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PART II.-REVIEWS.

Idiocy and its Treatment by the Physiological Method. By Edward Seguin, M.D. New York: William Wood and Co., 1866. Pp. 459.

THE subject of which this volume treats has of late years commanded so much attention, and the efforts which have been made for its amelioration have been so earnestly supported, that any treatise thereon would necessarily command attention. The fact, however, that this book is by one who in the infancy of the work devoted to it much time and labour, and furnished at that period the best treatise on the subject gives to these pages more than ordinary importance.

With vivid recollections of the French writings we opened with much interest the volume before us, feeling assured that whatever might be its faults it would bear the impress of the earnestness of a writer, who had manifested in former years great love for his work, and that it might possibly be enriched by the matured experiences of one who in the mean time had had the advantage of a superadded medical culture.

The object of the book as stated in the preface, is to embody, "1st, our present knowledge on Idiocy; 2nd, the method of treating idiots; 3rd, the practice of the same; and 4th, an outline of the direction to be given to the scientific efforts of the friends of idiots, and of the apostles of universal education."

The work opens with an introduction of twenty-seven pages, which gives an epitome of the efforts which have been made for the benefit of idiots throughout the world, and traces their origin to the philosophical labours of Itard to educate the savage of the Aveyron. Itard did not believe this savage to be an idiot, or he would not have undertaken his education; for he believed idiocy to be incurable. His object was "to solve the metaphysical problem of determining what might be the degree of intelligence, and the nature of the ideas in a lad, who, deprived from birth of all education, should have lived entirely separated from the individuals of his kind." Itard was unsuccessful, and finding that his savage was also an idiot, gave him up to terminate his existence in the wards of the Bicêtre. While acknowledging the value of the physiological method which Itard evolved, we cannot help feeling that the author has been carried away by a flood of enthusiasm when he attempts to

prove that all the improvements in general education owe their origin to the efforts put forward to educate idiots and deaf mutes.

To agree with our author would be to elevate idiocy into a source of incalculable good, to believe that but for the blighted mind of the idiot, modern civilization would have languished in the thick mists of unenlightened pedagogy. Our own opinion is, that the change which has taken place in education has been a natural development of the hand in hand progress of mental philosophy with physiology, and that the education of idiots has shared with that of healthy

minds in the advantages of the happy combination.

It is scarcely doing justice to Jean Jacques Rousseau to imagine that he was indebted to Pereire for all his theories on physiological teaching. It often happens that similarly constituted minds are simultaneously occupied with the evolution of the same ideas. The onward march of events appears to give the stimulus, and the outcome is often the expression of the same determining influence. Nor do we think that justice has been done to Pestalozzi, when he is charged with deriving all that is good in his system from Rousseau and all that is defective from himself. He at all events has the merit of having popularised the principles he enunciated and of having reduced them to a practical shape.

The synchronous origin of ideas cannot be better illustrated than by the showing of the author, that Guggenbühl and Saegert opened their schools simultaneously in Switzerland and at Berlin without

any knowledge of Seguin's writings or practice in Paris.

Passing from the historical introduction, the first part is devoted to a résumé of "our present knowledge of idiocy." Every author probably has his own definition of idiocy. Dr. Seguin, in putting forward his, wisely avoids laying much stress on it. He says "idiocy is a specific infirmity of the cranio-spinal axis, produced by deficiency of nutrition in utero and in neo-nati." The producing causes of idiocy are classified as "endemic, hereditary, parental, or accidental."

"Idiocy is endemic only as connected with some forms of cretinism. It is considered hereditary where there have been cases of idiocy or of insanity in the preceding or collateral generations. It is called parental when referred to certain conditions of the father or mother. The direct influence of the former ceases after conception, the intimacy of the latter with her fruit is incessant during the eventful periods of gestation and lactation; hence the share of the mother in circumstances favouring the production of idiocy is the larger. She may have been underfed in poverty herself, or through previous generations; or so miserably enervated by music, perfume, savours, pictures, books, theatres, associations, that a precocious loveliness has outgrown her motherly capabilities; as forcing converts the pistil and stamens of flowers into beautiful, fruitless petals.

