THE JOURNAL OF MENTAL SCIENCE.

No. 53.

APRIL, 1865.

Vol. XI.

PART I.-ORIGINAL ARTICLES.

The Psychology of Idiocy.

"L'homme en démence est privé des biens dont il jouissait autrefois; c'est un riche devenu pauvre: l'idiot a toujours été dans l'infortune et la misère."

ESQUIROL.

THERE are two methods by which an approximate analysis of the elements or constituents and of the laws of Mind may be arrived at. They may be submitted to examination in the mind itself; or they may be inferred from character, conduct, or individual acts. In both processes there are sources of error, and limitations. When subjectively considered, the nature and the accuracy of the result depend upon the original capacities to observe, abstract, report; upon those as affected by education, physical health and external circumstances, and upon the influence of preconceived opinions in estimating mental phenomena.

When conclusions are drawn from observation, the same sources of fallacy obtrude; with the additional and fertile tendency to elect ourselves, or some equally imperfect and ill-regulated intelligence, or some erroneous abstraction, as the standard by which mental and moral qualities and combinations are estimated in others. It is obvious that, in pursuing such a course, all speculation must be confined to what is developed in act; and that, after the most exhaustive analysis within our power, there may remain a residuum of latent or undeveloped faculties and feelings in which, rather than in the prominent and palpable features, the essential attributes, and the true individualism of the mind may reside.

In the case of the idiot, we are shut out fatally and for ever from obtaining data subjectively. It is sufficiently difficult and fraught with danger for the philosopher to formulise general laws from his vol. XI.

own experience of the structure and working of minds constituted like his own, of equal or greater strength and comprehensiveness; it is impossible for him to pass into the new and barren and chaotic region of idiocy, and it is equally impossible that the idiot should turn analyst, lay bare his own nakedness and destitution, and reveal what his fragmentary thoughts are, how originating, how associated and how regulated. The obstacles in the former case do not consist merely in the impotency of the robust and mature mind to enter into the consciousness and conceptions of the infantile and feeble, and to argue from premises which differ in degree only from those with which he is familiar, but in that the idiotic mind differs in nature from that of healthy and normal men; that much of it is beyond investigation, and that it lies within the limits of disease. Seguin, in the few pages which he has devoted to this matter, says epigrammatically "Idiocy is an intellect badly served by imperfect organs." But the truth is, that the organisation appears to interfere not only with the operation but with the display and the discovery of such capacities as may exist, and that there is opposed to all investigation of what weakmindedness actually is the double barrier of disordered intellect,

manifested through, or in relation to, imperfect organisation.

There may be a psychical life hidden deep beneath the surface which we see, beneath those superficial manifestations which render the idiot what he is in our eyes. It is certainly known that great constitutional changes in this class-grave diseases, involving directly or indirectly the nutrition or stimulation of the nervous centres—exquisite pain—appear to wake up and call forth powers hitherto unknown and unemployed; and that training imparts a growth and width, and developes peculiarities and proclivities which impart a new aspect to the still limited intelligence. The mind of Novalis was apparently created or roused into activity by a severe illness, in his ninth year; and it must, moreover, be admitted that certain ultimate facts and conclusions are occasionally encountered in the idiotic where there is apparently an absence of the means, an incapacity to conduct the process by which they are reached, or by which they are reached in our minds; that the Not-me, for instance, is comprehended, as well as the life and some of the moral relations which it includes, through the agency of touch alone; that the power of abstraction exists without any clear notion of the concrete. This is, however, partly explicable on the ground that where certain qualities are apparently eliminated, there is actually an inability to perceive them. It does not, for example, follow that because idiots have the sense of vision they possess it in the same degree or perfection as those of sane mind. The range may be limited, imperfect; one class of impressions may be received, and not another. Howe recounts cases where there was no perception of musical sounds; and while many display a morbid sensibility to particular colours, red for example, others are

unable to distinguish one colour from another, blue from green; a smaller number are insensible to colours altogether. In such an inquiry, dogmatic generalisation would be most unwise; for not only are there various degrees and categories of feeble intelligence, minds destitute of certain powers, defective in others, and disturbed by savage animalism, to be dealt with; but idiots, as a class, include every form of mental weakness and impoverishment, whether depending upon physical or moral causes, whether commencing during or subsequent to uterine life, upon inadequate nutrition, or the priva-

tion of that stimulus which training imparts.

From whatever source arising, we would compare the condition of the healthy idiot to that of the chronic lunatic who has survived a severe disease involving structural deterioration, but compatible with life and with the exercise of many original powers, whose system has become reconciled to the mutilation inflicted, whose intellect and feelings act faithfully within the range of the faculties conserved, and in accordance with the known laws of healthy mind, so far as these are unimpaired; who is susceptible of training and culture and of the acquisition of new habits and knowledge, and may attain that limit prescribed by his organisation—a limit which is occasionally the narrow boundary line between unsoundness and intellectual manhood. Idiocy may be said to stand in the same relation to certain intra uterine states, to the accidents of lactation, dentition, and of the years previous to puberty, that dementia does to mania, epilepsy, &c. It might legitimately be called infantile dementia. The conditions which are followed by idiocy are, necessarily, not so easily determined as the antecedents of fatuity in the adult; but we know that it is apparently produced by the effects of violent passions and emotions, anger or fear, but especially the latter, in the mother; by physical injuries actually affecting the organs of gestation, or involving the nervous system; and by such a course of conduct on the part of the parents, intemperance, immorality, the contraction of syphilis, &c., as would induce dementia in the individual. We know further that cerebritis, strumous affections of the meninges, convulsive attacks, are the most frequent phenomena of every mental impairment, and these are the most frequent complications and terminations of idiocy.

In place of a mere arrestment of development, it is observed to be a sequela of some acute disease or form of degeneracy—struma, rickets, &c.; the result, in fact, not of interrupted growth, but of disorganisation. The idiot is not merely a mental and moral dwarf. His mind is not a microcosm, in which the different faculties and potentialities of the mature and perfect man may be found, differing only in strength, proportions, or scope, from the ordinary intellect, and harmonised and well balanced amongst themselves, and acting to the extent of their grasp and cultivation upon trivial or child-like

matters; but it is a chaos, a ruin; stunted, distorted, degraded. This disease runs its course throughout a life-time, which is, however, of short and well-ascertained duration, and so constantly terminating in the same way by the same destructive agencies, that these

may be predicated from the beginning.

Microcephalics, epileptics, choreaics, paralytics, maniacs, dements, backward, starved, strumous, poorhouse, perverse children are, unfortunately, grouped confusedly together; as if the common misfortune of gnarled mental proportions justified such a classification. There are many reasons, dictated by humanity as well as by philosophy, for viewing and treating the members of this discordant fraternity separately. That which chiefly concerns the present object is the consideration that, in regarding these classes as a whole, an effort is made to apply the same analysis to the diminutive but comparatively healthy mind of the genuine congenital idiot, and to the degeneration and wreck entailed by acute disease, and to the depravity engendered by original disposition, by vicious education, or by the lack of all education.

Esquirol attempted to found a psychological classification upon the power of language, or of using oral signs for mental impressions.

1st degree. Imbecility.
2nd. ,, ,, Speech free and facile.
Speech less easy. Vocabulary circumscribed.
1st degree. Idiocy.
2nd. ,, ,, Monosyllables only articulated and cries.
3rd. ,, , Neither phrases nor monosyllables used.

So far as this arrangement embodies the gradations in the power to articulate, it is based on experience; but it cannot be received as an index of the general mental powers possessed by the members of the series, nor even of any intellectual power connected with utterance, except imitation; for the mute idiot is not necessarily at the bottom of the scale, nor the loquacious idiot at the top; as the former may display many mental manifestations, and the latter may repeat sentences, songs, psalms, without attaching the slightest significance to them.

Bucknill and Tuke suggested what may be styled a physiological classification. First, those idiots who exhibit nothing beyond the

reflex movements known as excito-motor.

Secondly, those whose reflex acts are consensual or sensori-motor,

including those of an ideo-motor and emotional character.

Thirdly, those who manifest volition, whose ideas produce some

intellectual operations and consequent will.

These views are in harmony with popular opinion, and are certainly not open to any objections from physiologists. But, having the object of this paper in view, two observations occur. "Sense-

less, motionless" beings are heard of; but a viable idiot, deprived of all the external senses, must be of exceedingly rare occurrence. We have not encountered such. It is almost impossible to determine what movements of the idiot are ideo-motor, and what are voluntary. Various considerations lead to the opinion that not merely reflex and sensory, but impressions derived from cœnæsthesis, or the molecular and other changes in the viscera, are included within the consciousness of the idiots of low type.

