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## Part I.—Original Articles.

*The Third Maudsley Lecture.* Delivered by Sir MAURICE CRAIG, *C.B.E.*, M.A., M.D.Camb., F.R.C.P., at the Quarterly Meeting of the Medico-Psychological Association of Great Britain and Ireland, held at the County Hall, Spring Gardens, London, on Thursday, May 25th, 1922.

### SOME ASPECTS OF EDUCATION AND TRAINING IN RELATION TO MENTAL DISORDER.

WE are met to fulfil the behest of one of the most distinguished physicians of psychological medicine of recent times. Maudsley was a leader in his lifetime, and he lit a lamp for research which it is our duty and that of the generations which follow after to keep burning. He was a man with a great insight and practical withal, for he has left behind him benefactions which are endowed by his inspiration and which must live with increasing benefit to mankind. The acuteness of Maudsley's vision is demonstrated by the method in which he founded these lectures; he perceived, and perceived rightly, that mental disorder was not purely a medical problem, but that there was a lay side to it which was of vital importance, and in consequence he directed that in alternate years a scientific and a popular lecture should be given. He wrote that " there are not many natures predisposed to insanity but might be saved from it were they placed in their earliest days in exactly those circumstances and subjected to exactly that training most fitted to counteract that innate infirmity." No doubt this connotes much, and to some it may seem an overwhelming task. For it would appear to include a full appreciation of how mental disorder is brought about; what, if any, are the precursory indications, and what symptoms, when present, should be regarded as potentially dangerous to the future welfare of the mind of an individual. The inquiry is a fascinating one, and the problem can be more quickly unravelled by the working of physician, psychologist and educationalist in close collaboration. Mental disorder

unfortunately, as things are at present, only becomes a medical matter when it has advanced a considerable distance, but this must be changed, and it must be our endeavour as physicians to control its very beginnings. Whilst it is right to devote time and energy to examine scientifically every means by which the recovery or the alleviation of mental disorder may be brought about and to use them to the full, in the end the return for these labours must be limited; to control its gateways and to prevent its occurrence far out-rivals any treatment of disorder that has once become established. In fact it is doubtful whether a complete recovery ever does take place in the sense that the patient is free from any scarring from the experience he has passed through. Preventive medicine is the side of medical science which is most attractive, offering as it does benefits of infinite value both to the individual and to the nation. Investigation tends more and more to establish the view that many disorders have their inception in childhood and experience confirms that this is true of the more common types of mental disturbance. It is on this account that I have decided to take as my subject for this lecture "Some Aspects of Education and Training in Relation to Mental Disorder." The term "education" will be used in its widest sense and will connote the instruction and upbringing of the child both at home and in the school.

Controversy has always centred round the question whether mental disorder is in the main psychogenetic or physicogenetic, and each theory has its able exponents. Experience has satisfied me that there is truth in both views and that it is unwise to disregard the potentialities of either of them. No doubt there is a mental instability in the majority of those who develop psychoneuroses or psychoses, but lowered physical health may be the final determining cause of the breakdown, and I would go even further and suggest that in many of these cases, had the bodily health remained satisfactory, no serious nervous disturbance would have occurred. We cannot separate mental and physical processes, and it would seem unwise to attempt to do so when we appreciate how strong is the evidence of the interaction which takes place between them. Therefore, in the theme before us it will be necessary to consider the child as a whole and to give due heed to both its physical and mental development. To regard it otherwise is to fall into the error too frequently encountered which not uncommonly results in faulty diagnosis. Further, let me predicate that the infant referred to in this thesis is the apparently normal, and not one who would suggest mental enfeeblement from birth.

It is not my intention to discuss the laws of inheritance further than to remind my hearers that, though the child tends to inherit

the attributes of its parents, fortunately it is nothing more than a tendency, and to be forewarned is to be forearmed, and the knowledge of any weakness can and should be used to the benefit of the child. To ignore the possibility of any known weakness developing is to court disaster, whereas to appreciate it and to take steps to lessen its influence will in many instances repay the effort which has been expended.

Our first step must be to consider if there are any mental factors whose presence is conducive to the development of mental disorder. As I am addressing an audience largely consisting of laymen, I must tell you that there are types of insanity which, like some physical diseases, are intrinsically part of the organism, and for which, with our present knowledge, little can be done either to prevent or to remedy. Fortunately these form by far the smaller group, whereas the larger includes the many which result from nerve exhaustion and emotional states. Therefore it must be to the latter that attention should be first directed on account both of the number of cases and of the greater possibility of prophylactic measures.

Maudsley writes: "Insanities are not really so different from sanities that they need a new and special language to describe them, nor are they so separated from other nervous disorders by lines of demarcation as to render it wise to distinguish every feature of them by a special technical nomenclature. The effect of such a procedure can hardly fail to be to make artificial distinctions where divisions exist not in nature, and thus to set up barriers to true observation and inference." It is these artificial barriers that have in the past so encumbered the way of progress. When one appreciates that in a given individual nothing more than exaggerated and uncontrolled normal characteristics may constitute mental disorder, we realise how narrow is the margin between those whom we call the sane and the insane.