"She, being pregnant, has used for exclusive food unnutritious substances."

"She, being pregnant, has used for exclusive food unnutritious substances, such as pickles, dainties, lemons, tea, brandies, &c.; or vomited all real food soon after ingestion. She has conceived at a time when spermatozoa have encountered noxious fluids of either venereal or menstrual origin, or have

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been altered in their vitality previous to their emission by drunkenness, &c. She is often passive under the causes of impressions, depressions, shocks, privations, exertions, abuses, excesses, altering the nutrition of the unborn

"But all these circumstances do not seem to act with the same energy or frequency in the production of idiocy, which is attributed most of the time, by women worthy of being trusted, to sudden or protracted impressions of an accidental or moral nature. The same tendency appears to extend the power of these circumstances through the period of lactation, in which mothers, morally affected, have seen symptoms precursor of idiocy, such as convulsions, follow immediately the ingestion of milk, and idiocy, paralysis, epilepsy, or death supervene.

"Accidental idiocy after birth, by innutritious diet and want of insolation, and of other hygienic requisites; by hydrocephalus, measles, hooping cough, intermittent fever, &c. In the above circumstances, as far as we have learned, must we look for the origin of idiocy and its annexes."

Thus in a few paragraphs Dr. Seguin dismisses the subject of the cause of idiocy. We cannot allow that it fully represents what is known on the subject. It is not a little remarkable that he omits altogether the influence of marriages of consanguinity, and disregards those slow but effective degradations of race which those who have paid much attention to the subject have recognised. Our own observations have impressed us with the importance of the influence of the tubercular and strumous diatheses on the part of the progenitors, and have not led us to attach the same value as our author to "music, perfumes, savours, pictures, pickles, dainties, or lemons." Moreover we think too much stress is laid on the retrospections of mothers as to transient impressions during pregnancy. Nothing is more common than the desire of parents to find any accidental cause for their child's malady rather than the more frequent one of degenerative influences in their race.

Dr. Seguin divides idiocy into simple and complicated, and the simple he subdivides into profound, organic, functional, and sthenic. The complications he notices are cretinism, epilepsy, chorea, paralysis, deafness, and blindness.

We are of opinion that our author attaches too much importance to chorea as a complication. It is true that among those afflicted with chorea a certain amount of mental feebleness is engendered, but among idiots properly so-called, although the co-ordinating faculty is low, chorea does not occur more frequently than in about 1 per cent. of the cases of idiocy, and then in a chronic form. Among well-fed idiots we have never known a case of acute chorea to develop itself. Our own experience is certainly in opposition to the view, that among idiots there is any great proclivity to chorea; while on the other hand again differing from our author, we have found paralysis and contractures to be very common, and serious impediments to the progressive improvement of idiots.

"Idiocy," says Dr. Seguin, "is called profound when the ganglia are

altered, and superficial when the peripheral terminus of contractibility and sensation only seem to be affected. It is called organic when the organs are sensibly altered, and functional when our imperfect instruments and observations do not permit us to trace the organic lesion as we do the functional disorder. It is called sthenic when it gives the child nervous impulses without object; and asthenic when it leaves him without them, when they are wanted for some object."

We cannot but regard this as a very doubtful mode of classification, and we cannot agree with the author on its practical value, any more than on the truthfulness of its scientific import, which he, however, does not defend.

The pathology of idiocy in the book is very meagre, and our author appears to have honest misgivings in this matter. He has, however, good cause to plead for this defect, and has certainly compensated for his deficiency in this part of the subject, by the introduction of some valuable suggestions in the branch of education of which he is so great a master.

Evidently the pathology so far as it goes, is in great part problematical, and the same remark applies to the craniological portion of the subject, which appears to us not to be the result of rigid personal observation. Much better is that relating to the physiological portion of the subject. Dr. Seguin says—

"The functions of organic life are generally below the normal standard. The respiration is not deep; the pulse is without resistance; the appetite is sometimes quite anormal in its objects, or limited to a few things, rarely voracious, though it looks so, owing to the unconventional or decidedly animal modes of eating and drinking of these children.

