doctrine which was an indirect issue of the Macnaghten case. The only way to discover whether the criminal did know and appreciate the circumstances is to study his action in those circumstances, i.e., in other words, his conduct. therefore, that full consideration of the acts done, and all the circumstances in which they were done, will often be of great assistance in cases of special difficulty, and will enable medical witnesses to show that, although the accused knew, in a limited sense of the word, that the act he did was wrong, he did not appreciate all the circumstances and consequences of his act, and thus misconceived and under-estimated its wrongness; in short, did not know how wrong it was. There are, of course, many cases which, in spite of the too rigid conception of criminal responsibility that has hitherto prevailed, are now often dealt with by greatly modified sentences. Offenders of this kind, though they may not be classed as strictly insane, should be subjected to other and more appropriate treatment than ordinary imprisonment. A case which is illustrative of these remarks has very recently been under my observation, and I hope to be in a position to refer to it in some further notes on "Mental Defect and Crime," which, by the courtesy of the Editors, may appear in a subsequent number of this Journal.

(1) It may be noted here that Dr. J. S. Bolton in his recent book on *The Brain in Health and Disease* represents the new Act as using the term "mentally defective" instead of "feeble-minded" to denote the highest of the three specified grades of defect. A reference to the Act would have shown that the contrary to this statement is true.—(2) See *Brain*, Part cxxiv (1910). *Journal of Mental Science*, 1905–1908, and Dr. Bolton's book already referred to.

Cases of High Grade Mental Deficiency. (1) By JANE I. ROBERTSON, M.B., Beit Memorial Fellow, Eastern District Hospital, Glasgow.

THERE is a class of individual loose upon society whose presence and significance in our midst seems, as yet, insufficiently and improperly appreciated. These people are usually of pleasant address, with all the outward show of civil social observance; they are fluent of speech, readily adaptable to circumstances, superficially in every way most plausible. How does it come, then, that on closer acquaintance they prove to be the scourge of their relations and friends; that many of VOL. LXII.

them have a prisoner's acquaintance with the police courts; that they are frequently embezzlers of money; are guilty of theft, drunkenness, and immorality of every kind; that slander, with all its miserable train of disintegrating influences, emanates from them as a miasma? Punishment is no deterrent to their anti-social activities; they are supremely unaffected either by the teachings of past experience or the forewarnings of future suffering.

What are these people, then, and how should they be regarded? Briefly, they are cases of high grade (2) mental deficiency that, for their own protection and that of society, should be diagnosed and segregated as such. One case studied in detail will provide a sufficient basis for further discussion.

G. N—.(8) G—, æt. 25; the eldest of a family of six; from birth till she left school at 14 in the sixth standard her health and conduct were apparently normal; at school she was intelligent, learnt quickly, and never had trouble in preparing her work; her games were fairly imaginative; reading books of travel and adventure was always, and still is, a passion with G—; needlework and housework have always been irksome, but are done skilfully enough under pressure; G— has always been of an irritable temper, and careless in details of personal niceness.

Family history.—Except for one cousin who committed suicide, no history of nervous or mental disease in other members of the family is obtainable. The mother is a delicate, highly-strung woman; the father, a master mariner, enjoys good health; the other children are all small made, more or less delicate individuals; G— is by far the sturdiest-built of the family.

General physical condition.—G— is short of stature (4 ft. 11 in.), well built, well nourished (8 st. 6 lb.). Her features are rather heavy, but the expression is predominantly intelligent, though frequently sulky and sometimes furtive. Irregular movements of the eyebrows are noticeable, and sometimes biting of the lower lip. The patient's bodily movements are alert, easy, and well co-ordinated.

There are no abnormalities of the circulatory, digestive, respiratory, or nervous systems, and no outward physical signs of degeneration.

Patient's career.—After leaving school G— remained at home

for about two years, helping somewhat unwillingly in the house, and attending night school to learn shorthand, book-keeping, and English. At this time her family learnt that she had been telling untruths about her bad health, and the unkind treatment she received at home. Shortly after she was 16 G— obtained a post as clerk, and her people discovered that for the six months preceding this she had not attended night school, though she had obtained money for fees, books, etc., and had left the house of an evening ostensibly to attend the classes. Six months later the family moved to another house, and G— went as clerk to another firm, where she remained for two years. During these two and a half years G— gave her mother her entire salary at regular intervals.