Mental evolution should take place in a definite order and within certain recognised periods and any delay should be noted, but even more important is it to watch for any regressive symptoms which may indicate a failure or a dropping back to an earlier phase in the child's life-history. Unless the observer has a keen perception, he will usually miss the beginning of any regression and in this way lose valuable time. Neither must he permit himself to fall into the common error of explaining away all mental changes as matters of no importance. Symptoms may be positive in the form of some new and unwonted mental characteristic, or they may be rather of the negative type, including conditions such as apathy, inattention and the like; they are often protective in purpose, being an effort on the part of the organism to defend itself from any undue stress.

When one reviews a large number of patients who are suffering from nerve exhaustion in varying degrees, there is one symptom which appears early and which stands out in strong relief, and that is hyper-sensitivity. This state is observable not only as a physical sign in the nervous system demonstrable by various tests, but it is a condition which also affects the mental processes. It is to me the symptom of all symptoms which gives rise to many others which in time may so disturb personality as to occasion definite unsoundness of mind. Here we have a symptom which is common to many children, but which in some, by its ever-widening embrace, slowly but surely undermines the whole mental fabric. It leads to unhealthy emotion, to pre-occupation, and to false reasoning; it heightens introspection, and by its presence it aggravates all the normal characteristics of the individual; it disturbs the relationship of self to surroundings, and with this failure of adaptation a sense of inferiority or of irritation may result. It will be appreciated how baneful this hypersensitivity may become, and how by its intensity or by its duration it may injure the mental life of the individual. Nature has its own way of lessening the trying effects of heightened sensitivity, and the recording of acute sensation may suddenly cease and its place be taken by a psychical anæsthesia in which mind may become a blank or in some other way become disordered. Now if hypersensitivity can do all this, it behoves us to treat its advent with an appreciative recognition, and to bring all our knowledge to bear in an endeavour to defeat its progress. We must discover, if possible, how and why it arises, and then the conditions which favour its development, and lastly how it may be remedied or at least mitigated.

Some children are naturally hypersensitive, whereas with others it is acquired. Over-stimulation is probably its most common cause in childhood, and this may be effected in many ways. Some children become over-excited by parties or by passing their days in unsuitable surroundings, and the harm that is being done may declare itself in irritability, querulence, gastric upsets, or disturbed sleep. The naturally quick child is more liable to become over-stimulated than the dull one, and its ease of learning delights both the parent and the teacher in instructing it. The early ability to read has an undoubted danger attached to it, for once it can do this the regulating of the time spent in the study of books can only be carried out with the co-operation of the child. During the early school days the danger of over-stimulation increases, and the brilliant boy develops a new and legitimite ambition to outstrip his schoolfellows in knowledge. The result of this may be a scholarship, and from then onwards his course is fixed, and he must live up to his acquired standard,

not infrequently without consideration of the injurious effect that close concentration is having upon his mental and physical health. Now it must be borne in mind that brain exhaustion is often of slow development and that it may not declare itself until school-days are over, and the mental failure may be in varying degrees of severity. Some authorities hold that the real blame for the competitive system largely rests with the Universities, for these seats of learning are the goal for which the boy strives and for which the parent and the master prepare the way. I cannot do better than quote Dr. Herbert B. Gray, late Headmaster of Bradfield College, who writes in his book on *The Public Schools and the Empire* the following weighty words: "Most physiologists would admit that the mere fact of such competition at such an early age involves a strain more or less harmful in after-life. Apart from the unnatural stimulus of the mental powers, there is the excitement of the premature competition, which is opposed to all sound biological principles. Physiology contends that over-strain in mental effort hastens the period of adolescence, whereas the more highly organised the creature, the slower is he, or he ought to to be, in coming to completed growth. Scientific investigations have in fact proved that the delicate mechanism of brain structure forbids such premature efforts of brain evolution. Inductive reasoning tells the same tale. The writer has been in close touch as boy and master with public schools for forty-five years. He is, therefore, familiar with many life-histories, and is at least not 'entirely ignorant of the subject.' At some of the famous schools where scholarships are most valuable, and therefore most eagerly sought after, statistics go to show that winners of such prizes have in a large proportion of instances 'tailed off' either in the stage of early adolescence or soon afterwards. The brain in all these cases is proved to have produced premature results by early forcing. Some boys have shown no lasting power after two years of continued competition at their public school; others of less delicate brain organisation or otherwise more bountifully nourished 'stay' till half-way through their University course; while others of still stouter mould do not begin to fail in power until they enter the competition of outer life; but only a comparatively small percentage fulfil the promise of their earlier years. The mental growth has become stunted and shrivelled; the plant atrophies, and if it brings forth fruit, it brings forth no fruit to perfection in the maturer years. It is a wasted life." I have quoted Dr. Gray fully on this matter, as his evidence is of the greatest importance, coming as it does from a man of long and wide school experience. Now what is true of the brilliant boy is true in a relative degree of others whose lessened physical stamina renders them more liable to over-stimulation; defective circulation, respiratory disorders and

