, and do not trouble yourself much about things outside of your own interests. You will work easily, chafe but little, and get through the world with less expenditure or nervous force than many under the same circumstances; are subject to rather high states of excitement, and while in this state you manifest more than ordinary powers of speech, and have some of the elements of the orator; and it might be well for you to cultivate yourself with the idea of being a professional man, for you are rather disinclined to work, especially in an every-day, ordinary manner, and only get so much a week or month. You have a public spirit that would stimulate you to enter public life, and to do that which would lead you before an audience. You have a penetrating intellect; are anxious to get at facts, and to know things exactly as they are, and are disposed to talk in a direct manner; are rather fond of discussing subjects; have much intellectual curiosity, and are desirous of seeing and knowing all that is going on; are strong in your likes and dislikes; are, in fact, quite executive, and even forcible, when in argument. You can exercise considerable tact, and are generally able to gain your ends; are highly ambitious, and quite desirous of having your name enrolled among the immortals. Your moral brain appears to be favourably developed, especially in conscientiousness. You believe in law and order, and if you had administrative work to do, it would be done according to some plan and established principle. If a preacher, you would lay down the law to begin with; you would not be the one to present the gospel to a sinner, but would wait until he asked for it, or was ready to receive it. With you right is right, and wrong is wrong. You are rather conscious of the depravity of the human race; are somewhat suspicious among strangers; would guard yourself where there was any danger. Your talents are of the available type. You should either teach, preach, be a lecturer, or a musician. You are not wanting in skill and general ingenuity, as one to plan, to manage business, or to construct arguments. You need a wife who will acquiesce with you, and allow you to take the responsibility.