In the autumn of 1910 G— left her situation for no definite reason and declared she had another, but after this only odd sums of money were handed to her mother with prevaricating statements. G- was not at work at this time at all, and the money she gave her mother was borrowed from girl friends. During this period she left the house in the morning, returned for dinner and went out again, as though at work, but actually spent her time with girl friends and wandering about; she gave tea-parties in other people's houses and drove in taxicabs, etc. In May, 1911, her mother first learnt of her conduct, and remonstrated with her about it. G- promptly ran away next day, and spent the following eight months with friends in Glasgow, completely out of her parents' ken. In December, 1911, she was in the hands of the police for obtaining money under false pretences from her friends, and her parents got into touch with her again. To a lawyer who saw G- in prison she related the following tale, the only commentary on which is that it is entirely imaginary:

"About two years before May, 1911, accused was employed in the office of a Mr. Wilson, and while in his employment became acquainted with Archibald Colquhoun, Grand Hotel. Colquhoun acquired an influence over her, and told her that he had compromising letters written by her mother to a gentleman in Cardiff, and had induced accused to leave her home. Colquhoun instigated the offences under continuous threats of disgracing accused's mother. Accused was shown the letters but was not allowed to read them, and the vile insinuations of the man Colquhoun so worked upon the girl that she came

completely under his influence. Colquhoun showed her certain documents which bred the suspicion that accused was not her father's daughter."

The charges in the indictment against G— may be summarised thus: "On various occasions you did pretend to A. M— that you were a Doctor of Science, and had been elected a Professor, and carried on business as Dr. Garey; that you had been left £600 by a friend and £6,000 by your grandmother; that your medical adviser was Prof. McCormick of St. Andrews and Edinburgh; that your lawyer was laid up with fever in the house of Prof. McCormick at St. Andrews, and was thus unable to send you money, and that you would repay to the said A. M— any sums he advanced to you as soon as your lawyer was able to attend to business, and you did thus induce the said A. M— to deliver to you at various times and places sums amounting in all to £74 5s., which you appropriated to your own use," etc. It is difficult to know which to admire more, G—'s fertility of invention or her friend's easy credulity.

In January, 1912, after completing a sentence of thirty days' imprisonment, G- returned home; here she remained, restless, irritable, and unoccupied, till May, 1914. During this period she became acquainted with a Mrs. R-, wife of a seafaring man; in the husband's absence at sea G-would often spend the night with Mrs. R-, a gentle, affectionate, simple woman, from whom and from whose father-in-law she wheedled sums of money amounting to some £60. G- was to receive a large legacy; she was a doctor and had a post at the Royal Infirmary; she was setting up in practice at a very good address in Glasgow, and had a motor and chauffeur and a staff of servants; a book of housekeeping accounts, and of large sums spent on housefurnishings, was left lying about for the admiration of her friends. While intimate with Mrs. R-, G- had "fits" that always came on when she was safely in her friend's house; they were characterised by sighing moaning respirations, aimless movements of the arms, rolling of the head and eyes, while the latter had an unseeing stare, movements of the tongue, and signs of much physical exhaustion. These "fits" might be prolonged, and alarmed Mrs. R- very much, who treated them with petting and the application of hot cloths; apparently the climax usually consisted of a cup of tea and toast, and not infrequently a poached egg, which the nurse, not the patient,

was too worn out to enjoy. G— at this time purchased and read medical books, and probably the "fit" had been read up. When annoyed, G— would threaten to take her life, usually by jumping from the fourth floor window, but no one, not even Mrs. R—, ever took her seriously; it was her method of getting Mrs. R— to promise not to tell her parents about her, and Mrs. R— kept faith with the girl, believing she had an unhappy home.

In May, 1914, Mrs. R—'s father-in-law began to make inquiries about G—, and when the girl was told she evinced much alarm and fear, but no sort of contrition, and decamped next morning to London, taking, without permission asked or granted, 30s. from her hostess. G— remained in London, living partly on money her mother sent, and partly on the charity of a lady on whom she imposed for a short time, and then about the middle of July she sent her mother her London address, and the latter went and fetched her home to Glasgow at the end of the month.

G- remained at home only a week; owing to the outbreak of war, St. Pancras Parish Hospital, London, was short of nurses and advertised in Glasgow for probationers, and her mother, thinking it would satisfy the girl's craving for change, sent her back to London as a probationer nurse. Naturally no word of her previous career leaked out. For a time things seemed to go well, once G-had recovered from the shock to her self-conceit when she discovered she was in a Poor Law establishment. In May, 1915, however, her mother was summoned to London. It seemed that G— had borrowed money amounting to £11 from her fellow nurses, that she had run away on May 22nd, leaving a note threatening suicide, and giving her address till that evening, that she had promptly been captured and brought back to hospital, and was being cared for as a suicidal patient and under constant observation. G—seems to have been much surprised and annoyed at being taken so literally, but on May 28th she was certified, and admitted to an asylum as a suicidal case. The hospital nursing staff spoke nicely of G—, whom they seem to have liked, and whose tales as a seacaptain's daughter of many voyages they had admired and believed; her experiences in an American leper colony had been particularly interesting. Here, as in Glasgow, interesting letters, to and from utterly imaginary people, had been left lying about where her fellow nurses would be likely to see and read them.