zymotic disease all accentuate the danger, and any one of these may be the determining factor in bringing about the collapse of an already over-strained nervous system. Further, if in addition to work the brilliant boy is also successful in games, his risks of breaking down are correspondingly increased. We are apt to forget that it is the same nervous system which serves both mind and body, and first to over-stimulate it on one side and then on the other is to court disaster. I have known not a few child prodigies who have excelled in games and who have in consequence deteriorated mentally before the age of twenty. Physical fatigue may be damaging in several ways, but one of the most important is violent exercise occurring in a comparatively short space of time. I can recall the case of a young girl who developed an exhaustion delirium after running in a paper-chase and who remained in a confused state for several months. I need hardly remind my hearers that such a delirium is almost certain to leave behind it a lowered nervous resistance for very many years. Children who are about to take part in any severe test of endurance should be inspected beforehand, and any who for either physical or other reasons are below their usual health standard should be debarred from the contest together with those who are constitutionally frail. The spirit of many a child far exceeds its power of physical endurance, and this high spirit may be raised even further by a powerful herd instinct which calls for an unusual effort for the good name of some school house or other school division. Further, apart from the actual physical strain, there are some forms of sport which in some young persons lead to an extreme bracing up of nervous tension. Anyone may observe this in the trembling of the muscles of the young aspirant to athletic success; of course, this is in itself not harmful but even beneficial when such effort is kept within limits, but over-stimulation of the kind may be very damaging if by prolonged effort the nervous energies are over-taxed, or if even a moderate strain is placed upon a physically or nervously reduced child.

Time will not permit me to make an exhaustive inquiry into the various circumstances which give rise to hypersensitivity, for the causes are numerous, including as they do physical diseases and disorders, defective sleep, and the over-action of various mind processes. On the other hand its existence is easy of discernment, and its influence on the growing organism should not be overlooked. I am fully aware that there will be critics who will point to the mental hospitals which draw their patients from the country village and say that these cannot be the victims of over-stimulation. But surely this is no answer, for the problem of mental disorder in the town is not necessarily that of the country and we find conditions in the rural districts which are rare in the urban. Intermarriage with all

its degenerating influences is rife in villages compared with cities, and also a narrowed life has a deteriorating influence of its own.

Failure of power to concentrate attention is quite one of the earliest symptoms of over-stimulation and exhaustion, and the symptom should be quickly discernible in the child. Attention is one of the attributes of normal mind which appears when the normal child reaches a certain age, and if it fails to develop, the faculty for acquiring knowledge is correspondingly diminished, the totally inattentive child being uneducable. On the other hand, if the capacity to attend has once been acquired, to lose it indicates a regression and its import must not be lost sight of. Nevertheless the loss of power of concentration is of value as a means of protecting the nervous system from mental work which might be harmful to it. Unfortunately this symptom rarely secures the recognition it demands, and it is this failure to observe and understand that leads to the development of more serious disorder in later life.

Again, as over-stimulation may in time give rise to inertness, it is necessary to refer to laziness. Owing to the untrained outlook of the lay mind, mental attitudes are apt to be classified in one category without any distinction as to how and why that attitude has come about. "A lazy child is a lazy child," and too often that ends the investigation, and having reached this verdict the sentence is passed in due course. But laziness is a proper mental reaction to a definite debilitated state of mind, and to ignore it or to punish for it would be considered little removed from cruelty if the real circumstances were known. To appreciate the pathological significance of laziness it is only necessary to read the term reports of a number of school-children and to note how frequently we read that this child and that has shown indifference and inattention to his studies during the latter part of the term, and for this he comes in for condemnation. Yet in many cases the condemnation, if any is to be allotted, should be on the writer of this report for his lack of insight and knowledge of mind and its working. In support of my statement I will again quote Dr. Herbert Gray, who writes: "Every schoolmaster knows that the most reproductive work of the term is done during the first half of it, and that both masters and industrious boys 'tail off' in energy about the ninth week through sheer brain-fag." That this is true there is ample evidence, but that it should be permitted to continue is less easy to understand. It cannot be argued that "brain fag" is a benign state even in the adult, but to produce it in the plastic nervous system of the growing child is little short of culpable, and to prevent it must lessen the incidence of nervous and mental disturbances. When laziness is to be observed, search for any legitimate causes that may be giving rise to it, and only find

fault or punish when these have been eliminated. It is, unfortunately, more common to condemn first, and only when correction has failed to produce the desired results, to investigate in other directions. To follow such a course not only increases the mental damage to the child, but it injures personality by establishing a sense of inferiority in the good and a callous indifference in the bad.

As defective sleep is a common cause of the development of hypersensitivity, it will be well to consider it before we leave this subject. All living organisms require proper time for repose, and it is safer to permit of a longer rather than a shorter one, especially during the early and growing years of childhood. The child should be trained to sleep during the day if possible until it reaches the age of five, and to neglect this part of the training not infrequently permits of too rapid development which brings with it restlessness and overstimulation. Children up to the age of sixteen should have at least ten hours' sleep and from sixteen to twenty, nine hours should be allotted for rest. When considering sleep it is necessary to give weight to the quality as well as the quantity. A restless sleep full of dreams and broken by nightmares is unrefreshing and indicates an unsatisfactory condition of health, and the child who persistently exhibits such symptoms is not in a fit state for the ordinary work of school. The nervously over-stimulated child fails to sleep, and when this happens it indicates that the organic side of life is being disturbed, and this will shortly declare itself in loss of body-weight and other symptoms if steps are not taken to correct it. Again, sleep is rhythmic, and it can easily be broken by interrupting the rhythmic habit by evening dances, theatres and the like. There is little doubt that some parents permit of serious damage to their children by giving them this type of pleasure. Broken sleep is not easily re-established, and even at best once it has been disturbed in this way it is easy to relapse into a sleepless state again. Evening school preparation work has always seemed to me to be of doubtful value, and it is definitely harmful to some children. The work before retiring to bed should be of the lightest, and probably in time we shall see with advantage the hours after tea being devoted to light lectures or instructive games. Some schools are open to criticism for the way that the younger boys are disturbed by the older ones as they go to bed at a later hour. The nervous apparatus for hearing must always be active and alert, as it is largely on this special sense that the sleeping person relies for warning of impending danger. If you doubt this, watch the restless movements that are produced in a sleeping infant by sudden sounds, and these movements are the translation of sensation into action. Some children are definitely awakened, others merely disturbed, by sound, but practically all must be affected by