We have placed all idiots under five categories, as they are one, two, three, four, and five sensed; but such a system, while it embraces and, to a certain extent, fairly measures the inlets to impressions and the means of building up the intelligence, leaves untouched the original capacities to receive, assort, apply, whatever these may prove to be. At present, at least, it may be prudent to dismiss these essays, and to consider the mental phenomena of idiocy as those of a group of bodily diseases, without reference to the species or modifications under which the malady may be presented. We shall, in the mean time, accept that involuntary or accidental training to which all idiots, the most debased and neglected, as well as the most elevated and most tenderly cherished, are subjected, who can see the blue sky, or smell flowers, or hear sounds, or even where the external senses are closed to such impressions, where pain or muscular motion or other internal impressions affect the nervous system, not only as an augury, but as a demonstration that the inner life may be reached and added to, and to a certain degree placed in relation to something outside and above itself; and that it is regulated by the ordinary laws of mind, especially mind when labouring under disease.

The exposition of Bain, the most physiological of our metaphysicians, of the growth of mind and experience in the newly born lamb, "whose eyes were wide open, and light must have entered to stimulate the brain," appears an illustration of a process that must take place in a large majority of the most rudimentary members of our race. An idiot first gazes at the sun, or at a single ray of light, which, designedly or accidentally, falls upon his eye. He turns towards it, he extends a hand towards an illuminated spot, or to a particular colour, and always towards the same colour. In such a succession of objective manifestations, there is a gradual broadening of knowledge, of that basis upon which the higher acts of consciousness are founded. The first recognition of an external world may in an idiot, as well as in another, include all subsequent mental processes. And it is quite clear that in the more simple or limited capacities, the cognition that there is something without, must be a single impression of sight, or taste, or touch, as the case may be; and of single impressions of the same sense, which cannot be compared with past or existing perceptions, as there are

none such; which must be received; which must be retained; which, on the transmission of a second impression from the same source, must be found, by some pre-existing mental condition, and not by itself, to possess qualities of similarity, or dissimilarity, to that impression by which it is displaced; must be combined or separated, but must be different from the acts by which it is received, combined, separated, which is a contribution to mind, but, until the impression is received, is not mind itself. These propositions imply a receptivity, or a capacity to receive, retain, combine, apart altogether from the impressions passing towards and into it. appears, however, that there are human beings who, whether endowed with this capacity, or not, give no response to light or sound, or vapour, or odour; so that, although the stimulus of which Mr. Bain speaks reaches, and is, in all probability, followed by those molecular changes in the brain which accompany mentalisation, no external proof exists that thought or feeling arises; a proof, wanting, perhaps, in consequence of the vices of that organisation by means of which it should be demonstrated. This irresponsive capacity may, however, be fostered by reports from internal organs, which, like reflex actions, appear to be more pronounced and distinct where the operation of the external senses is withdrawn or restricted. It must not be forgotten that the blind, denied all materials from the ordinary and natural channel, form visual images and create pictures.

Idiots generally display great accuracy and delicacy in the exercise of touch. They examine and identify objects by it. They derive exquisite gratification from passing their fingers or lips along smooth, or soft, or warm surfaces, although, to some, the sensation imparted by wool or velvet acts like galvanism. In certain spots the sense is exalted, and they manifest emotions by what may be designated rhythmical palpation. But many are met with, deprived not merely of all tactile power, and of the instruction and delight which it opens up, but of common sensibility. They bear children, they suffer from mortal ailments, severe and painful injuries, apparently ignorant of all that is passing. They tear, bite, and mutilate different parts of the body, unconscious of the evil inflicted. One penetrated his cheek, and then forced his finger through the commissure of the lips; we have known two who amputated the organs of generation, and treated the emasculation as a joke; and have seen one within a short space who had lost several toes and a part of a foot by exposure to cold and gangrene, without much disturbance to the system, and with a total disregard to the wounds.* While

^{*} This anæsthesia or obtuseness observed in many is a barrier to training. It interposes between the stimulus of pain as well as of pleasure, and consciousness as factors of cerebral excitement and thought. It may predispose to subjectivity; it certainly diminishes greatly the multitude of slight impulses by which the activity of intercourse with the external world is sustained.

due importance is attached to general and local anæsthesia, it is certain that these revolting accidents are in many instances to be traced to those morbid tendencies, degraded appetite, and thirst for blood, which produce similar manifestations in the insane; and that

apathy which accompanies concentration.

There are individuals who never suck, and who never swallow, unless the food be placed in the pharynx; a condition which assimilates the scope of the nervous system to that of the lower animals. But, in general, taste co-exists with the lowest forms of human organisation. The experience derived from the palate constitutes the only intercourse with the external world, the only obviously appreciable source of knowledge and happiness. But even within this narrow limit there are detectable the comparison of one sensation with another, a choice, a preference, and joy or anger as that preference may be indulged. Food is accepted. Castor-oil, or such condiments as nauseate or irritate, are rejected. Here psychical existence must be summed up, so far as it can be derived from external intimations, in one sensation, or in the difference between impressions on the same sense. It is difficult to realise the mental condition which is confined to savours. Were it not for the manifestations which grow up around the mere act of sensation; were there not an election, signs of pleasure or repugnance, and, where muscular power exists, the closure of the teeth or lips, in order to exclude the offensive morsel; many of the phenomena might be regarded as beyond the range of cognition. Such an amount of limitation and privation would unquestionably justify the appellation of solitary to this class of beings. They are imprisoned in a narrow perpetual egoism. Even their notion of self cannot pass beyond an agreeable taste. Their notion of time must rest on the difference between the moments when the palate is titillated, and when it is not. And yet analysis would show, among these fragments of mentalisation, the rudiments of the processes upon which man depends for his moral power and dominion. They compare, they remember, they reject, they resist, and, in some cases, exhibit a desire to escape from the thraldom to which they are condemned. We have recently watched a deaf and blind idiot, incessantly pawing the air as if to find the external world of which he has obtained some faint conception, and resting quiet and tranquil whenever he can grasp the hand of a living being.

Under such circumstances, personal identity if it exists even in embryo, and we must hold it to exist, must reside in a single act of perception, or in a series of single impressions of the same nature, differing, it may be, in force or distinctness; and yet our faintest experience of the "me" seems to depend upon the comparison of two or more different impressions—that which is identified with ourselves, and that which is not ourselves, which has reached con-

sciousness through a different channel. To regard personal identity as the sense of co-existence, or the impression made on consciousness by all the vital processes, does not solve the difficulty, as such a view supposes the pre-existence of consciousness, into, or before which, all intimations from internal organs must pass. If the sense of personal identity can be, or can arise as, an element of one class of perceptions, taste for example, it may be inferred that such sense will gain extension and clearness in proportion as such perceptions are multiplied. The case of Laura Bridgeman-celebrated alike for the extent of her privations and for the triumph effected in her education over physical impediments which reduced her nearly to the class of children now under consideration—may serve to illustrate these positions. When about twenty months old, and then a healthy and robust but epileptic child, she was attacked by a severe and protracted illness, characterised by fever, by suppuration and disorganisation of eyes, ears, and surrounding structures, and which left her debilitated, deaf, blind, with the sense of smell almost destroyed, and that of taste blunted. This one-sensed child was limited for life to such information as she could obtain by touch. The history of the gradual evolution of her powers does not fall to be recorded here, although the course pursued was similar to the most approved methods of reaching the idiotic mind; but it yields several important suggestions connected with the present inquiry. She was not congenitally an idiot; her nervous system, in whatever way affected by epilepsy, was not structurally defective, or incapable of performing its natural functions; and, accordingly, it is recorded that at her second birth, "among her first efforts after her recovery, was to explore the room and house, to familiarise herself with the form, tensity, weight, and heat of all accessible objects." This exploration is the act of an intelligent child which has grown up in the darkness of ignorance, not of a mutilated one-sensed idiot; and, notwithstanding the experience of the twenty months preceding the great bodily convulsion, speaks forcibly in favour of the opinion that, independently of the senses, of the stimulus derived through them, and of the materials for thought furnished from without, certain mental powers, personal identity and a craving for impressions from the Not-me may exist, grow, and attain vigour, in correspondence with the growth of the system, and in defiance of the most formidable obstructions. Her recognition of her mother, after an absence of six months, and when she was twenty-six months old, and through the instrumentality of touch, her outpouring of affection and happiness tell the same tale. Even then, behind the contributions from the single and feeble inlet of knowledge of the onesensed idiot, there may be faculties and feelings which cannot be reached, or can only be partially reached in the present state of science.