In the asylum G— was considered as an "exhaustion pyschosis," and was discharged "recovered" on June 15th, and, after some confused arrangements, allowed to travel alone to Glasgow, under care of the guard, with a shilling or two in her pocket. G— left the train in the suburbs of Glasgow, instead of proceeding to the terminus, where her parents awaited her, and spent the night in a hotel. Next day, however, she met her parents accidentally in the street and went home with them, to be sent on the following day to the Eastern District Hospital Observation Wards, as her parents considered her utterly beyond their control.

Under observation G— has been found to be of an irritable temper, requiring discreet control; on the whole, however, she is a very active, not unkindly girl, pleasant with the children and old patients; the restless, changing activity of ward life suits her fairly well, until the confinement irks her. In November, 1915, she seized a favourable opportunity and ran away to a relation in a neighbouring town, but was persuaded to return next day. Residence in the Infirmary has not dulled G—'s gift of vivid narrative. A number of the nursing staff, seniors at that, have been much interested in her accounts of pre-war visits to the Belgian towns, since destroyed by the Germans; others were entertained with accounts of her wedding trip to various Italian ports in her father's ship, etc.

This account, much condensed, and with many quaint touches necessarily omitted, brings G—'s history up to date, and some of the more significant features of her case may now be briefly indicated.

Summary.

- (1) The time of onset of the romancing habit. With G—it was first noticed by her sister about the age of sixteen, but probably it had been in progress for a year or two before this.
- (2) The mental alertness in childhood; the easily prepared lessons; the voracious reading of tales of adventure and travel.
- (3) The absence of any capability for concentrated sustained mental effort which became apparent after G— left school about the age of fourteen, and which, if anything, has become more marked with increasing age.

- (4) The irritability of temper which leads to outbursts when G—strikes. The greater frequency of these states of irritability of late years. The marked physical restlessness. Mrs. R—said that G—'s constant coming and going in the house, and inability to settle to any occupation, were wearying in the extreme to the onlooker. The idleness, combined with considerable manual dexterity when the particular occupation, for any reason, proved entertaining.
- (5) The need of attracting attention and admiration, which, while it led to the purchasing at times of extravagant articles of dress, etc., never in G—'s case overruled her habits of personal carelessness, and even uncleanliness; she still needs supervision in order that she may conform to the ward sister's standards in these matters. It was a source of grief to the girl's mother when she was called to London to find that G—had failed to procure the artificial denture for which she had been sent money, and that her hair was verminous.
- (6) The absence of any warm affections; for instance, her cruel tales about her people; the lack of real emotion at the pain and trouble she has cost her family; her unabashed attempts at resumption of intimacy with her victim, Mrs. R—; this lack of affection is a point on which her relations, friends, lawyer, and her nurses are all singularly at one.
- (7) The absence of any real consciousness of guilt or shame. There is annoyance and irritation, and even fear, displayed when the situations in which G— always finally lands herself become impossible, but neither in her letters nor in her conversation, when actually charged with her fabrications, is there any genuine contrition or shame. There is no intellectual appreciation of the significance of her conduct. Charged in round terms with lying, G— either lapses into sullen silence after doggedly asserting the truth of her fictions, or she prevaricates with disarming skill and invention round the charge. weakening its significance in every possible way, or else she sometimes ends the matter with a half-helpless grin, and the remark that she did not think that the first lie in any one particular chain of fabrications would be believed, and then, as she herself says in one of her letters, "one lie means thousands before you finish." G- might thus be considered either as an unscrupulous cynic deliberately playing with the gullible fools who seem so numerous along her path, or as an

impish child, whose naughty ballon d'essai having met with incredible and unexpected success, is passively impelled deeper and deeper into a sea of deceit by the culpable stupidity of incompetent adults. Unfortunately, the problem is not so simple as this, though there is an element of truth in the latter view.

Though incapable of adhering to the truth herself, G— is quite aware of the difference between truth and untruth, and is quick to resent any report concerning herself of which she is made aware, and which she says is "untrue." In a letter she writes, "I have always been off the straight." G— knows it is wrong to tell untruths, to take money under false pretences, to tell unkind lies about her mother, etc., but all in an impersonal, detached, external fashion; the wrongness of it has no vital importance for her mentality, and therefore cannot act as a deterrent when by telling untruths some immediate gratification can be obtained.