it. Further, sudden noises not only awaken but startle some persons—this is known to all anæsthetists—and the disturbance created may not quickly subside. Therefore this matter is of practical importance and cannot be brushed aside as a frivolous observation. For a time some children, like some adults, do not appear to suffer from defective or deficient sleep, but because there is no gross objective sign it does not necessarily follow that deterioration is not taking place, and experience teaches that it is the wiser course to treat the condition seriously rather than to venture a hazard that all will be well. Broken sleep of short standing can easily be remedied, but if once established it is a far more difficult proposition.

I will now proceed to consider emotion. We owe to Déjerine a debt of gratitude for the emphasis he has laid on this attribute of mind and how it may affect the mental health. Everyone knows how devastating is passion and how exhausted it leaves the subject who has been enduring it. But emotion exists in varying degrees, and although in its more severe forms its physical concomitants of pallor, flushing, tears, tremors and the like are in evidence, some of the more subtle types are less easy of discernment owing to the apparent absence of somatic signs, and yet they may be working steady and untold havoc. Emotion becomes attached to ideas and groups of ideas, and if the emotion is an unhappy or an unpleasant one, it very readily leads to a "preoccupation" which may slowly absorb attention until it seems to fill the whole field of thought. "Dreads" and "fears" belong to this order and these are not uncommon in childhood. Many fears are unreasonable but this does not lessen their power, and the inability to drive them away is both depressing and terrifying to the sufferer. He must be helped by a sympathetic and philosophic understanding. Unless relieved, a fear of this kind may affect the sleep and produce bodily disturbances and lessen mental activities by setting up a hyperattention on one subject, instead of the normal state of being able to turn the attention in any direction. Now emotion of this or a similar kind may result in the development of a sense of inferiority—a feeling of being unlike others. When this takes place introspection begins to play an important part. The healthy mind is largely extroverted; thoughts are projected outwards, but in certain morbid emotional states the process is reversed and everything is turned inwards. This leads to unhealthy reasoning; it interferes with the relationship of the child to others and not infrequently results in a solitary existence. The child who has formerly been fond of companionship and who in course of time becomes lonesome is usually evoluting into an abnormal mental state, and every effort should be made to clear away the difficulties. Unless this can be done, the morbid outlook, which at first is scarcely dis-

cernible, becomes, over extended time, a factor of such importance that life is almost unbearable. For this feeling of inferiority gives rise to suspicions, ideas of persecution and resentment, any of which are factors of no mean importance in the mental make-up of an individual. Some children develop this sense of inferiority from being laughed at by their school-fellows. I do not wish to convey that "chaffing" is not in the main a healthy mental exercise, but it may stultify, if not worse, the intellectual growth of some children, and it is these whom we ought to save if we observe as we should do. I have heard a well-known training officer in the Army say that a man who was "gun-shy" and who was clumsy at games has ultimately excelled in shooting and in sport by steady encouragement, whereas experience has shown that were this not given him and were he allowed to be unduly chaffed, he would drift, as many have drifted, into a solitary, useless person, full of grievances. Remember that mind is never stationary and in the course of evolution factors which are of small moment to-day may in time become of absorbing importance. Maudsley recognised this, for in speaking of extreme shyness which is the unfortunate disqualification of some nervous temperaments, he writes: "Only those who have it can know how sore an affliction it is and how great a let and hindrance to them through life. Nay, it sometimes wrecks a life. For as the unamiable proclivity of mankind, as of other animals, is to set upon and persecute any individual of the species which differs from the conventional type, it happens that when a nervously sensitive and shy boy is sent to school he is teased and bullied there because he is not like other boys. If he meets with no one to understand him, to show him sympathy and kindness, he gets more and more estranged from his fellows, more and more he feels himself a peculiar and separate being, suffers, mopes, and pines in solitude, and in the end is so shattered mentally perhaps as never in after life to get over the injury which has been done to him." Those who have children in their keeping and who believe that boys are best left to themselves to find their own places among their fellows, to statements such as I have just read make answer, "Yes, we know all this, but the few must suffer for the good of the majority." My reply must be, "Is this necessary?" The educationalist does not keep back the brilliant child; he bestows upon him his special attention for reasons which are obvious. My experience goes to show that the rewards will be as great for a more careful study of other types.