That amaurosis, long and short sightedness, and that imperfect vision met with in the aged, where objects are seen as through or enveloped in mist, are more frequently met with among the weakminded is true; but this occurrence is not characteristic: whereas, when it is discovered that form and magnitude may be cognised without any perception of colour, we are carried back in the search for an explanation of this phenomenon to those exceptional cases of colour blindness, which are, however, now known to be comparatively of frequent occurrence, even in minds exercised in observation, to the perversion of sense concomitant with certain species of insanity; and to that theory which admits a plurality of distinct and special powers for the recognition of the different secondary qualities of matter, and which may be injured or destroyed with material injury to the general capacity. The same limitation exists in the operation of other senses, as in vision. An idiot may be sensible to pain who does not notice heat. Music, or the sound of friction of paper is heard, while speech produces no effect upon the organ. The Sauvage d'Aveynon, was unmoved by the discharge of a pistol, but was roused by the cracking of a nut. The sense of smell may not exist at all, or it may appear exalted, as in the blind, conferring a power of distinguishing particular persons, woods, metals, stones; or it may be perverted, seeking gratification in offensive and disgusting effluvia. The preference of such smells, and the substances from which they spring, to the most exquisite perfumes, is common to this class and to the insane. It may appear exaggeration to speak of the cultivation of the power of attention where the impressions are so few, and the sources of distraction so slight as in the idiot mind. But, however small the number of mental states, the power of concentrating one or other of these, of dwelling on or in a condition of consciousness, is signally absent. This is partly explicable by the incessant discoveries and accretions which are crowding in upon perception, by the tendency to imitation, by the difficulty in regulating the eyes, and the intensity of reflex impressions, and by that muscular irritability and restlessness which sustains the whole frame in movement, pulsating, vibrating and as if quickened by internal impulses; such incessant movements unquestionably proving a source of disturbance to that fixity or continuity of action which keeps one object of contemplation before the mind to the exclusion of all others, either designedly, or without known design. But even where the range of mental vision is restricted to a comparatively narrow field, to two or three cognate impressions, and where these sources of agitation do not exist, and where the same objects must necessarily be at all times before consciousness, the same defect is observed, and the belief is suggested that attention, or the continuance in the same mental state, is a power apart from the things which are attended to, and is superadded to the act of consciousness. The instruction in the exercise of such a power, which forms one of the first stages in the training of the idiot, is a confirmation of this view. When expansion of experience has taken place, when varied and complicated perceptions pass through the mind, there is generally observed an absence of the power of unifaction, of bringing together, ordering and harmonising accumulated impressions, such, in fact, as go naturally to the notion of entireness and unity. This continues to characterise the educated imbecile. At the point where the attention can be attracted and directed by the will of the individual, or by that of others, the moral life and training of the idiot may be regarded as

having fairly commenced.

We do not attach much importance to what has been described as fixation of vision. At one time it formed, or was claimed, as the characteristic feature of the system of training the imbecile in Bicêtre, where it originated, but where it has long since been discontinued. But as the experiment was undertaken with the view to call the attention to the external world, and to particular objects, a notice of it is called for. The author of this plan likewise entertained the expectation that when he succeeded in obtruding his own image upon the consciousness of the idiot, and attracted and fixed his gaze upon himself, he thereby established such a connection as to secure recognition and obedience to his will; and so essential did he regard such a relation, that he is described as sitting opposite to a rolling and rebellious eye for five weeks, in the effort to form the tie. In carrying out this process, the operator is seated before the child, holds his hands and feet, and follows his eye. Upon the first occasion that the glance of the teacher arrests that of the taught, and the idiot becomes conscious of the object upon the retina, in fact, sees distinctly for the first time, he often struggles and screams; but during succeeding trials, in place of passing his hand over the person in order to convince himself of the identity of his preceptor, he will steady his eyes and look at him for an instant, as if something entirely new to him, continuing and prolonging his scrutiny upon future occasions, until his curiosity is satisfied. We have witnessed something of this recognition and union of the idiot with his fellow man; and although it may be difficult to believe, with some of our fellow labourers, that the act formed a crisis in the moral being of the pupil, or that any specific influence was established over the emancipated mind by the supposed liberator; yet the enlargement of intellectual vision thus, or in some manner, consummated, and the new relations suggested, appear of so solemn a character, as to recall the narrative of the sensations of Cheselden's patient. But besides, and independent of, the mere influence of the human eye, the vision is guided, and attention roused by placing the child in a darkened room, traversed by a single ray of light, or

in which there is a single luminous point, or by directing the eye to phosphorescent objects on the wall, or by causing brilliant objects to

pass rapidly in the line of vision.

The ease and rapidity with which impressions fade, or are displaced in the idiot mind, is a well-known fact. There can be, accordingly, no general power of memory. But the distinctness and tenacity with which a series of impressions associated with pleasure or pain are retained and reproduced, contrast signally with the oblivion of words and of acquisitions made under instruction. We have hitherto spoken of crippled or unevolved powers; but in certain rare exceptions there are encountered aptitudes and talents which almost deserve the name of genius when compared with the feebleness of the class or even of the individual in whom they appear. But even where strength has taken the place of weakness, and where great proficiency has been attained in a particular direction, there are still detectable unhealthy features in the nature, the arrangement, or the mode of application of the ideas collected. Memory, whatever theory may be formed as to its origin or laws, is not necessarily the characteristic, although it may be an element, of a great mind. The words, facts, tunes, stored up and reproduced in minds of stunted growth are retained as isolated and comparatively useless materials. They are neither arranged, amalgamated, nor utilised,—they neither impart strength nor breadth nor comprehensiveness to the mind. Individuals are encountered able to repeat long poems without knowing the meaning of a line. Morel gives an account of an idiot who, although incapable of numerating the length of twenty, could repeat the names of all the saints of the Calendar, and the days of their respective fêtes. Every one in this country is familiar with the achievements of the historical idiot, who, on the slightest hint or cue being supplied, recounts in measured tone and stereotyped terms anecdotes or passages connected with every part of English history, who cannot go beyond his part, and is undisturbed by any attempt to induce divergence, who follows the inquirer in order to exhaust his store, but is much annoyed if interrupted before he reaches such climaxes as "and the punishment then for killing a fat buck was as great as for killing a king now," and "if chroniclers are to be trusted, the herdsman's wife boxed the king's ears soundly for neglecting the loaves."

A similar power has been observed to survive the ruin and chaos of dementia. If the mature and even the philosophic mind be indebted to language for all abstract notions, and for the very process of thought, it can be understood wherefore untaught deaf mutes are often imbeciles or of limited powers, and wherefore the capacity of an idiot seems to correspond to the extent of his vocabulary. This doctrine is open to modification. It may be exceedingly difficult to conceive in what manner the quality of hardness can, in

contemplating a marble, be separated from the size, form, colour, and become an object of thought independent of these without the aid of a sign; yet many of the phenomenon observed in idiots, even of the lowest type, justify the conclusion that individual properties are selected and remembered to the exclusion of others, and of the object or basis with which they are connected, or, that certain impressions only reach and become objects of consciousness. As has before been stated one idiot perceives only certain tones; another certain shades of colour; a third fails to realise the notion of resistance, and receives blows and bruises in a vain conflict with insensate matter, while he recognises musical intervals and the relations of numbers; and, what is directly connected with the present argument, individuals are frequently encountered who never acquire a knowledge of adjectives, but who act under a distinct appreciation of qualities which are presented to their senses, and which must to their apprehension appear as distinct existences. A B, who has no articulate or other sign, except for concrete impressions such as dog, cat, day, distinguishes the white dog from the black, and dreads the latter, and when he sees a black coat, &c., calls it "dog," and is agitated by the same aversion. Under certain circumstances such impressions expand into or fill the whole mind, and the idea of which it consists may be forms, colours, and their signs and nothing more.

There are individuals whose intellectual existence is concentrated in one bright spot of light; who associate the notion of roughness and pain with every object but the surface of their own skin; or who, urged by a vulpine appetite, seek gratification in whatever is soft or reducible by mastication. It is rash to assert that even these lower grades are destitute of attention, application of thought, memory, spontaneity, of which traces, although not the complement of such powers, may be discovered in the two-sensed, perhaps in the one-sensed, idiot. Even in the most incongruous and irrational proceedings of such beings, we may find indications of analogical reasoning, and even in the misinterpretation and misapplication of signs, evidence of abstractions where the language is bald and barren and monosyllabic. A pupil who has been punished may retaliate and subsequently inflict blows upon the rod; but his blind revenge demonstrates that he regards and employs blows as indicative of anger, as the corrective of disobedience, or of some evil quality or tendency detected in the object struck. A refutation of an opinion attributed to Griesinger, that a mute idiot is incapable of forming an abstract idea, is afforded in the history of Massieu, an idiot by want of education, and in the manifestations of many congenital and necrocephalic idiots who can multiply, subtract, know the value of money, and that it represents certain commodities for which it may be exchanged. That general mental strength and range bear no necessary proportion to the natural or acquired knowledge of articulate signs of mental processes, is well illustrated in the case of the constructive idiot, so frequently adverted to in the Rev. Edw. Sidney's pamphlets on the Idiot School at Earlswood, who built the beautiful model of a ship. Those who are competent to declare the completeness and similitude of every block and rope, have pronounced the vessel ready for sea; and to a landsman the structure, from stem to stern, from keel to masthead, from the admiral's cabin to the cockpit, appears a marvellous specimen of naval architecture. Four years have been spent in completing this the second attempt of the builder. His original failure was attributable to his ignorance that wood could be bent by being placed in hot water. This effect was his own discovery; in fact, the whole model is a creation of his own constructive powers; as he is the son of a gardener in an inland county, and, although he passed several years in the carpenter's shop of the Institution of which he is an inmate previous to the commencement of this model, it is said that he had then never seen the sea, nor a river, nor a ship, save the representation of one in the middle of a pocket-handkerchief. However incredible this may be, when his work was nearly finished he visited a dockyard, and has introduced a few changes. This inspection suggested to him the operation of coppering, and the Victoria was safely raised by machinery of his own invention, executed by three idiots. He has been taught to copy drawings, and some of his productions are so excellent and curious as to form ornaments of the Palace. Yet this lad, now twenty-eight, remains a well-formed, pleasing-looking, small-headed, large-pupilled idiot. He can articulate a few words or imperfect words, but in general babbles. He is described during the current year as engaged with another ship, but as combining "ingenuity and skill with an unconquerable inability to reason upon common things, or to express himself intelligibly." He is vain and fond of dress. He has an idea of receiving wages on Saturday, but has no conception of the value of money, nor of the divisions of time, nor of eternity, nor of God. He cannot follow sentences; but must be addressed through substantives. He recognises no distinction in words, between round and square, but the latter to his mind indicates symmetry. He cannot write; but uses pictorial representations to express his wants.