- (8) The curious lack of real cunning, as shown by the absence of adequate precautions to prevent the lies being detected; they are told as freely and unguardedly to acquaintances of the family or to officials of the hospital where G- is under observation, as they are to strangers whom they might be expected to deceive. Again, the same individuals will be lied to repeatedly after exposure. As her lawyer exclaimed in exasperation when trying to analyse this aspect of her conduct, "as a criminal she is contemptible." Mrs. R- put it that G-never heeded where her tales led, but always trusted to "something turning up" opportunely to save her from their inevitable consequences. There has been superabundance of lying, of inspired and plausible mendacity, but no sign of really intelligent criminal subtlety. G-'s offences are of the self-limiting type of crime from sheer lack of wisdom, and inevitably lead to the police court.
- (9) The vices in which G— has not indulged. Theft does not seem to have been committed in the ordinary vulgar acceptance of the word, except perhaps twice, and that fairly recently in her career. Deliberate theft is, however, one of the declensions that G—'s morality, already not too high, will probably undergo unless artificially prevented. Sexual immorality does not seem to have been indulged in; nor is there any evidence of any alcoholic habits.

- (10) The complete remembrance of the lies told and the things done, of the money borrowed and spent, of the flights in all their details, coupled with the inhibitory control, probably very far from complete, of the lying habit when in contact with her home circle. That is, the complete continuity in consciousness of the lies.
- (II) The irregularly occurring flights that seem in each instance to have been determined not by any real anguish of mind, agony of regret, or paroxysm of shame, or any ascertainable fits, but simply by annoyance, or fear, at a situation that has reached an *impasse*.
- (12) The absence of any anæsthetic skin areas, or of any definite fits or emotional crises beyond what have already been noted.
- (13) The pleasant, intelligent, rather engaging air and manner of the patient in her more even moods. When G— feels important she fairly irradiates happiness, and manifests a rather striking physical alertness and poise. G— seems to be attractive to the people with whom she comes in contact, and is well liked in hospital. Nevertheless, there is at times something vaguely repellent about her that makes the accounts of her irritable temper easily credible.
- (14) G— has no delusions and no hallucinations that have been discoverable during 7-8 months' observation; neither has she manifested any real depression or exaltation.

Discussion.

G— may be considered as very fairly typical of all such cases. The age at which the condition becomes apparent may be even earlier, one case that has been reported lately in the newspapers concerns a boy æt. II. The precocity and the voracious reading are typical, so are the lack of concentration and persistent effort of any kind, and the curious busy idleness. The irritability may or may not be excessive or defective. Emotional and moral indifference, and an unjustifiable self-conceit, are constant characteristics; as is the plausible yet essentially stupid lying. The vicious habits indulged in vary, of course, in number and degree. A pleasant, rather taking air, combined oddly enough with something repellent, is also typical, and is remarked on by numerous observers. The picture as a

whole is always amazingly the same, but the colour gradations vary within wide limits.

These cases are baffling, really more by reason of their high degree of mental attainment than by their deficiency. Figuratively, the vulnerable heel of Achilles is in his head and so well concealed that the essential weakness due to its presence there is just at first not easily appreciable. Minds such as these are working at lower, more automatic level than the average, and they are endowed with everything except the power of earning by concentrated effort and industry the right to the higher grade gratifications of civilised life. This more automatic or reflex character is indicated in two ways; first, by the typical physical restlessness, frequently exhibited as spasmodic muscular movements, which in some cases may develop into definite attacks of chorea; second, by the need for an immediate and indiscriminate satisfaction of any given desire. Patients of this type are flotsam, at the mercy of impulse and desire, over which they are unable to exercise any selective control. They are incapable of not responding to the stimulus of any passing whim, and they become guilty of technically immoral actions, owing to their being non-normal, irresponsible creatures in a moral society of responsible individuals. What these people cannot earn, however, they covet, and if they cannot earn the just rewards of effort, such as wealth, respect, admiration, fame, or glory, etc., they nevertheless can and do assume them. In these matters they even improve upon the cynicism of Hamlet's advice to assume a virtue though one have it not. The amazing thing, however, that is almost as interesting sociologically and pathologically as the patient, is the number of supposedly competent people who accept unquestioningly, nay, with admiration, the claims he puts forth. No normal individual, of course, could support life without the enjoyment, in some degree, of the higher grade gratifications, sanctioned at least by his own, and preferably supported by other people's judgment. Thus there may be in this, so to speak, insane theft of unearned gratification, an element of a sense of deficiency on the part of these patients; a concealment from others, and perhaps ultimately from themselves, of an organic "fault" which causes an unpleasant sense of personal inferiority. This view recalls at once Janet's (1) definition of the "starting point of hysteria,"

that it is "a depression, an exhaustion of the higher functions of the encephalon." In the writer's opinion, however, the cases under discussion are suffering from a developmental absence of the highest cerebral levels, and this brings them at once within comparable distance of some of the manifestations of hysteria, though it does not in any way identify the two conditions. The relations between hysteria, epilepsy, and insanity are not yet understood, nor are the confines of their territories settled. In this connection it is worth noting that of seven cases of which I have been able to obtain accounts, one has a family history of insanity and epilepsy, one of insanity and "nerves," one has already been the victim of an attack of acute insanity as distinct from her permanent mental deficiency, and two at least present to the trained eye the epileptic facies with its suggestion of impulsiveness. The early manifestation of the condition, however, in cases whose career can be completely traced, seems to me a strong argument against considering them in the light of hysteria; these patients are suffering, in the writer's opinion, from a deficient development, from a degree of primary amentia, not from a secondary dissociation of a possibly feeble but complete mentality. Further, the permanent and apparently incorrigible nature of the affection also supports this view.