Repression is a mechanism which has attracted increasing attention with the advent of what is commonly spoken of as the new psychology. Freud laid down that forgetting is not necessarily a negative process but a positive one, and that experiences of an unpleasant

character do not fade away with time, but are definitely repressed out of consciousness. This is probably only partially true; some natures undoubtedly have to treat unpleasant experiences in this way, but many do not do so. Freud realised that there must always be a danger of a conflict taking place between the primitive instincts and the demands of the community, and further that a termination of such a conflict may only be possible by the active repression of the former, which usually entails emotion and is in consequence fraught with danger. If the individual is successful in fully repressing the unpleasant experience, it passes out of the realm of consciousness; nevertheless Freud has shown that it may remain as a dissociated portion of the mind, with the potentiality of becoming active under certain conditions on account of the original emotion attached to it. According to Freud and others its harmful effect is in the amnesia (loss of memory) occasioned by it. Wingfield, in his book on hypnotism, lays special stress upon the preceding emotional state of a repressed painful experience. He gives instances in support of his view that the emotion always precedes the rising of the repressed thought into consciousness, and thus the emotion leads to an automatic shutting out of the incident until in time it is entirely forgotten, the emotion alone remaining. On the other hand, there is no doubt that many so-called repressions are not fully repressed but remain more in the realm of consciousness than some authorities would suggest, but nevertheless they have a very wearing effect upon the nervous system and in the course of time begin to have a deleterious effect upon the mind of the individual. Repression takes place during all ages, but the struggle with authority is more common during certain periods of childhood and the damaging effect of a conflict is more serious upon the growing plastic brain of the young. That Freud was wrong in believing that most of these repressed complexes were sexual in character is becoming increasingly evident, and I have long felt that when this is dropped as an intrinsic part of the Freudian theory the latter will greatly benefit. To me Freud's teaching is valuable, not in its methods of psycho-analytical treatment, but because it emphasises an important factor which had been overlooked—how conflict with subsequent repression may injure the mind. The knowledge of this alone must make parents and educationalists pause for reflection and to examine whether their attitude towards the young in their charge is in accordance with it. It is not my intention to convey that all repression is harmful, for indeed repression is a normal mental process, but like the "will," some persons try to use it for unsuitable purposes. Repressions that are harmful usually tend to centre round some morbid thought or some particularly disturbing experience. It is the psychological atmosphere

in which the child develops that leaves its mark upon its future life, and therefore its later welfare is dependent upon those conflicts, repressions and any other mental conditions leading to unrest being especially guarded against. If this were fully known and appreciated I believe that greater consideration would be given to the conduct of the home. Children, and especially the sensitive ones, are far more perceptive than many adults give credit to; they note the gesture, the conduct and the language of those about them and they rationalise in an elemental way, but it is none the less leaving its impress on their evoluting minds. Further, it is all-important to bear in remembrance that it is not the subjects which are freely talked about by the child that are usually harmful, but those upon which he introspects in silence. To the observant person gesture-language will convey as much, if not more, than words, and no one can claim to be an efficient trainer of children unless he is equipped with the faculty of reading it. Words may be misleading, but gesture is seldom so, for the latter is complex and is the outward and visible sign of inward sensation and emotion. As Maudsley once wrote: "What is mind-reading but muscle-reading through movements so fine as to be discernible only by a practised sensibility?" Every adult knows the effect exercised by the environment of an unrestful house and its influence upon a child must be infinitely greater, and when to unrest there is added apprehension or definite fear, it does not call for a great effort of the imagination to appreciate the damage that is being done. The undisciplined man is a burden to himself and a thorn in the side of his fellows, but the child who has to live with him is in danger of mental ruin. This may appear to be forcible language, but thirty years of experience of nerve work forbids me to soften it. The greatest hope for the lessening of the incidence of mental disorder lies in a fuller awakening to the duties of the parent to the child. There is one thing that the State can never effectually perform and that is the office of parent, and those who wish that it should do so either have a very small insight into what is really meant by parental care, or they must feel that the thoughtlessness of the average parent is such that the child is safer out of his keeping. Had we but the vision to see, there is no reason why either of these views should remain active, but to escape from them there is only one way, and that is to increase the sense of responsibility of the parents and not to lessen it, otherwise the natural consequences must follow. Those who call for larger families without seeing that the parents who have them appreciate their duties are incurring a grave responsibility. The stability and happiness of the mass are the combined effect of these virtues in the individual and it is to parental care that we must look to lay their foundations.