Two grave errors have been committed in prosecuting this part of the inquiry. Idiocy has been regarded as prolonged infancy, and the constitution of the imperfect mind as a miniature of the matured and robust, and endowed with similar capacities differing only in degree.

> Dim miniature of greatness absolute! An heir of glory! a frail child of dust! Helpless immortal! insect infinite! A worm! a god!

Other fallacies have been founded on the suppositions that mutism or defective utterance was the most serious barrier to improvement, which, being once surmounted, the spiritual nature would be set free; and that on the application of the ordinary means of nutrition and training would be evolved into a perfect being. It is true that many of those designated idiots are mental starvelings, laggards, undeveloped creatures, to whose cure or quickening or progress the appropriate stimulus is only wanting. But in the mass of those of whom we speak the imagined potentialities are chained and confined within the impregnable prison of a diseased organisation; the power of language, of recognising the relation of the articulate sign, and the thing signified may be absolutely wanting; and, although the power may be present, the physical conformation of the organs of speech is such as to render articulation impossible; and success is chiefly to be expected where the obstacle rests either in defective volition or in defective co-ordination of the

muscles engaged in articulation.

It may be enumerated among the curiosities of literature that the first suggestion and impulse in the philosophical analysis, and in the education or cure of the imbecile mind, originated with the Philosophers, or with medical men acting as Philosophers, and not with Physicians. They desired to solve a problem rather than relieve humanity; to decide a controversy, not to eradicate an evil. The dispute as to innate ideas is perhaps coeval with thought. The opposing parties represent different forms or tendencies of human opinion. The discussion has been, and is now, conducted with various degrees of energy and interest; but periods have occurred when great crises and triumphs were anticipated. The beginning of last century was one of these. There was at that time captured in the woods of Hanover a naked, hairy boy, about twelve years of age, supposed to have been deserted by his parents, who uttered no sound, walked on all fours, or climbed trees like a squirrel, fed on bark, grass, and vegetables. Before this genuine, unsophisticated man could be corrupted, or his primitive mental condition disturbed by civilisation, he was brought to this country by order of George I, and intrusted to Dr. Arbuthnot, that the mind might be explored, analysed, and reduced to its elements; and thus the great problem worked out. The experiment failed lamentably in every way. philosopher was frustrated in his search for the confirmation or refutation of an à priori philosophy. Peter the Wild Boy proved to be an ineducable idiot, who could not be brought to perform the simplest manual act, such as the loading of a cart; who pronounced King George "Ki Sho," and Queen Charlotte as "Qui Ca," and whose education was concluded by his contracting a decided taste for brandy. Yet his advent and the investigation to which it gave rise were regarded by the learned and speculative of that time as

epochs in the history of philosophy. One of these, a Scotch metaphysician (Montboddo), declared, ecstatically, his appearance to be a much more important event than the discovery of a planet, or than if the astronomers, to the catalogue of stars already known, had added 30,000 new ones.

Almost within our own recollection, when the reveries of Rousseau had, in a neighbouring nation, assumed the dignity of a creed, and his followers constituted a school of philosophy, the Sauvage d'Aveyron was hailed as the exponent, as the perfect and natural man; and the observation of his mental condition and his education were accepted as the mission of one celebrated man who participated in these views. Itard is said to have devoted himself for seven long years to this task, and to have exhausted all the originality and ingenuity and zeal, which he undoubtedly possessed, to build up the civilised and artificial upon the base of the savage or pure man; and in the application of his axiom that "the senses are the soul." No such magnificent results as were hoped followed, but the attempt was not altogether fruitless. A few impressions were communicated to Victor, and, although Pinel's opinion that he was an idiot was fully confirmed, and he was immured for life in an asylum, yet the expediency of assimilating much of the training of the weak-minded to that employed in the case of deaf mutes was recognised.

Speech in the idiot, whether natural or acquired, is infantile, scanty, and imitative. Although the proposal to arrange the class according to the power possessed of articulating words, forming sentences, or embracing all the applications of language, has been found to be impracticable, yet that a certain relation exists between this special and general capacity is probable. Idiots of the lowest type never attempt to articulate, or to utter a sound. The crics of animals, or sounds emitted from inanimate objects, are imitated and become the expression of instincts and passions. It is narrated of wild children, who may be idiotic solely from deprivation of training, that they howl, bark, or cry, in the same manner as the animals with which they are associated. Of 28 idiots received into the Massachusetts school in 1851-52, 17 were dumb, many of them absolutely so, the others making two or three sounds, resembling words indeed, but which they used only as exclamations and interjections; 4 used single words correctly; 5 could construct simple sentences with more or less grammatical accuracy; and only 1 used language well.* In a Table before us, including 1341 cases, the following psychical defects are enumerated :-13 are altogether insensible to pain; 31 are blind; 44 are deaf; 249 are mute; 29 cannot maintain an erect posture; 22 cannot sit; 101 cannot walk upright, although some of these move about on all fours; 103 cannot

* P. 13. "Third and Final Report of Experimental School, &c., and First Report of Trustees of Massachusetts School for Idiotic and Feeble-minded Youth,"

feed themselves; 315 cannot master a button or a tie; and 7 resist all attempts to clothe them.

In the process of culture, substantives are first taught; but what is peculiar in many cases, the acquisition stops at this point, and although a sufficient number of vocables may be remembered for the wants of the individual, they are neither qualified nor connected, and form the only means of communication. When nouns are associated with verbs, an advance is gained; but the ends of language are still much circumscribed. As verbs imply assertion, a predication, a will to do, it is intelligible why they should not be embraced till a late period of life, and rarely used by individuals characterised by the lack of that mental condition which they represent.

The ready acquisition of substantives may be explicable both as a law of the growth of the faculty of language, and as a result of the incessant contact with the objects signified as ministrants of pleasure or pain, and of the varied impressions made by them on consciousness through the external senses. The absence of adjectives, in some cases, may depend upon the imperfect and late development of that abstraction by which qualities are separated from the object with which they are in consciousness primarily associated, and then connected with other objects not previously known to possess them. The rarity of the use of the personal pronoun by idiots is remarkable. They pronounce their name, they avoid substitution, or speak impersonally, perhaps from the feeble sense of personal identity which they possess, and from their still feebler volition. Egoism is undoubtedly involved in many of the brief expressions used; but I is a revelation. They are, in fact, parasites. They are part of their parents or guardians, they depend upon their personality, responsibility, thoughts, and acts. Even after their powers have been developed and trained, and they have become self-reliant, so far as the sense of the capacity to perform certain acts within a given circle of contingencies is concerned; they still require an impulse from without, they wait for the governance and guidance of another, in order to be moved.

Where phrases consisting of the elements of language are learned, they are so as entire sentences. This may be the process pursued in the healthy mind, but there is this difference, that they become stereotyped in the idiot, are never modified, and are used on all occasions, whether strictly applicable or not. Where the tuition of language has never been attempted, or has failed, there is occasionally met with the formation of a jargon of uncouth sounds, which, whether intuitively representing thoughts or wishes, or not, is found to be retained and repeated upon like occasions; a habit frequently observed in the insane. From many specimens of such dialects before us, we select one which contains the ascertained interpretation.

Bee-wee				means	Little, small, or few.
Handey				,,	Up, out, away.
Bobby				"	Wag.
Dindey		•		"	Cars.
Daw day				"	Sunday, God's day.
Daddy-be	R 171			"	A nurse.
Gougy				,,	Dirty, ugly.
Homigy				,,	Home.
Hou-day				"	This day.
My		-		"	I, me, my.
Own-hoo				», »,	Sugar.
Pee bay	•	•		"	Bread.
Tee-taw	•	•	·	"	Cold water.
Ting-ling	dav	•	·	"	Christmas day.
Toody	٠	•	•		A carriage.
y	•		•	**	&c., &c.