"The swallowing of the food without being masticated, only rolled up in saliva, sums up many of these imperfections which are to be attributed in variable proportions to absence of intelligence, want of action of the will on the organs of mastication and deglutition, deformity of, and want of relation between the same. As might be expected imperfect chewing produces on them, as on other children, unpleasant effects, but no more. Their excretions cannot be said to present any dissimilarity from those of others which our senses can discriminate; only their sebaceous matters are as different from ours as ours are from those of the variously coloured races, or from those emitted in most diseases.

"The functions of animal life, or of relation are generally affected in idiocy; either by perversion, diminution, or suppression." * * * "Idiocy affects the body in its general habits, as bending forward, throwing the head backward, moving it in a rotatory manner which seems impossible, swinging the body to and fro, or in a sort of sideway roll."

The descriptions which are given of idiocy are often graphic, and are evidently the result of much patient and long observation. Idiocy has so many phases, and may be classed in such various ways in reference to etiology and treatment, as well as to the development of philosophical views respecting it, that it may perhaps be too much to expect that the treatise should be exhaustive in these particulars.

The author goes on to describe the various anomalies of move-

ment, touch, taste, smell, hearing, sight, and speech, which idiots

We do not at all agree with the distinction the author draws between the idiot and the imbecile. The imbecile in our view is one afflicted from birth with a less grave lesion than that which produces idiocy; whereas the author assigns to this class those only who have had an arrest of development during youth, and he appears to give to these unfortunates but a small portion of the affectionate regard which he lavishes on their idiotic brethren.

In the second part of the treatise, Dr. Seguin expounds his principles of physiological education, and here as before points to the idiot as the source of educational advance. He says—

"The lessons at the hospitals of the incurables and of Bicêtre, of the schools at Boston and Syracuse, have not been given through the idiots in vain.

"Visitors came in and every one carried away some of the principles or instruments used there according to the chances of a daily practice. Seeing this, physicians could no longer write on the diseases of children without expatiating on moral or functional treatment, nor teachers go back to their schools without carrying with them some of our sensorial gymnastics, imitation exercises, &c. In all this, truly the idiots were the doctors and the teachers. They taught as much as could be seen or understood in a visit; they taught besides, that idiots are not the repulsive beings that our neglect made them, and that any land would be blessed where women and men would devote themselves to the task of elevating these unfortunates. Hence for their education have sprung up everywhere, and the physiological method was scattered piecemeal in every educational establishment."

Without being sufficiently enthusiastic to attribute all this flood of blessing to the education of idiots we are far from wishing to depreciate what has been effected primarily for them, and secondarily for the race. An idiot left uneducated is not only shut out from the enjoyments of this life, and incapable of taking his part in the world's work, but he uses up the energy of a sane life, and nullifies, to some extent, the existence of a more perfect creation. If he be but educated so as to minister to his own wants, although we may fail to establish a regulative judgment, we have at all events done much in increasing his means of enjoyment, and in liberating a productive worker from the incessant claims of a barren occupation.

That thus much, and even more than this may be done, has been abundantly proved both in this country and elsewhere.

The whole of this chapter contains much that is valuable, curiously commingled with much that is visionary. Nothing can be better than the remarks on hygiene and the importance of nutrition, on the necessity of the gradational character of the education, of teaching "every day the nearest thing to that which each child knows or can know;" of alternately stimulating and relaxing the attention, of teaching by the cultivation of observation and comparison, and using with tact sensorial impressions for the purpose of developing the

higher faculties of mind. He very properly begins with the education of the muscular system. Every person who has had practical experience in the treatment of idiots will recognise what importance should be attached to means employed to overcome anomalies and deficiency of motion, and how the nervous centres are increased in power by the healthy stimulus thus afforded to the nerve periphery.

There is a great deal of truth in Dr. Seguin's remarks on the importance of attaining perfect immobility as the starting-point for action. He says—

"Muscular activity is a function accomplished by the contraction and relaxation of the muscular elements; movement taking its fulcrum in immobility.