The child who is naturally repressed is without doubt more difficult to train than the one whose temperament is open and frank. It is less easy to understand and is usually more resentful of interference, and for this latter reason punishment not infrequently does more harm than good unless it is carried out with great circumspecspection. On the other hand such a child may develop into a fine character if training has been judicious, for it is often capable of much reasoning power and its intelligence may be above its years. When and in what way to punish the child become problems of increasing perplexity as more is known of the working of mind. The crude rule-of-thumb methods of the past must be more and more challenged. We now know that in apparently correcting a fault we may damage the mental development of the child unless we keep this actively in mind when meting out the sentence. Take, for example, the matter of corporal punishment—in referring to this I do not wish to be misunderstood; I am not one of those who believe that all punishment is wrong, for whilst human nature is what it is punishment in some form or other will be necessary—my criticism is that it is too often administered according to tradition and custom rather than by the exercise of a wise judgment. For example, it is difficult to understand how caning and corporal punishment are so commonly left in the hands of prefects, whose knowledge of mind development must be non-existent, and this being the case it is the crime that is punished and not the author of it, and the effect that it may have upon the latter is left on the lap of the gods. I have known of a young boy caned by prefects several times in his first term for minor offences until finally he ran away in a high state of nervous excitement, and this at one of our best public schools. Such treatment may claim to make some boys into fine men, but undoubtedly it also causes some to become nervous wrecks, and I cannot help feeling that it ought not to surpass the wit of man to evolve some scheme of punishment which should have all the benefits of the present system and less of the disadvantages. Government by prefects has, when properly carried out, a highly beneficial effect upon a school, but duties should not be imposed upon them which are clearly beyond their powers of full appreciation. Dr. Herbert Gray, in writing on corporal punishment, says that he has "no hesitation in maintaining that it should be confined, when administered at all, to offences of a moral or quasi-moral character, such as lying, cheating, evil language, and misconduct of similar type." Now that it is known how damaging is emotional shock to some individuals —and this must be more likely to occur in a child—it behoves those in authority to re-survey the grounds for and the methods of administration of corporal punishment from the psychological standpoint.

I am not aware to what extent the writing of "lines" is still practised in schools, but it is a form of punishment to which there are serious objections. To write out hundreds of "lines" is to fatigue the hand centre in addition to other parts of the nervous system, and when it is imposed for "inattention" which may be due to brain-fag, the result is obvious. Speed alone in a mental exercise is exceptionally fatiguing, and what boy does not write his "lines" with the greatest despatch at his command, and what master does not know this, for does he not intend to keep the boy at it for a definite time, and to do this he must be guided by possible pace rather than by slowness? I know that many school authorities are taking a more scientific out-look in the treatment of delinquents, but much has yet to be done, for traditions die hard, and it is apt to be said that "what was good enough for us is good enough for the boys of to-day."

There is another type of child to which I might refer, not because of the frequency with which it is met, but rather on account of the very damaging effect it usually has upon its fellows. Fearlessness is an attribute which rightly holds a high place in character, but like all virtues it may lose its value unless it is tempered by judgment. To train a child to be fearless unless at the same time it is acquiring experience is to court very definite danger. The fearless child becomes independent above its years, and with independence it may develop a dictatorial and bullying spirit. Many of these children when puberty is over pay less and less heed to authority and become quite insensible to kindness or severity, and not a few fall into the hands of the police for breaking the law. This all goes to prove that mind development should be a homogeneous whole, and although interest and aptitude may tend to quicken growth in certain directions, these tendencies must be watched and kept within reasonable limits.

During recent years much has been written regarding phantasy—not that it was a fresh discovery, but on account of its place in the new psychology. Now make-believe is a normal characteristic in all young children, but some have it much more fully developed than others, and these are usually of the sensitive type. As with reality there are two large classes of phantasy: the one includes all that stands for brightness and happiness and the other all that is ugly and forbidding. That the latter should play so formidable a part in the child's story- and picture-book has always been an enigma to me, for to the sensitive child it may do much harm and its power for good must be very small. Nevertheless phantasy is good, as it smooths the path of the child on its way to the stern realities of life. Whatever its troubles, it can soon forget them in the land of fairies. But as years pass it is necessary for phantasy to be slowly replaced by realities,

and it is incumbent upon the teacher to prepare the way for this transition. Realities must not be made too hard, otherwise the child is driven back into phantasy, or in silence it may fret until the rising emotion shows itself in varied forms of nervous disturbance, or if it is made of tougher material it may slowly harden into an attitude of careless indifference or open rebellion. One child easily slides over the difficulties which mark the opening years of its life, whereas another requires help, and it is urgent that this help should be given. What I have already described as a wise, philosophic, yet sympathetic understanding is what is called for, and not the enervating " sloppy " sympathy which is apt to be given, interspersed from time to time with an undisciplined display of irritability.

Although phantasy is a marked feature of the mind during early childhood, it may persist or re-appear in the later school days. If so, it will call for inquiry as to why it is there. The adult has his day-dreams, but they ought merely to be an outgrowth of reality—a visualising of some ambition that is as yet far off but the contemplation of which affords encouragement in the present and a vision of hope for the future. On the other hand, phantasy which has no normal relationship to life indicates that an older child has either regressed or that his mind is not developing normally. At this point I may be met by those who believe that " self-expression " in whatever form it may take is the factor of overwhelming importance throughout a child's life, and that what some may regard as phantasy is nothing more than the unfolding of a creative mind, which may easily be stunted by careless handling or failure to appreciate the condition in its true light. I agree, as I suppose most would agree, that self-expression has been sadly neglected in the past and that schools have been conducted to meet the requirements of a standardised child which, to avoid any difficulties in differentiation, has been termed the normal child. Those whose mentality did not permit of their fitting into this charmed circle either risked becoming chronic failures, or, having weathered the contempt to which they may have been exposed in early life, have developed, when once freed from the system, into successful men in whatever sphere of work they may have taken up. But because " self-expression " has been a neglected factor in the past, there is no reason why it should be granted too free a place in the education of the future. Sooner or later the instinctive impulses of the child must meet and, if untrained and unconditioned, must clash with the social *régime*; he is unable to free himself from the herd. What he thinks of others and what they think of him are musings which, if allowed to run riot, may entail his downfall, but, if rightly directed, may lead to the development of a character where self is almost lost in interest for others. It is this adjusting to the