It is probably clear enough that G—, and all her numerous brothers and sisters in affliction, are cases of insanity of arrested development, of feeble-mindedness, or high grade mental deficiency, and, as in all really high grade deficients, the moral manifestations of the condition are the most striking. That is, G— is morally an imbecile, but the moral imbecility is probably due to a mental deficiency, and is only its most striking manifestation. As Maudsley (2) writes of cases of moral alienation: "One cannot truly say, however, that the intellect is quite clear and sound in any of these cases, while in some it is manifestly weak."

Till the age of 12-14, G— was apparently normal enough; she had an intelligent, ingenious child's quick superficial apprehension and love of the marvellous; a child's lack of wisdom and of appreciation of the relations of means to ends; the vague, arbitrary, externally imposed conceptions of right, which have at first no emphatic internal sanction in a child's mind; a child's simple, rather unintelligent emotionalism, frank

selfishness and self-importance, lack of control, lack of concentration, love of display and need of immediate gratification; a child's uncertainty and indifference as to where falsehood and truth begin or end; the low standard of personal cleanliness that many children have; a child's utter lack of insight into its own mentality. In spite of this, however, G— was probably never normal, though her essential abnormality did not become apparent till circumstances gave it scope for development.

Any child æt. 12-14 will present any of the above qualities more or less clearly marked according to the varying rates of individual development, etc., but no normal child presents at any one time quite so unpleasant and incongruous a mental whole as do G— and her like. This is because the more primitive phases of mental development in normal children are only appreciated as dissolving views progressing steadily to adjustments more developed, co-ordinated, and harmonious. A deficiency or redundancy barely becomes irksome to the observer before it is found to have been more or less rectified; its place, it is true, may be taken by another as glaring, but it too in turn becomes appropriately co-ordinated, and, with a sigh of relief, the parent realises that the child is no longer the "young savage" of earlier stages. In G-'s case, however, there has been no gathering up of the reins of cerebral government by the highest intellectual levels, owing to the developmental deficiency of those levels, and there results the grown-up abnormal child with its insubordinate mental acquirements stereotyped and emphasised in all their unharmonised crudities. It must be remembered that these cases are not only suffering from the negative effects of a deficiency of the highest grade mental levels, but also from the positive effects of an abnormally uninhibited action of the lower grade levels. The child that never grows up must keep eternal normal childishness of body as well as of mind not to be an ineffably tragic figure in a grown-up world.

Dr. Mercier (3) puts it thus in discussing these cases. "If we pass in review the qualities that have been described as characteristic of the persons in question, we cannot help being struck by their similarity to the qualities of uncivilised man. The fundamental defect in their nature, the incapacity for steady, continuous, persistent industry, is eminently and emphatically the defect in which the savage is most conspicuously inferior

to the civilised man. The other qualities which are defective in them are defective in the savage; those which they possess, they possess in common with him. In their shallow cleverness; in their manual dexterity; in their addiction to crude artistic performances; in their fondness for sport; in their sedulous care of their personal appearance; in that colossal mendacity which indicates, not so much a disregard for truth as a want of perception of it; in their personal conceit and vanity they proclaim aloud their kinship to the savage. Two other qualities only are needed to complete the parallel; and neither is wanting. The lack of intelligent foresight, which renders the life of the savage an alternation of orgies of gluttony with intervals of starvation, is paralleled by the equal lack of the same quality which his modern representative exhibits when he squanders upon luxuries in a fortnight the means which, if properly husbanded, would have kept him from penury during the remainder of the half-year. And the complement and obverse of this lack of foresight, that forgetfulness of past distress which deprives the savage of his incentive to provide for the future, not only performs the same office for the class of men here dealt with, but prevents them from experiencing that normal and proper depression and loss of self-esteem which these repeated failures ought to produce. Even the impulsive ferocity of the one is represented by the short-lived outbreaks of anger in the other. In all essential respects the person whose character has been sketched is a reproduction, at a later date, of the qualities of his remote ancestors. He 'throws back' to his forefathers. He is an example of atavism, of reversion. As a civilised man he is a failure, but he is a very fair savage.