"Therefore, before and simultaneously with, directing the training towards the acquisition of some special movement, we must accumulate its greater energy in view of the concentration of activity into positive immobility wherefrom all action springs. Immobility is taught in various attitudes,—standing, sitting, reclining one way or another, on some gymnastic apparatus, with the rifle, the dumb-bells, the balancing-pole, etc.—according to the obstacles which are to be encountered and the various stages of the training.

"As immobility is in nature the fulcrum of movement, so in our training it will precede and close every exercise, and serve as transition and as repose between the various modes of active training."

Our author then takes in succession the education of the powers of prehension, locomotion, &c., and describes various plans which may be seen in operation at Earlswood and similar establishments. This part of the treatise is written with evident enthusiasm, an enthusiasm which leads the writer on at a rapid pace. The reader will be apt to imagine that the mindless creature our author first presents to us is speedily developed into the most plastic being we could desire. The author has adopted a narrative style of composition, in which he frequently says, "We do so-and-so, or "Our pupil can now do so-and-so," as if the results were certain to follow, or even had invariably followed, the means employed. We cannot help thinking that disappointment is likely to accrue from this excathedrá style, and some reaction ensue against the efforts which may in many cases be advantageously employed. Thus Dr. Seguin writes—

"After months of alternate individual and group training, in fatigue, often in despondency, we see them with joy, not only imitating the physiological exercises, but carrying their few powers of imitation into the habits of life; trying to eat, dress, stand as we do before them, proffering their services to weaker children, as we tendered ours to them; and, finally, doing by the influence of habit what more gifted children do only under compulsion. We looked at the rather immovable or ungovernable mass called an idiot with the faith that where the appearance displayed nothing but ill-organised matter, there was nothing but ill-circumstanced animus. In answer to that conviction, when we educated the muscles, contractibility responded to our bidding with a spark from volition; we exercised severally the senses, but an impression could not be made on their would-be material nature, without

the impression taking its rank among the accumulated idealities; we were enlarging the chest, and new voices came out from it, expressing new ideas and feelings; we strengthened the hand, and it became the realizer of ideal creations and labour; we started imitation as a passive exercise, and it soon gave rise to all sorts of spontaneous actions; we caused pain and pleasure to be felt through the skin and the palate, and the idiot in answer tried to please by the exhibition of his new moral qualities; in fact, we could not touch a fibre of his without receiving back the vibration of his all-souled instrument."

This, and a great deal more like it, expresses the subjective wishes of the writer rather than the objective realities of life. We can imagine a reader carried away by this style of expression looking for a ready response to all his plans, and speedily giving up his efforts in disgust, in consequence of the want of correspondence between the results which he obtains and the ruddy reflex of our author's brain.

The chapter on the moral treatment of idiocy is not in our opinion equal to the previous one; it contains much that is characterised by the same defects as we have already pointed out, without being counterbalanced by the same discriminating sagacity. The moral treatment of idiots is one of great importance, and general success very much depends on the tact and judgment of the trainer in this particular.

Some of the dicta laid down are more than questionable. We cordially acquiesce, however, in the importance of commencing the moral treatment early, and the evil influence which is often exerted by injudicious friends. "We have seen idiots, after a year of obedience and contentment, relapse into their anti-social habits at the sudden reappearance of the weak-hearted person who once indulged their idiotic propensities, and the same children resume their orderly habits at her exit."

Our author attaches importance to the advantage which idiots derive from their companionship with one another, and our observations confirm his remarks. We have frequently seen an idiot child in a family depressed and injured by the isolation of his life. He may have been surrounded by brothers and sisters, but they held no companionship with him; even the youngest avoided a game with the one who spoiled the sport. Removed to the company of his peers, his sympathies are awakened, and a healthy emulation is established, which if rightly used will lead to good results. Moreover, the imitative faculties are more readily evoked in company with others, and effects are obtained which it would be useless to expect from isolated effort.