How far such gibberish may be the imitation of the speech of others we cannot say. Individuals catch up syllables, portions of words, or the last word addressed to them by others, repeat the sounds upon all occasions, and, by a singular transmutation of letters, which might serve to illustrate those changes in language which have been going on for ages, and still continue, produce groups of words which are recollected and used as means of communication.

In such cases of failure an explanation has been sought in the malformation of the organs of speech, and the defective intellect. In the conduct and character of the individual, however, there may be considerable talent or ingenuity and dexterity; and the real cause consists in the absence of that power by instrumentality of which man devises and employs vocal signs for his thoughts. The mode pursued in placing the idiot approximately in the position of man so endowed, is to familiarise his ear to the sound, to direct his attention to the muscular act by which the sound is produced, to induce imitation, and to connect the sound with the thing signified, or with a visible representation of it. But the process by which these steps pass into consciousness, and by which Will brings into action the vocal apparatus, must differ from that with which we are familiar, both in proportion to the difference in the powers brought into operation, and especially in volition; but likewise from the necessity imposed upon the idiot of overcoming the difficulty in connecting his act with that of his instructor, and these with the cat, cube, or colour, the name of which he is called upon to pronounce; and, lastly, in co-ordinating muscular efforts in obedience to the instigation of imitation. The mere act of instruction stimulates the brain even where it falls short of the intended aim, many idiots presenting indications of excitement during object lessons; and the law by which the frequent association of impressions on consciousness establishes an indissoluble relation between them, overcomes many of these obstacles.

That physical defects in the palate, tongue, &c., must greatly impede the progress of the mind, is obvious, and that in certain VOL. XI.

cases they may be the cause of imbecility, may be granted; but that such obstacles are perfectly compatible with sound intelligence is shown by the phenomena of deaf-muteism. Even the capacious and educated intellect is so dependent upon the articulate sound for precise notions of the thing signified, and for assisting memory, that the want of such an instrument in the idiotic must circumscribe and retard their development. Speech is hailed by their teachers as a vast stride in the direction of enlightenment. It is not, however, generally the first advance accomplished, and the vast accumulation of heterogeneous knowledge made previous to this discovery, would go to show that it is, perhaps, an erroneous arrangement to commence education by scholastic training.

This is further countenanced by the suddenness and rapidity with which the acquisition is sometimes made. It is not always by a tedious and toilsome labour of alphabets and syllables, and orthographies. Abruptly the child utters words, sentences, evidently in virtue of imitation of what he has observed the lips and mouths of others do.

When we speak of idiots using language we must exclude from consideration the 50,000 words which might be articulated, and the 4000 supposed to be necessary to express thought and sentiment in all forms; and confine our observation to the two or three vocables to which their communications are actually confined. In an analysis of 20 speaking idiots 7 are found to have acquired many words; 1 many real words, without attaching meaning to them; 2 to employ an unknown tongue; 1 to use two, a noun and an adverb; 1 to use three, one noun and two pronouns; another three, consisting of a noun, pronoun, and adverb, a third, three, a pronoun and two adverbs, and others of the series 4, 5, 6, 8 words respectively.

The subject of education is not here embraced; but there are several characteristics of the progressive development of the idiotic mind, and which seem to imply unhealthiness, that may be recorded.

1. The rapidity of acquisition in certain cases, but up only to a certain point; the slowness of the great majority.

2. The difficulty of imparting two or more departments of knowledge at the same time, and the displacement of one acquisition by another.

3. The rapid relapse of the trained idiot into the original condition of ignorance and hebetude.

4. That increased nourishment, or more judicious diet, promotes acquisition.

Few idiots understand natural language. Except as a result of imitation, they rarely have recourse to it as expletive of their meaning, and as they often feel none of the passions and emotions of which it is an expression, they are not influenced by it when used by others. One great impediment in manifesting such signs is the striking passiveness and torpidity of the muscular system, which less or more cuts it off, as an instrument, from the will and notions by

which it is brought into relation with the mental state. The mobile vivacious restless child, illustrates another difficulty. He fails in controling or regulating the muscular excitability, which becomes

rather a vehicle for automatic than volitional suggestions.

The extreme restlessness, the perpetual motion observed in so many of this class, which blindly impels to so many absurd acts, and entails so many catastrophes, may be connected with the predominance of the ganglionic system, the influence which light or temperature may exercise, and the dormancy and effeteness of the will. Nor is this excitability of the medulia purely functional or referable to speculative causes;—as the rachitic state of the spine, and consequent physical irritation in so many cases,—apart from the effects of the participation of the nuclei in the strumous diathesis;and the sensitiveness of constitution which is a neurotic element of that diathesis, must sustain a susceptibility to internal stimuli of which the healthy know nothing. A slight irritation of particular spots throws the muscles into tremor; a sudden noise or blast of air induces convulsion. While guarding against the belief that the majority of the acts of idiots are automatic; -even the friction or rythmical striking portions of the skin, and above all the practice of masturbation to which hundreds utterly ignorant of sexual tendencies are addicted, may depend upon intimations borne by afferent nerves to the medulla, of which consciousness has no cognisance. The bullimia so often observed, and where food is neither craved nor sought for, but taken or swallowed without attention, or appreciation of its qualities or quantity, may legitimately be classed among the same phenomena, and associated with irritation, originating in impaired or morbid digestion and nutrition.

The attitudes, eccentric and extravagant gestures, of individuals may belong partly to the dominion of volition and partly to the influence of reflex action. This view is strongly supported by the possibility of teaching individuals to relinquish such habits—to will and act otherwise. "Elle offrait," says Dagonet, describing a girl belonging to his third degree of idiocy, "le tic du balancement lateral, crachatait, bavait de manière à tremper son fichu, ne se mouchait jamais, et léchait constamment sa lèvre superiure qui avait finie par devenir le siège d'un exemthème rebelle. A force de patience et de soins on est parvenu aujourd'hui à lui faire reciter sa prière, quoique d'une manière unintelligible et ne bave plus, ne crachote plus, se tient assez proprement et a perdu le tic du

balancement," &c.

In general, however, such movements must be determined by affections of that sense of equilibrium and regulation of motion which have been supposed to be connected with the cerebellum. A child oscillates from side to side for hours or a life-time; another rocks, but moves backwards and forwards. These directions cannot

be accidental; the individuals presenting these peculiarities swell into classes. We find others striking, depillating the head, and always the same spot of the head; clapping the hands, balancing the hands; going on all fours; burrowing, pronating, supinating, alternately elevating and depressing a shoulder, rolling the head on the pillow, rushing with irresistible force and fury forwards or backwards, or walking interminably in a circle from right to left, as the case may be, for years; or standing immobile. That such modifications of muscular motion may in certain cases and circumstances be regulated by choice, and bear some inscrutable relation, partly as consequences, partly as expressions, to mental states is probable, because they are frequently witnessed in the insane and generally where the brain is structurally diseased; but are then intended and proclaimed to be means to an end, compliance with a Divine command, the solution of a geometrical problem, or the revolutions of a moral machine.

While the ordinary gait and gestures of idiots are vacillating and uncertain, and betray either lack of purpose or of muscular power or of both, these tremors and irregularities often disappear under excitement or irritation, give place to rapid well co-ordinated and regulated movements, which again give place to the habitual stagger when the emotion subsides. Yet in many the voluntary position is not only stationary, but statuesque; constrained or extravagant postures are assumed and preserved for a length of time which must necessitate a sustained effort of will. Fixed to the same spot they display attitudes or movements of the limbs and trunk involving purpose, and which are in themselves graceful, or grotesque, or rhythmical. So fixed and rigid and prolonged is such a position in certain cases that there must be an object as well as a pleasure in the act.