"... This, then, is his position: he is out of adjustment to his circumstances; moreover, there are no circumstances to which, if left to himself, he can adjust himself. The unadjustment is due, not to disorder of the process of adjustment, but to defect of the process. He is as wanting in the ability to conserve his own life by his own efforts as is the imbecile who cannot be taught the difference between a shilling and a farthing. His defect is not of the same nature, it is true; it is not an inability to perceive the true relations among simple phenomena; it is an inability to forgo immediate indulgence for the sake of greater future benefit; and if we regard this

These cases then belong to, if they do not form, the class or highest grade mental deficients; they are of quite frequent occurrence and are found in every social class, and in each are accounted, for a time at least, among the clever and gifted. Individual cases vary naturally in the exact degree and manifestation of their mental handicap, but essentially, until the deterioration due to evil habits sets in, they are an intelligent set of people, usually of pleasing address, and, as would be expected, showing few if any of the outward stigmata of degeneration. Ironically enough, these high grade defectives are ultimately much more severely penalised by society than those of a lower grade. It requires little acumen to diagnose the child who steals aimlessly and openly, who wears stolen jewelry in the sight of the owner, who tells unnecessary lies, who is idle, stupid, and uncleanly, and that individual is promptly and properly segregated and placed under due restraint before she has come into serious conflict with society. The intelligent precocious youngster, however, whose plausible fabric of lies is based on a not impossible foundation, whose aberration from the normal is too subtle at first for proper appreciation by the untrained, is rarely diagnosed in time to prevent disaster to his victims, his relations, and himself. It is only after prolonged experience of the insane irresponsibility of these cases that they are sometimes considered in a proper light, and it is fortunate indeed if by that time the patient has not found himself in prison, or suffered social ostracism, acknowledged of no man, and accepted of no institution. He has all the mannerisms of sanity, but none of its principles, and unfortunately his mannerisms are accepted at their face value by most people until betrayed by the lack of principle, i.e., the insanity; and then it is the machinery of punishment, of retribution, not of sympathetic analysis, that is promptly set in motion against him. The average individual eventually sees in G- and her like merely social parasites of the worst

description, battening on their more naïve neighbours, and does not pause to inquire why they should be parasitic, nor what is the rational treatment that should be meted out to them.

Bandied about finally between legal and medical authorities, these people still remain round pegs in the square holes whether of prison or asylum. The prison authorities regard them as incorrigible and constantly-recurring nuisances, the asylum authorities have little love for them owing to the difficult atmosphere their peculiar mentality at once creates in such specialised surroundings; in both institutions they are sources of constant trouble and expense, and can hardly ever be permanently detained even in the asylum. Yet these patients are not criminally responsible, neither are they sane. A third type of segregation would therefore seem imperative, which, to be of any practical value, however, should come into operation before ever the tedious and expensive medico-legal conflict over the patient arises. It is therefore a matter of real social importance that these highest grade defectives should be recognised early in their career, and suitably cared for. Their whole lives are anti-social, and they have a markedly disintegrating effect whatever their social rank, and it is this that makes them a social menace. At school and college they exercise an evil influence over their companions, an influence that is rarely fully appreciated by parents or guardians. I know personally of one harum-scarum lad who was adjured by his parents to take as his model a flagrant example of this type of defective, so pleasantly had the latter impressed them with his easy manners and accomplishments. Among the better educated classes these cases almost always become involved in dishonest pecuniary transactions of more or less magnitude. money being so essential a factor for the gratifications of modern life. As time goes on, more and more vices are indulged in, and these people "go under" in various ways, are cast off by outraged relatives, dismissed to the colonies, and descend the social scale with much rapidity. The socially inferior cases are less seldom involved in pecuniary transactions, at any rate of any magnitude, but their inveterate mendacity in itself is always a disruptive factor in their lives. and this, and their incapability of sustained effort, sets them drifting from one temporary occupation to another. These are

some of the people who swell the ranks of casual labour of all descriptions; men who drift from one more or less skilled job to another; women in domestic service who pass without a "character" from one situation to another. Wherever these people go, they create ever-widening circles of antisocial influences based on irresponsible lies and actions. Much time and money, often ratepayers' money, is spent on each of them before they pass out of existence, and it is spent in a manner profitless to all concerned. Amazingly few ever seem to reach proper institutional care. Out of 7 cases of which I have been able to obtain accounts, I is in an asylum, I is under observation, I has lately been compelled by his relatives to enter the army, 2 are domestic servants, I was in service but has died of cardiac disease, I was a partially-trained hospital nurse but is now married.