demands of the herd which is often so difficult, and when one appreciates what it means, the adaptation of an ever-changing being to an equally kaleidoscopic world, it is remarkable that misfits are not more common. But apart from actual misfits we are still far behind in what could be done to make the best of life and to equip the young for the work that they have to do. The normal child is extroverted, and if introversion is noted every care must be taken to develop its ease of expression. It is frequently the sensitive child who is introverted, and he may otherwise be one who is endowed above the usual with powers of perception, and, given suitable care and training, is often capable of fine development. If, on the other hand, by any misfortune it finds itself under the care of unimaginative and commonplace persons, its life will become increasingly cramped by the conflicts within and the cruel pressure from without. Nothing is more tragic than to see the introverted child suffering mental anguish more exquisite than physical pain, and in consequence closing the way to mental development and in many cases all because it is not understood. But a child may be too extroverted, and in this case also its mental future is in jeopardy, but in a different way. Its danger is in the limelight, and in an undue appraisement of its ability. If its fibre is tough it may at first trample its way through or over the herd until it ultimately breaks down, a victim of its own conceit. Nevertheless if the dangers of such a child are appreciated early enough and if it is handled with judgment, it will be found in many ways one who is more easily led than the introverted one; but time is against the teacher, and once puberty is reached the task becomes infinitely more difficult.

As childhood advances all the natural instinctive impulses must become conditioned, and by this we mean that experience must modify them. Impulse is an unconditioned reflex, whereas a volitional act is an action which has been toned by experience to the environment in which we live. The instinctive impulse of a man who is exposed to danger is to run away, but training and experience teach the soldier that this is contrary to the opinion of the herd, and in consequence the fundamental law of self-preservation is conditioned and annulled by the dictates of the social order. Untruthfulness and other moral delinquencies belong to this category, but just as many men who ultimately turn out to be trustworthy soldiers cannot be trained by any intensive system, similarly certain children require long and careful handling. By harshness the normal sensitive child may become confirmed in its lying, for falsehood is a defence of the fearful, and once it is consciously established, it becomes an active detrimental factor in its future mental welfare.

In this way we reach what is and ever must be the goal of all mind-

training—self-discipline. By this I do not mean a mere clicking of heels to authority, right as this may be in its proper place, but true discipline, connoting the right proportional working of all the attributes of mind in an even way. The undisciplined nervous system is one which reacts impulsively and violently on slight provocation. Persons who are undisciplined and querulous not infrequently vent their displeasure in spiteful acts; they are highly unreliable, and yet they may be possessed of a personal charm which throws their defects into singular relief. There is no unhappier state than that of instability when a man finds himself reacting abnormally to thought and environment. Ultimately he finds that there is no place for him in the world, and rationalise as he may that his so-called undisciplined outlook is a proper reaction to an unfriendly community, his own uncontrolled language and actions alienate him from the herd. Many of these individuals end their days in mental hospitals, their nervous system having finally broken down under the strain of contending with men and things, and yet, when carefully analysed from the psychological standpoint, there can be discovered no intrinsic reason why such a state of mental unsoundness should have been brought about, had reasonable care and supervision directed the earlier years of their life. All children are undisciplined, and though the majority acquire controls by the education and training which they receive, some lag behind in gaining them. The child that does not become disciplined at the usual age is often quite intelligent and may even attain to a high standard of knowledge, but when a child shows defects in the matter of control it is necessary to focus the immediate training upon these defects, for knowledge is useless to the possessor of an unbalanced mind; far wiser is it first to obtain stability and then to impart knowledge. The irritable child, like the irritable man, must not be regarded as in good mental health, but the brain of an adult takes longer to damage, and although it is true that each outburst of irritability is gradually undermining the mental power of the man, its effect upon the plastic growing brain of the child is vastly more injurious. Further, the child forms habits with extraordinary ease, and once established they are infinitely difficult to displace. Discipline is not a product of short training, for it is not elemental; its component parts are highly complex, and in consequence its development is slow and subtle, but once established its reward is stability, and it protects its possessor from the effects of undue strain of conflicts within and irritation from without. As we acquire knowledge, thought and acts which at first were accompanied by a feeling of effort grow to be automatic. Right thoughts should become associated with proper actions. Sound experience means that we instinctively do the right thing at the right

moment; the adult mind should be stored with judgments which have been tested by experience and can be called up more or less automatically when occasion requires it. It is not the knowledge that we have acquired that counts so much as with what other things this knowledge is associated. The knowledge of finance associated with extravagant or penurious thoughts is of ill-value; cleverness and much learning when associated with conceit are singularly unattractive; business capacity when associated with an intolerance for others often is a valueless possession. When we come to test a man's endurance or what he has made of his life it is rarely pure learning, it is knowledge added to something else which gives it its value, and it is this "something else" which either makes or mars the history of that life. It is outside the purpose of this lecture to discuss all that goes to make character, but just as the good morale of troops keeps an army in a high state of efficiency, so with the individual it is the fundamentals that count.