The late development of the will as well as of the power to walk; and, still more, the want of correspondence between the perfect maturity of the muscles and the torpidity of the will, deserve comment. Idiots do not walk, nor apprehend, nor feed, nor dress themselves until they are five, ten, or twenty years old, if at all. Fear may interfere and suspend certain of these muscular combinations, but according to the popular theory of volition fear might accomplish and perfect others. While among idiots, will generally corresponds to the strength and degree of advancement of intellect; it assumes the aspect of disease when directed by the instincts of their nature. They more resemble their fellow-men in their propensities and sentiments than in the other parts of their character, and they are most widely separated from their fellow-men by the tyranny which these impulses exercise. They are, in fact, often a congeries of appetites. They may be vain, proud, passionate, erotic, degraded, presenting no redeeming trait, and no other trait of

humanity except its failings and vices. There are drunken, dissolute, sanguinary, incendiary idiots. Their moral tendencies are, it is true, more exposed to observation, as there are no conventional habits to overlay, no cunning to conceal, and unfortunately no sense of prudence or propriety to moderate the manifestation. There is, moreover, no intellectual volition to control or subdue such exhibitions, or to direct them into legitimate channels; so that they are protruded in all their rankness and foulness and force into surrounding arrangements. The force and fierceness with which certain passions and propensities, such as lust and anger, agitate the idiot, are characteristic. The energy of such impulses may be partly in relation to the absence of the controling powers of reason and conscience, as is observed in degraded and uncultivated natures; but the manifestation sometimes amount to a blind and indomitable But volition, which is paramount and irresistible under such instigation, fails to regulate many simple acts and movements even when the muscular apparatus is perfect; and is incapable of giving consistency and permanency to the mental processes constantly passing through the mind. Men of powerful and herculean mould and savage and inflexible purpose cannot undo a button or pick up a pin, or determine spontaneously upon a course which they are made daily to follow. There may likewise be mentioned what is fairly designated a divided volition, where movements in a particular direction, or for a particular purpose, are executed, but where others equally practicable are never performed, or only performed under menaces; and where certain words are articulated and always repeated to the exclusion of all others, even where the utterance of these lies within the capacity of the individual, and where they have been uttered. The approximation, if not the identity, of these symptoms in the idiot class, with those observed in the insane, may be illustrated in another way. An analysis founded upon cases drawn up by an indulgent guardian of an Idiot School containing forty pupils, showed that individuals had exhibited the dirty and degraded habits of the dement, the malice of the cunning maniac, the theft and hoarding of the kleptomaniac; the preference of solitude of the lypemaniac; the incendiarism, the jargonising, muteism, refusal of food, and the unnatural appetites of other forms of insanity. It may be observed that these manifestations are one and all the exaggerations or perversions of instincts which the weakminded are known to possess.

The command and precision imparted to muscular action by training, and even by mechanical contrivances, and the contemporaneous or subsequent development of the exercise of volition over the particular organs trained, is a corroboration of the growth of the will. Besides the mere local guidance and support afforded, it is probable that the stimulus conveyed by the impressions transmitted

to the brain may call into increased activity portions of the nervous

system hitherto passive or dormant.

In whatever light the imaginative faculty may be viewed, whether as primitive or as a result of other mental processes, it may be predicated that from the imperfection of the powers by which impressions are presented, intensified, associated, separated, and by the poverty and paucity of the impressions themselves, such a faculty will be of feeble development in the weak-minded. Where colours are not perceived they cannot be added to gild and gladden a landscape; where terror is a blind instinct it cannot form an element in the conception of the sublime; and where every object is perceived in the concrete it appears impossible for fancy to ascend to any extent into new combinations except those of order and arrangement. We are scarcely entitled to allude here to inspired idiots, in Johnson's sense; but verses have been written by imbeciles, and many poetic and picturesque sayings have been recorded as proof that their minds can soar into the realms of idealisation, and can create new and pleasing conceptions from common-place materials.

"Early next morning," says the author of 'Mind Unveiled,'
"before rising, the room-door of the writer slowly opened, and Edward,
with most of his clothing hanging over his arm, entered with an
eager step; he advanced toward the glass door that faced the east,
and with raised finger and unwonted fervour, he exclaimed, 'look
there!' The grey of dawn had receded before the rich colours of
sunrise, and that gorgeous sky had thrilled the soul of poor

Edward.

"'Look there! red, blue, orange, all kinds.' His small vocabulary seemed exhausted, his lips were parted and his eye returned for the rich beams of that beautiful sky what was equally beautiful—the intelligent gaze of a dismantled spirit. His bosom seemed to thrill, and his whole form expand and heighten with the swelling emotion, as with riveted eye and outstretched arm he uttered in a subdued voice, 'God in heaven!'"

So far as the sense of the beautiful, the inventive faculty, or that speculation which carries us into the true but the unrealised, are concerned, the aspirations of this class are feeble and puerile; but so far as the idealisation of ordinary life, the addition of qualities to visible objects so as to confer life, animation or elevation, so as to form pictures and romances, which are event pictures, can be regarded as the suggestions of imagination, many of weak mind share the gift with their fellow mortals. But as in those who dwell and revel in the supersensuous, and as in the insane, many of these creations are dreams and phantasmata, over the origin of which they have little control, and from which, as in the same classes, they cannot withhold their assent and belief. The sleep of the weak-minded is rich in such materials. They laugh, start, ejaculate,—Laura

Bridgeman even talked and revealed her fancies upon her fingers during dreams,—and when able, recount delightful or horrible experiences. If golden mountains or silver streams in heaven are presented to such an intellect they become real, and are as distinctly visible as the heath-covered Grampians, or the swelling downs of Kent. It is, however, clear that to whatever extent credence may be given to such a Utopia, the influence of fancy in lighting up and embellishing the inner life is in a humble fashion widely diffused among this class. Idiot children personify toys: one chair is a carriage, another is a horse; they lay out imaginary banquets; they enact impromptu scenes or imitations; they delight in Punchinello, and the

Shop-play.

Castle building is perhaps as common as among healthy children, although the materials employed, and the structures erected, are more unseemly and rickety. In both cases the dreamer is the hero of his own romance and painted so as to be a flattering and interesting likeness. Seguin writes:-"Incapable de comparaison rationelle, de jugement, de reflexion, de deduction, elles se livre à toutes les fantaisies que provoquent en elles les circonstances de lieu et de choses qui l'environnent; de là une apparence d'imagination dont les saillies et les excentricités seduisent au premier abord, mais dans laquelle on ne tards pas à reconnaitre que les circonstances ont plus de part que l'inventivité proprement dite." In many imbeciles the habit to varnish or magnify actual details, or to construct aimless fabrications, is correctly attributed to falsehood, the spirit of mischief, or to a deliberate desire to deceive. As many are entitled to be regarded as moral, as well as intellectual idiots, as many have been corrupted, taught to mystify and invent; and as truth in others is either of late growth, and a principle communicated by precept or training,—it is necessary to distinguish between what is sportive fiction, and what deliberate untruthfulness. It is an interesting revelation that sincerity and honesty of purpose grow with that amelioration and reformation in the disposition which, in the great majority, is effected even where the attempt to educate has failed.

Many idiots readily acquire psalms and hymns; many others are fascinated by the sonorous reading of poetry, where the only attraction can be euphony, or the succession of harmonious intervals. It may be the tender and emotive, as well as the measured and modulated tone, or the rhythm which arrest attention; but it may likewise be the sound of particular words, as certain expressions, chiefly those implying magnitude, height, divinity, brilliancy, have been observed to exercise marked influence, and that independently of the meaning and of the relations in which they occur. That an appeal is thus made to wonder and marvellousness, to the unmeasured and the unknown, cannot well be doubted. The singular

similarity which in some instances the jargon uttered by idiots bears to spoken language, and, above all, to versification; the regular monotone in which it is chaunted forth; and the regularity with which automatic movements are performed, suggests the existence of an internal measurement of intervals. Whether deriving data from such a source many idiots who are ignorant of the artificial divisions of time, who cannot estimate minute portions by any natural signs, such as the alternation of light and darkness, and whose impressions are too few and stationary to provide a subjective standard by which to calculate the passage of time, it is difficult to determine; -yet they display a surprising exactitude in noting intervals, and in the expectation of the return of particular events. A group of educated idiots has been tested in this particular, and without reference to clock or watch, in the dark, and without any clearer conception of the object or meaning of hours and minutes than what might be suggested by meals, lessons, play, they were found able to state with great precision, the hour, and even the minute. Savages with greater, certain sleepers with less, assistance from external circumstances,

possess a somewhat similar power.

There are imbeciles who display an intuitive feeling of right and truth. Every village affords examples of half-witted errand boys, who, although they cannot tell how many pence are in a shilling, are of such unimpeachable fidelity and punctuality, as to be intrusted with valuable property, and whose verbal accuracy in conveying intelligence is so great, as to constitute them the chosen depositaries and messengers upon important occasions. Were there not such redeeming instances, general observation might countenance the belief that idiots were endowed with no sense of duty but what is the result of training. They very early display a notion of property, and claim a chair, a spoon, as their own. They are pilferers, purloiners, exaggerators, falsificators; they labour under disease of the moral sense, and they are cured of such morbid tendencies by instruction, example, and by that awe and submissiveness which grow out of discipline, rather than convinced by the moral and religious considerations addressed to them. That the quality of conscientiousness grows with moral growth is demonstrated by the education of non-idiotic children; a development which suggests the theory that, while the perception of personal rights may be innate, the appreciation of what constitutes the rights of others depends upon the enlargement of the understanding, and upon a sharply defined conception of personality. The fact, however, that the indications of duty may be found in very low types of idiocy, and that the sentiment bears no uniform proportion to the degree of intelligence, points to an independent origin. It is worthy of remark, that while certain idiots are naturally and spontaneously loving, kind, obedient, and even generous, sharing their property and priviliges with those around, their notions of justice seem, in accordance with Hobbes' theory, to be regulated by the standard which prevails in their confraternity, and are associated with reward and punishment. One individual robs his preceptor of five dollars, pretends that he found the money in a field, and admits his peccability when detected; another whips or scolds her doll because she is naughty; and a third, having been accused of an imaginary crime, submitted to an imaginary trial and was condemned to death, laid his head, as decreed, upon the cook's block, is supposed to be decapitated by the application of a wet dishclout; but in the sincerity of his belief and submission to the tribunal and the reality of its award, dies on the spot. The intense selfishness, or the solitary life in self of the idiot, and his lack of relation and sympathy with the outer world, sufficiently explain the tardy and obscure manifestation of such a power. Howe affords an illustration of imitation coming to aid a feeble and badly instructed conscientiousness. An industrious and self-supporting idiot was soundly thrashed when he showed symptoms of insubordination, when he really offended, or when his father was out of temper. When the cows offended him, or he was out of temper he thrashed them, when a rake or a hoe excited his wrath he dashed it to pieces. The father found that his severe discipline was useless, or was retorted on himself. He substituted bread and water for supper, a bed of a little straw upon the floor, with gentle advice. The son adopted the same course. Offending cows, rakes, hoes, were punished by a supper of bread and water, a bed of straw upon the floor, and an admonition.*