Equally important is the exercise of authority, and the insisting on obedience thereto. We doubt, however, whether recompenses are desirable to ensure obedience. We believe rather that the general life should be made as pleasurable as possible, and that punishment for disobedience should be by deprivation of pleasure. This is the

great element of success in the treatment of idiots, and the skill of the physician will be manifested in his perfect acquaintance with the idiosyncracies of his patients, and his ready knowledge as to the particular deprivation which will most influence his charge. We have witnessed curious failures from mistakes in this particular. The idiot is to some extent a hero-worshipper, and he loves to bask in the sunshine of his hero's approval. That person will not be a successful moral trainer of idiots who fails to exercise by the threat of his displeasure one of the most potent punishments he can inflict. He can only do this, however, by being consistent, truthful, and loving, with a tender appreciation of all the traits of his patients, and by holding the supreme place in their affectionate regard.

While agreeing with many of the principles laid down in this chapter, we think some are not free from grave objection. author, for example, insists that idiots should not take their food in large groups, within sight of huge joints, in order to avoid disgraceful manifestations. This we take as a type of an entirely mistaken principle of action. We have known, from similar motives, idiots placed in rooms with windows high above the floor, compelled to live and sleep in places as bare as possible of furniture, to eat from metal platters, and to drink from iron cups, in order "to avoid disgraceful manifestations." Where can there be any moral teaching with such a principle of action! It should be our duty rather to give them cups that can be broken, platters which can be mutilated, furniture which can be destroyed, to place food before them which they are not at once permitted to eat; and it is our further duty to teach our patients those habits of selfcontrol which temptation alone can bring into action.

The chapter on "Institution" describes what Dr. Seguin considers necessary for the collective training of idiots; many of the suggestions are extremely good, but others we are persuaded are equally visionary.

The same enthusiasm which led our author to an exalted account of the speedy results from the training, naturally leads him to consider that no expense is too great in the trial.

However great our sympathy for the most afflicted of our species, we cannot entirely disregard politico-economical principles. In this respect one cannot but perceive that the details are elaborated by one who has not had the responsibility of command.

Irrespective of these considerations, we cannot take the general directions given as the best suited for the regulation of an institution. It is only fair to observe, however, that they have been written with an eye to the peculiarities and conditions of American training-schools, and have very little adaptation to English institutional requirements. We have met with very devoted officials, but we have yet to make the acquaintance of the matron, who after fol-

lowing the servants and children all day, attending to the household arrangements, to application of dressing and medicines, to the execution of the prescriptions relating to individual diet, to the clothing of each child each time it goes out, to its condition on its return, to passive oversight during school, to presiding over their festivities, yet "sees everything is right at bedtime, in the middle of the night, and in the early morning."

The volume closes with a copious appendix, which contains notes of cases, some being translations and others being transcripts from

the report of persons engaged in idiot training.

We have endeavoured to give our readers a clear idea of the contents of Dr. Seguin's work. In doing this we have had to allude to points on which we differ, to call attention to errors into which the writer, in our opinion, has been led by a too fervid enthusiasm. We have not been insensible to its merits, to its earnestness, and to its frequent pregnancy with thought; but we have at the same time felt that its importance and aims rendered it worthy of other than mere indiscriminate praise. Its defects are radical; it fails to teach us anything of the pathology or morbid anatomy of idiocy, it assists but little in the diagnosis of difficult cases which every now and then arise, it gives no data on which to base a safe prognosis, and throws no new light on etiology. As the work of the physician, it is scanty; as the work of the schoolmaster, it impresses us strongly with its value, makes us regard with kindly admiration the warm sympathy which everywhere shines out, and the enthusiastic love of the subject which is the origin of its gravest faults. We have abstained from laying bare some of these faults out of respect for the loving earnestness of the author. He writes with some of the spirit of an old warrior, who gloats over campaigns in the distant past. We warm as we witness the fire of his eye and the mantling glow of his face. If, however, he is to lead us to the battle, we regret that he has been deprived so long of the ballast which practical work imparts. We feel convinced that we shall require for our victory a fuller appreciation of the strength of our enemy's position, and to reject from our equipment the weapons which have only theoretic worth. In spite of these counterbalancing aspects, we still retain, in large degree, veneration for the hero of former fights, and are influenced by the recollection that it was by virtue of the same enthusiasm which now imparts an exalted fervour to his words, that prowess was given to his arms, and that he stepped forward as the early champion of a noble but long-neglected J. L. H. Down. cause.