It is remarkable what apparently insignificant factors may so increase the burdens of life that, starting as a small nucleus, they may form a centre which in course of years may collect round it other factors, until the cumulative effect is greatly to disturb the mental equilibrium of the individual. What for want of a better term may be called "sloppy-mindedness" is an example of this. Some parents give so little heed to the future welfare of their offspring that they bring them up indifferent to principles and untidy in thought and action. The innate intelligence of the child may permit of its acquiring knowledge maybe above its fellows, and when it starts on its life-work all goes well until responsibilities have to be accepted. It is then that the "sloppy-minded" training begins to tell, for it may and often does so handicap the man's progress that troubles which might easily have been prevented overtake him, and these and the unhappiness which is associated with them become so disturbing as to render him a mentally broken and disappointed man. There is another group of cases which are particularly sad, as it is often the break-up of a life which from the earliest of days has been devoted to close application to work; this group includes those who have risen from the ranks and who through scholarship or unceasing study have acquired some good position, only to find that their personality is unsuited for the post. The issues of life cannot and must not be lightly faced; phrases like "equal opportunities for all" have a fascinating sound to the uncritical mind, but if you carry this assumed truth into general practice, your kindly attention will bring about the mental downfall of many of those whom you intended to help. The tendency of the age is to standardise everything, but when this system is carried into the management of human affairs

the results cannot but be disastrous. Although it may be true that men whose mental capacity is nearly equal can be arranged in groups, and although, further, it is true that a certain number may be capable of being transferred from lower to much higher grades, the majority must be content to move within narrow limits. Evolution is at all times slow and to attempt to hasten it is not only unwise but disappointing. The natural laws plough on with an unmerciful regularity, for ever heedless of the ever-changing fashions in the opinions of men. It is proper to see that the want neither of money nor of position should stand in the way of the advancement of those whose natural gifts permit of this, but to regard it as the normal right of the majority is to think a vain thing. I know that my critics will say that this is precisely the difficulty—to know who has natural gifts and how such can be gauged. To these my reply must be that this is the duty of the educationalist, for he must search until he finds some reliable test which shall decide this problem, but to attempt what some would have us do, to give all a standard chance, is too wasteful in practice and too hurtful to those who fail. The problem is full of perplexities, and no doubt there are many who are striving to find the right solution, but unfortunately the claimants who demand to be heard are many, and each regards the proposition with a distinct bias of his own. There is first the parent who sees in his offspring the qualities which, if given opportunity, are pregnant with possibilities; and next the schoolmaster, kindly and hopeful, fully aware of the limitations of his pupil, but always ready to give him the benefit of any doubt. Next in order comes the array of examiners and school inspectors, men whose outlook is largely concerned with a standard of knowledge, the human element only entering into the scheme as a means of expressing that knowledge. Next come the Universities and great seats of learning, whose duty it is to indicate the educational needs of men and to hold out as their highest aim, irrespective of individual characteristics, the attainment of pure scholarship. Finally we come to the Legislature, the mouthpiece of popular opinion, who are willing to fling education into the maelstrom of political notions, careless of the effect so long as it appeals to the masses and in consequence strengthens some party at the polls. If only each claimant would wholeheartedly view the proposition from the standpoint of the child and his future welfare and put away from his mind all other considerations, the problem should be capable of a right solution.

Psychological medicine has been progressing rapidly during recent years, and with this one of the most satisfactory features is that the word "mental" is being used more and more freely with reference to normal individuals. At one time any reference to a mental state had a terrifying effect upon the lay mind, and it is all to the good to

find that the public is learning that mental processes are common to the normal as well as to the abnormal. We now await the time when the Legislature will show its appreciation of the advance that has been made by relaxing the law so that the knowledge that has been acquired may be the more readily used for the benefit of the people. In the meantime we must go on teaching that the mental health of the nation is largely dependent upon a wide-spread knowledge of the requirements for keeping a mind in health. The position is in every way comparable to the problem of attaining a high standard of physical fitness. The onus must ultimately rest with the people; the medical profession can but point the way. If the present writing on the wall is correct, that the early years of life are the important years for determining the stability of the mind of the adult, it behoves us to put this knowledge into practice. The country is learning that the greatest asset to a nation is good health and that a small number of A1 men count for infinitely more than a crowd of the C3 class. To attain this end we must look to education, not merely from the narrower standpoint of learning, but where learning is superimposed upon a stable mind. I would close, as I began, on a note of hopefulness. The criticism that is often made against prophylactic measures is that it is pure hypothesis to say that such and such a condition might have arisen, and that the claims of having prevented it are in consequence mere assumption. We at least shall be free from such uncertainty, for we shall be able to point to fewer and less populated mental hospitals. We know that this result can be attained, even with our present knowledge, and all we ask is that those restrictions which hinder us should be removed, and that the lay public should bear in mind that mental disorder is rarely of sudden development and that much more can be done to prevent it than they at present appreciate. For ourselves, we who work in the sphere of mental medicine must keep widening and ever widening our vision as our knowledge advances. In our struggle to repair disease, we must not lose sight of the other matters which belong to our inheritance, for our work lies in no narrow scope, covering, as it does, all that appertains to the mind of man.