Religious convictions, and a notion of God may be reached. Idiots recognise size, force, causation, rewards, &c. They infer greater force than what they can exert, or what has been exerted upon them, as they witness the effects of lightning, firearms, the deprivation of life and strength in others, who are, in relation to themselves, omnipotent. How often is God described by them as the good man, the strong man, and his word as good things! Although the deity of their imagination and belief may be little more than a "big, big man," their Heaven the blue sky, and their future the brightest sunshine of their happiest day; it may be questioned whether this simple creed differs very widely from that held by thousands who claim a higher intellectual position, or that it may not produce many of the results attributed to clearer and more correct views of divine truth. The process here supposed is closely allied to that pursued in teaching the deaf and dumb.

That idiots, or any large number of them, can attain a knowledge of the infinite, or of a personal deity, through reason, or by any intellectual process, such as must obtain in the healthy mind, is a

^{* &#}x27;The Causes of Idiocy,' p. 17.
† 'Puybonnieux,' p. 322.

proposition which cannot well be entertained. It would be merely to evade the discussion, or the difficulty, to fall back upon the doctrine of Schelling, and to affirm that idiots, as well as philosophers, may reach such a knowledge by passing into a state beyond consciousness, with which we are identified, and thus know it.

Of this condition we know nothing, and cannot, accordingly, predicate the capabilities of the idiotic, or of any class of mind during its continuance. These observations are rigidly restricted to the more obvious modes of operation of the human powers, and do not embrace the divine influence which may have acted on them, or through them. There are, however, narratives of devout persons of feeble intelligence, where strong religious impressions, and a craving for worship, for reliance upon something stronger, higher, better, were manifest, a dependence which, whatever interpretation may be attached to it, appeared to be of the same, and proportioned to, that childish faith and veneration and obedience with which they regard guardians and teachers.*

A clergyman, who bestowed much time and earnestness on the cultivation of the idiotic mind, writes as follows:—" I do not think it possible for a thoroughly imbecile child, by any amount of teaching or training, to realise the abstract conceptions of Christianity. They can realise a great and good being; kind to them; who loves them when they are good, and is displeased with them when they are bad. They may call him "God," but they cannot realise this, or bridge the chasm which separates the two conceptions. I am sure that they can grasp a Great Spirit, who made what they see around them, but only as they may see a man make any article of wood. They cannot, I think, realise a Maker in the sense of a

Creator, but only as an Artificer," &c.

The limited number of mental states, and the isolation of these, or their existence as independent and concrete propositions, interfere with the formation of those processes attributed to judgment and reason. These impressions in general follow each other without appreciable order, sequence, association. They are disjointed narratives of facts. Yet there are presented indications—parodies they may be called, of instituting comparisons, of tracing analogies, of a reference of events to causes or to antecedents which, though lame and impotent, serve to demonstrate the possession of the faculty and of its vitiation. A child impressed with the fact that his medical attendant wore a black coat and ordered medicine, inferred that all men with black coats were doctors; and whenever the family received a visitor so habited, he produced his physic spoon.

The deficiency of association guided by place, form, or succession, and the difficulty of acquiring a notion of progression in the idiotic

^{*} Rev. Edwin Sidney, Rev. W. Knight, &c.

mind have been illustrated by their repetition of the alphabet. The first letters may be said correctly, but a leap is then made perhaps to T or to U, and ultimately a return to B. But the perception of plan, progressive evolution, and of means to an end, is observed in many who acquire a knowledge of draughts. Charles Emile, one of Seguin's most celebrated pupils, was an adept in this game. A psychologist, doubting or desiring to test the boasted dexterity of idiots in this accomplishment engaged in a match this odd, and, after a sense, clever creature. My friend cherishes to this day a vivid and humiliating recollection of the discomfort and shame experienced on finding himself utterly discomfited, and on noticing the childish exultation of his conqueror, and the laughs and screams of delight

uttered by his idiotic confraternity.

That even such educated imbeciles cannot rise to a conception of universals has been advanced. Their highest form of reasoning is the detection of dissimilar qualities; and they never employ such words as therefore, because, as, of, &c. That there is an adumbration of reasoning in their simplest and most incongruous manifestations must, notwithstanding, be conceded. An idiot is bit by a black dog. He, in future, runs from all black dogs, actuated, it may be supposed, by some such mental conviction as that all black dogs bite. This is a black dog, therefore it will bite. But we may as legitimately, perhaps as truly, suppose that no such figure as the predicate has occurred, or can have occurred, to the idiot, as this would imply a concrete idea of the species or variety of dog which he cannot possess, or that he recognises the dog as a black dog; i.e. as one of a number of black dogs; but that his caution is founded upon the conception that this is the dog that bit me, and will bite me again. But even this interpretation is open to the objection that fear may be roused by every black object, independently of any recollection of black objects formerly seen, or of injury inflicted by them. Idiots have been known to sow pounded sugar, in the hope of realising a harvest, and to roast a child in place of a joint. This imitation of the agriculturist and of the cook involved reasoning; but false reasoning, founded upon ignorance of the laws of animal and vegetable life. But a process assimilated to that of generalisation is demonstrable from the most ordinary acts. There are individuals who fail to establish or to recollect the relation between fire and their own sensations; and plunge their hands again and again among the coals. But there are others, apparently less liberally endowed in other respects, who, having been burned, not only recall the suffering and its cause, but infer that fire will burn other substances as well as their own body, and even the bodies of other persons as well as their own, and who act as guardians or custodians of children less experienced or less cautious than themselves. It may happen that beyond the ideas of fire, pains, my hand, everybody's hand, all the steps comprehended in the inference are erroneous and absurd. It may be believed, for example, that the fire is a malignant being, that it seeks to give pain, that the pain and injury came out of the fire, not as effects but as specific entities; but these fallacies do not invalidate the correctness of the inference, nor the application of the law of generalising from particulars. Or results may be reached deductively. An idiot has presented to his notice daily the arrangement of the dinner-table at a certain hour, when a bell rings, when a whistle sounds, when the labourers return from the fields, when every one washes their hands, and a number of trivial circumstances occur. This duty is devolved upon him; and, although ignorant of the divisions of time, and unable to communicate with those around, he infers from the concurrence of these events that it has become necessary to lay the cloth, to arrange a certain number of spoons, which he does, except on Sunday, when another group of circumstances, the presence of the chaplain, the assembly for prayers, the suspension of occupation, the holidaydresses of himself and his companions, suggest the exceptional sequence that knives and forks are required at the repast, which he carefully provides.

As has been previously stated there exist broad and palpable marks by which idiots might be classified, physiologically or pathologically. They might be arranged into groups according to their capacities to see, feel, walk, speak; or, according to the diseases, such as epilepsy, chorea, hydrocephalus, with which their mental infirmity is complicated and exaggerated, or by which it is produced. But they may likewise be distinguished psychologically. Individuals are of limited and infantile mind by privation, or denial of the powers which characterise sane beings, or by deprivation, where such powers are stinted or extinguished during the process of growth.

Whether depending upon non-development, or arrested or vitiated development, the mental result may be of two kinds. It may consist—and does, perhaps, most frequently consist—in the limitation of mentalisation, in the restriction of the faculties, in number and educability; in the stoppage of their growth at a particular point; but it presents in other instances the superaddition of delusions, furious passions, and incoherence to infantile weakness of judgment.