Treatment of such cases in the sense of aiming at a cure is, on the face of it, impossible. Treatment can only be directed towards protecting these individuals from themselves and from society, and society from them, and this means some kind of suitable restraint. They are, however, an exceedingly difficult people to deal with, and their detention must have a clear legal sanction, as their endless chicanery and unfathomable plausibility render essential an absolute authority for the proper control of their activities. As already suggested, the need for this control is twofold, as there are at least two people concerned in the matter, that is, the patient himself and his victim. It is in no flippant spirit that reference has already been made to the havor that these high grade mental defectives can make in other people's lives. There is a large proportion of the community that needs active protection from the sinister endowments of these by-products of civilisation. So firmly, pace modern cynicism, are the foundations of civilised society based on the convention of mutual trust and good faith, that it is only a fairly small proportion of people who have insight enough to suspect its insane abuse by these cases. The history of every one of these high grade defectives shows that the simple, the gentle, and the stupid, are their victims in purse, reputation, and peace of mind, yet these form a large section of our eminently respectable and industrious, and, therefore, valuable citizens. The less astute members of society have as good a right, and a greater need, to be protected from the

subtle machinations of insanity as they have from the obvious depredations of the ordinary criminal.

The cost of segregating these cases is always a matter for anxious thought, but much has to be carefully considered before the problem is dismissed as insoluble on those grounds. Against the cost of providing suitably for them must be put the profitless expense with which such cases always, sooner or later, burden the State as embezzlers, "in and out" prison cases, temporary asylum inmates, patrons of various anti-social vices, parents of illegitimate children, and last, but by no means least, as instigators of crime and vicious living in others. Also it must be remembered that these individuals under discreet guidance are capable of much-skilled manual, and quite an interesting amount of mental, work, and it should not be impossible to make them defray much of the cost of their own keep. Again, many cases are of comparatively wealthy parentage, and suitable maintenance fees might be charged. The proper control of these high grade defectives would undoubtedly be an economy for everyone concerned.

Environment during childhood does not seem to exercise the slightest influence on these patients; they occur in families of good social position, of good parentage, and in which, under exactly the same circumstances, several other children of varying temperaments grow to happy, normal adult development. The true mental defective, of whatever grade, is born, not made.

Granted, then, that these cases of defective mental development are a social menace, and require restraint of some kind: how, and when, and by whom should we expect them to be recognised?

The mental defect in these cases only becomes apparent during the years of late childhood or early adolescence. It might therefore be considered that the parents would be the surest observers of the condition, but this, except very rarely, is far from being the case. Several things militate against this. Not infrequently the parents are elderly people and the children precocious and active, whose rapidity of development utterly blinds their parents to their later shortcomings; or, as in G—'s case, the parents are more or less shut out from the child's real life, which goes on at its debased level outside their ken. The awakening in either case is a long and difficult process and usually comes too late.

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As a matter of practical fact it should be the schoolmaster or mistress, failing really intelligent parents, who should be able to warn the relatives of the developmental anomalies that they are witnessing in the child. This is certainly the case in boarding-schools where the leaving age is 16–18 or more; in board schools the condition may hardly have begun to assert itself before the age for leaving school, i.e., 14. All teachers, of whatever social class, however, should be capable of recognising the various indications of mental deficiency in their pupils occurring at any age. The difference between these high grade defectives and the lower forms is after all only one of degree, but there are one or two points especially suggestive for the early detection of the former, and not usually connected in the lay mind with mental deficiency.

First, and perhaps most important of all, precocity of any kind. Precociousness may be due to one of two causes, and always requires judicious examination and treatment; it may be due to a real and unusual development, or it may be due to an absence of normal inhibitions, in consequence of which there is temporary overaction of certain powers suggesting an apparent precocity. The latter cases always end, as they begin, in mental disability, the former in many instances also, except under very favourable circumstances.

Second, voracious reading. Habits of excessive reading should always be suspect; in itself reading frequently signifies little, occasionally it may indicate a budding literary talent, but, associated with other signs, it sometimes points to an unoccupied indolent mind, of intrinsically poor imaginative power, and a craving for constant external stimulation. The large vocabulary and apparently great imagination of the cases under discussion will usually be found to be merely reproductions from sundry of their literary adventures.

Third, an unusual facility and flow of language, uncorrelated with any attempts at original literary composition save that of letter writing, which may, however, be excursive.

Fourth, a growing discrepancy between a child's intelligent, alert manner, and apparently quick apprehension, and its power of reproducing good work of its own initiative; it is the discrepancy that is important. Children merely of poor mental initiative are rarely alert in manner, or apparently quick of apprehension, and never clever at mere verbiage. That

is to say, the ordinary child of average but slow mentality, the perhaps "stupid" child, does not present at all the same picture as the high grade mental defective.

Fifth, the permanence of an emotional and moral indifference, not uncommon as a transient phenomenon in children.

Sixth, the permanence and expansion of a habit of ingenious lying; most children are untruthful more or less, but the habit is discarded as a stupidity during normal mental growth; here it is the ingenuity and plausibility of the lies, and the permanence of the habit, that are important.

Seventh, teachers should always consider carefully the child whom, though to all appearances normal, its companions tolerate good-naturedly as "queer," but treat as something other than themselves. The more intelligent school and college companions of most of these cases are usually well aware of their oddity, and this in itself should constitute a matter worthy the careful scrutiny of responsible people.

All educationalists hold that mere instruction does not constitute education; the function of education is, as far as possible, to prepare the individual for "complete living" (4); and observant teachers, with this ideal in view, will find that it is in this respect that they fail utterly with these high-grade defectives. It is possible to convey to them a very considerable amount of instruction, but they cannot be educated. It is impossible to cultivate in these minds a proper apprehension of the connection between actions and results, whence disorder of conduct must be the inevitable outcome. After a given time the proper continuous organisation of acquired knowledge ceases to take place, there is no further real mental assimilation. and no development of discrimination. Later still, of course, no further knowledge at all is acquired. These cases cannot even achieve the educational conventionalism that steers the stupid individual safe through life; they are indeed refractory to education in that they cannot accept it passively, nor benefit by it actively. These children are not in normal reaction to their social and moral surroundings, and it is of this conflict with, and lack of progressive adaptation to, their surroundings that the teacher should be aware whenever it becomes at all serious. After some given point no further development occurs in the individual in his preparation for the duties of life. and it is this cessation of educational development that is the danger signal, and that, occurring sporadically in one child amongst other children of normal progressive development, should be fairly easily noticeable by the skilled and interested onlooker. The suggestive indications are many, and their occurrence should at least lead to the investigation and discussion of their possible significance in every instance.

Thus the cases that are under discussion fail, owing to their comparatively high grade development, to obtain classification as defectives under the Binet-Simon (5) tests. Healy (6) attributes this largely to the fact that these tests call so much for "language responses," in which he considers this "verbalist type of defective" to be specially gifted, as some defectives are gifted in arithmetic, etc. Some German observers share this point of view, and crystallise their opinion in the irresistible name of Pseudologia phantastica. The verbal fluency is undoubtedly one of the signs that tend to conceal from the lay mind any suspicion of the mental deficiency that it cloaks, but it is after all only a facet of that very subtly-cut diamond, the mind of the highest grade defective.

Reported, then, to the senior school authorities, to the parents, and referred to suitable medical observation, it should be possible to ensure the proper recognition of the greater number of these high grade defectives, hitherto so largely overlooked and misunderstood, and to ensure their proper care, to the mutual advantage of themselves and of the community. The urgency lies in the early recognition of these cases before they have come into any serious conflict with society. Cases that escape the observation of the educational authorities should be capable of being detected early in their career through the agency of properly administered juvenile offenders' courts. A small number of such individuals will always, probably for a time at least, slip through the meshes of both these sieves; ultimately, however, even these will be convicted, so to speak, out of their own mouths, and suitably and safely provided for.

The crux, perhaps, of the whole question lies in the proper education of school teachers, of all classes, in the elements of normal mental development, and in some of the manifestations of the more frequent and simple aberrations; seconded by the frank recognition on the part of the medical and legal professions of the mental deficiency of such high grade cases, of the utterly incurable, uncontrollable nature of the affliction,

and of the only possible solution of the difficulty by proper institutional or other restraint.

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- (6) Healy, William. The Individual Delinquent. Heinemann, 1915.
- (1) Read at the Glasgow meeting of the Medico-Psychological Association, March, 1916.—(2) The words "high grade" as applied to mental deficiency are used in this paper in the same sense as they are used when applied to "high" or "low grade" imbeciles, i.e., "high grade" signifies a comparatively slight degree of deficiency.—(3) I have to thank Dr. Ivy M'Kenzie for affording me every facility to study this case in detail in his observation mental wards at the Eastern District Hospital.

Diet as a Factor in the Causation of Mental Disease. By CHAS. MERCIER, M.D.Lond., F.R.C.P.Lond., late Physician for Mental Diseases to the Charing Cross Hospital.

"Forty years long was I grieved with this generation and said: it is a people that do err in their hearts, for they have not known my ways."

It is just forty years since I first ventured to call in question the accepted doctrines of the causation of nervous diseases. In an article in the British and Foreign Medical and Chirurgical Review, an excellent quarterly now long defunct, I likened the imagination of physicians in this respect to the imagination of that fortunate sailor to whom was granted (nowadays we should say who was given) the fairy privilege of having three wishes fulfilled. After he had secured all the rum in the world and all the tobacco in the world by his first two wishes, he could think of nothing further to desire than "a little more rum." So physicians, after they had attributed every known nervous disease to sexual excess and syphilis, had no explanation of a