There may be the idiocy of imperfect maturation, the idiocy of disease, usually so called. There are examples of true and unequivocal mental disease, mistaken for idiocy by privation merely because they occur in the early years of life. We have seen an idiot of seven years old in a strait-jacket. Another opportunity may occur for investigating the origin and aspect of the incontrollable impulses which agitate and influence such persons, of the dementia of memory which may be associated with feeble impressions and fickle attention, and above all of that complex state in which mania

and other forms of alienation are grafted upon idiocy, or, as it may be expressed, rush through chasms in the half-organised, uncoacted intelligence, and then pass away, leaving the mind free from positive perversion, but as rude and rudimentary as before the incursion of active disease. At present we have to consider whether idiocy, although occasionally consistent with what may, in a sense, be styled the healthy exercise of the faculties within the range assigned to them, may not be legitimately regarded as a morbid state, a form of insanity. This state must not be predicated merely where there are severe bodily ailments and infirmities and obvious lesions of the nervous structure. Nor does it consist simply in oddities and extravagances which are explicable on the supposition of impairment of volition, or moral perversions, or of disorder and discord in the constitution, or in the relations of the reasoning and emotive power, or of that variety in the normal disposition which is observed in those of imbecile minds. There are from time to time committed to asylums persons of very low capacity who have rendered themselves obnoxious to society by their violence, by their sanguinary or salacious tendencies, who present the wild frenzy, the restlessness, the sleeplessness, the augmented strength, the vitiated secretions of maniacs. There are others who are subjected to seclusion because they are sombre, sullen, menacing, who cease to act, work, speak, feel, as they did under ordinary circumstances; whose pale and wan and woebegone aspect, cold surface, defective nutrition tell as forcibly as their cries, complaints and tears, of despondency, despair, or fear. Such patients have meditated or attempted suicide; as those previously described have designed and committed murder, or parricide,* or rape.+ A diminutive frame, a feeble physical power do not preclude fatal results when the homicidal or destructive propensity exists in those of weak mind. An attendant simulating a corpse was placed beside an idiot for the purpose of testing his supposed immunity from fear. When the dead body moved the subject of the experiment chopped off a foot, and then, roused by the cries of his victim, decapitated him. Another killed two nephews; and we have recently seen two imbeciles, who, without any apparent provocation or external cause, destroyed fellow patients, under the influence, it is legitimate to suppose, of a homicidal impulse. It is highly probable that many members of the supposed criminal class described as hebete, stupid, stolid, who, to the astonishment of all, and in palpable inconsistency with their ordinary disposition and deportment, committed some frightful outrage, come under this category, and are at the moment of the atrocity maniacs, but before and after partial imbeciles.

Did the undeveloped mind of the idiot differ only in strength and scope from that of the mature adult, and were it susceptible of

^{*} Ann. Med.-Psych., t. viii, p. 108.

[†] Ann. Med.-Psych., t. ii, Quat. Ser., p. 57.

growth and decay within its own limits, it might be expected to succumb to disease. The experience of many observers has, accordingly, demonstrated not merely that idiots differ in natural disposition, and are gentle, sullen, sad, cheerful; but that they present the symptoms of transitory delirium, delusions, paroxysmal fury, and even of melancholia,* either as complications or as additional phenomena of the general structural condition of the nervous system. Epilepsy and chorea and less prominent affections are very frequently found combined with all forms of idiocy. It is a matter of speculative interest to inquire whether the violence and virulence of temper, the infantile mania, in fact, which agitates the idiot and disturbs all domestic arrangements, is a link in the chain of morbid actions of the nervous system, or a specific and distinct disease, recognised when it occurs in the more intelligent members of the community, but in this instance engrafted upon a weak and inexpansive mind, and depending upon remote causes, having no connection with the congenital or ordinary mental life of the individual. The latter proposition is countenanced by a few facts which appear to demonstrate that where idiocy is connate, various forms of alienation may be inherited; in other words, where a child of deficient intellect has had a parent of a robust and educated mind, but subject to derangement, the same malady has been superadded to the mere privation of power. There are other instances in which idiotic children, the offspring of parents one of whom was in a state of dementia and the other of great irritability of temper, have presented the enfeeblement of judgment and impairment of memory of the one, and been subject likewise to ebullitions of fury limited and modified by physical impotency and feebleness of will.

A very cursory examination of the idiotic class, even when left under domestic rule, will convince that they are not always either the happy, or innocent, or harmless, or the simply rudimentary beings that they have been depicted; but that in many, although perhaps not in a majority of them, there are sources of misery and discontent, vice and corruptions, and offensive and irrational habits and egregious absurdities and perversities in conduct and belief which must be dissociated from mere simplicity or feebleness of nature in any estimate of their condition, although such manifestations may originate in a common source. C. F. sees and fights with the devil; A. F. hoards every morsel of metal as gold; E. G., a dwarf, conceives himself Colonel of the 92d., was attired in the glorious panoply of an old red coat, strutted about in feathers and medals and ornaments, and showed how fields were won or lost so truthfully that his warlike qualities have consigned him to an asylum. It has been the fashion to confound or comprehend many of the less abstruse of these peculiarities under the epithet "tic." This is a

* Esquirol, t. ii, p. 302.

French cloak for ignorance, or for a false theory. Every act in the infantile as well as in the maimed and morbid mind is the consequence of a previous mental condition; and our failure in tracing oscillation, gyration, &c., in idiots to a recognised cause does not place them out of the category which comprehends Addison's stare, or Samuel Johnson's passion for orange-peel or for touching lampposts. Observations similar to those above have been made where the numbers of this class have been carefully selected as suitable for culture, and have been for a time subjected to training, which, whether equal to the wants of the pupils or not, was certainly calculated to guard them against those impressions or associations which

suggest and nourish morbid fancies.

In twenty-seven individuals, from seven to twelve years old, thus favorably situated, several presented phenomena which might, inferentially, be supposed to indicate exalted imagination, but five were found in whom hallucinations in the ordinary acceptation could be demonstrated to exist. E. L. saw objects during twilight, followed them with his eye to the roof of the house, and clutched at them. He spoke only a few words, so that precise information could not be obtained as to the form, colour, &c., of these objects; but he was delighted with the phantoms, and said that he made "music out of them." D. M. heard musical sounds, and listened to them, and was terrified by these visitations; but as he had gained ground, and his mind expanded by education, he gave less evidence of listening to the "fairy pipes." L. O. saw the devil on her shoulder, and called to her companions to take him away. She took a stone to cast at him. Occasionally, she says that she saw him in her heart, and that she reads of this in the bible. M. T. cried out that she saw a dog. R. L. gazes on the sun and moon; gazes anxiously for them, and often says that he sees them, when they are not visible. Here are illustrations of hallucination of vision, hearing, and touch, of the sense most frequently affected, partaking of different aspects, and inspiring different emotions, corresponding, it may be fairly held, to the predominating character and temperament of the spectre seer, and to have been suggested by them.

It is well known that the savage, or what is a synonymous term, the undeveloped races, are victims to superstition and credulity, to interpretations of external impressions, which amount to hallucinations, and surround them, subjectively, with unreal sounds and sights. Delusions appear to grow up rapidly and rankly in the young of the criminal class when subjected to prison discipline. Recent investigations have made us familiar with the prevalence of visions in children;* but a careful scrutiny of any school will demonstrate that such an occurrence is comparatively * See on this subject, 'Life of Girolamo Cardano,' by H. Morley, vol. i, p. 35.

rare, and when it is detected, can only be detected in faint shadowings, and doubts, and panics; or that where such impressions stand out boldly, sharply, and indelibly, that they are unhealthy, precocious, imaginative, and that such disclosures may be ranked with the prognostics, if not with the symptoms of morbid action and critical constitutional changes.

Brière de Boismont says, "L'imbecile conservant plusieurs facultés, peut avoir des hallucinations et des illusions. L'absence complète de l'intelligence chez l'idiot et le crétin en rend la production impossible."* This might be assented to when mindless idiots are discovered, but delusions have been observed in those of low type, and of a permanent character; and merging ultimately, as in the case of D. M., alluded to in the preceding page, in unequivocal alienation.

Neuropathy, or Vaso-Motor Therapeutics: a New Method of treating disease through the agency of the Nervous System. By John Chapman, M.D., M.R.C.P.

DISEASE, in the great majority of its forms, consists, according to the most scientific pathologists, in either an excess or deficiency of those transformative processes by which new structures are built up and the old dissolved and carried away, and on the continuance of which the healthy growth and sustenance of the organism depend. Until an animal is full grown the constructive processes are in their maximum state of normal activity; while, relatively, the destructive processes are at their maximum of abeyance. But for the continuance of healthy adult life the balance of organic change must remain always even: growth must be equalled by decay; the agents of each must do equal work. If after the attainment of maturity the relative activity of the composing and decomposing processes should continue the same as before in any part of the organism, hypertrophy or abnormal growth would be the result. If, on the other hand, that relative activity is reversed—the destructive metamorphoses becoming predominant, either locally or generally—there is corresponding atrophy. Moreover, as one of the essential conditions of normal life, the co-ordinate action of the constructive and destructive agencies must range, within certain degrees of rapidity, beyond those limits in either direction the regions of disease are entered on. If that action be unduly slow, the physical frame is weak, the emotional nature is apathetic, the intellect lacks energy-systematic thinking being a toilsome or impossible task; if successively slower still, corresponding phases of vital degradation are passed through, until

* 'Des Hallucinations,' &c., p. 180.