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A TEXT-BOOK OF INSANITY

A TEXT-BOOK OF INSANITY

AND OTHER MENTAL DISEASES

BY

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TO

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REGIUS PROFESSOR OF PHYSIC IN THE UNIVERSITY OF CAMBRIDGE

IN RECOGNITION OF HIS EFFORTS

TO PROMOTE THE SCIENTIFIC STUDY OF INSANITY

DURING HIS TOO BRIEF TENURE

OF THE OFFICE OF

COMMISSIONER IN LUNACY

PREFACE

TO THE FIRST EDITION, 1902

YEAR by year the students to whom I lecture ask me what book on insanity they ought to study, and year by year I have to recommend books which I know to be excellent in themselves, but which I feel are of such bulk and volume as to be out of proportion to the time which students can profitably give to an outlying subject, and to the vast mass of other material which they have to assimilate during their brief curriculum. Before that important event which took place in the year B.C. 2348,* medical students might have spent forty or fifty years in preparing for examination, and have looked forward to commencing practice when they were entering their second or third century, but nowadays it seems incumbent upon their teachers to avoid discursiveness, and I think that our knowledge of insanity has reached a point at which its various forms and varieties, like those of bodily disease, can be described as types, without having recourse to descriptions of illustrative cases, which bulk so large in most text-books on the subject. Moreover, I was anxious to put forward the distinction that I have drawn in this book between forms of insanity and varieties of insanity, a distinction which I think goes far to solve the difficulties of classification which have been so great a stumbling-block to successive writers on insanity for generations.

* According to Ussher, but the Septuagint has it B.C. 3246.

In giving a preliminary sketch of the normal processes of which insanity is the disorder, I have followed a course which is very unusual, but which I have pursued for many years in lecturing on the subject, and have found to be a very useful foundation on which to build a knowledge of insanity. Special stress is laid upon observation of conduct, which is in my opinion the key to the subject. The causes of insanity have also been separately dealt with, and as I hold that there are not insanities, but insanity only, this course is at once convenient and logical.

C. M.

Flower House, Catford.

PREFACE

TO THE SECOND EDITION

THIS book was primarily intended for the use of students of medicine, as an introduction to the study of insanity, to give them a general notion of the subject without going much into detail, and incidentally to be of use to them in examinations. In this object it succeeded so far that it became, I am told, the text-book in use in most of the Universities. It was not intended as an advanced book for those who make a special study of insanity, and in this respect also it has not disappointed its author, for the novel doctrines contained in it do not appear to have become known to them yet.

In preparing a second edition, I have addressed a rather wider audience. The book will still, I hope, give the novice a general idea of the elements of the subject, but if he is reading merely for the purpose of preparing for a qualifying examination, there is much that he will be well-advised to omit. It is never advantageous to an examinee to know more than his examiners about his subject. The considerable additions that have been made to the book are intended, not for the general student of medicine, who has enough subjects in general medicine to load his memory with without adding the superfluous burden of a knowledge of the constitution of mind ; but for those, now much increased in number, who devote themselves temporarily or permanently to the special study of insanity.

Insanity is a subject but little understood. When I began to study it there was no systematic knowledge of it at all; and even now it is considered, both by alienists and in legal phraseology, equivalent to disorder of mind, or unsoundness of mind. So regarding it, as I was taught to regard it, and as everyone but myself still regards it, I urged in my early days that the study of insanity—the disordered mind, as I then considered it—should be preceded by the study of psychology—the mind in health. The argument was logical and reasonable, and unlike most of my recommendations this was successful, but the experience of many years has made me sorely regret my success. We are all psychologists now. Many examining bodies grant degrees and diplomas in psychological medicine, and all that do so require of the candidates a knowledge of psychology, by which they mean the psychology of the text-books; but as a knowledge of text-book psychology is of no more value to the student of insanity than a knowledge of cuneiform inscriptions, I now contemplate the result of my well-meant efforts with rueful dismay; but still, though my argument led to this disastrous result, I yet maintain that it was right in principle. Insanity is of course not the same thing as disorder of mind, but it contains a considerable ingredient of disorder of mind; and of mind, as of everything else, disorder cannot be understood until order is known. I have therefore considerably enlarged the chapter on Mind, and it now contains an analysis and description of the normal mind specially adapted to the purposes of the student of the disordered mind and the alienist. The scheme appears to be an elaborate one, but it is the irreducible minimum necessary for the comprehension of disorders of mind; and though the divisions are numerous, the

plan of division is simple, and imposes no great burden on the memory. Certain faculties of mind—self-estimation and caution for instance—which are often disordered, are here distinguished for the first time, and many disorders that have hitherto been confused together are now discriminated. For instance, euphoria and exaltation, dysphoria and abasement, have never been discriminated, though each of them may occur alone, and some of them often so occur. The disentanglement of the highest level of thought from its inferiors is alone a justification for the scheme, for it is disorder of this limited constituent that distinguishes insane from sane disorder of mind, and that constitutes the criterion of insanity. It has taken a quarter of a century to obtain practical recognition of the principle that the study of the physiology of mind should precede the study of its pathology, and it will probably take another quarter of a century to substitute a fruitful scheme of the constitution of mind for a useless one. I shall not live to see the substitution, but as we grow older we grow more patient and more resigned.

The doctrine that insanity is disorder primarily of conduct and not of mind, manifestly and blatantly true though it is, has made little or no progress towards acceptance in the twelve years since this book was published. My alienist colleagues understand, when I speak of disorder of conduct, that I mean disorderly conduct in the police-court sense. The difference seems to me as plain as the difference between, say, a horse chestnut and a chestnut horse, or between £3 10s. and 3 lbs. 10 oz., or between A and a bull's foot, but I cannot get my colleagues to appreciate it, and it must wait for acceptance until a new generation takes their place.

Every writer on insanity has his own classification of

insanity, and I am no exception to the rule. I am exceptional, however, in paying some regard, in the classification I propose, to the accepted canons of classification. In the first edition of this book I formulated a scheme in which an approximation was made to the separation of insanity the symptom from insanity the disease, though the distinction was not at that time clear in my mind. I was convinced that insanity could not be classified in a single scheme, because there is more than one kind of fundamental difference between different cases, or more than one kind of kinds; and that the two series must be separated from one another before any satisfactory classification could be made of either. The resulting arrangement was an advance on previous classifications, but it was not wholly satisfactory, and no one recognised this more clearly than myself. It was unsatisfactory because I did not at that time recognise, what has since become clear to me, that the series is not double, but triple, and that no classification of insanity can be satisfactory, or free from cross-classification and confusion, that does not recognise the three concurrent series :—symptom, type, and disease.

Tried by all the tests that I have been able to apply to it, the classification now proposed is watertight. There is no inclusion of anything that is not insanity. Insanity is clearly distinguished from everything else, including unsoundness of mind. There has been no attempt to divide any class on three or four principles at once : principles of division have been applied one at a time ; consequently there is no cross-classification. Moreover, I think the alienist will find, as I have found, that the kinds of insanity brought together in this classification are such as, from their natural affinities, we think of

together as alike, and those that are separated are separated by a distance that corresponds with the number and importance of the differences between them. If a classification does these things it is a valid classification, and does all that is wanted of a classification.

The clinical descriptions of the various kinds of insanity have been slightly elaborated, but not much; for in the first place, our knowledge has not much advanced in this respect since the first edition appeared, and in the second, I kept in view the primary object of the book as a text-book for students. For examination purposes I am afraid the book will be to some extent vitiated by the exclusion of the fashionable titles of dementia præcox and manic-depressive insanity that have of late become so popular. I think I was the first to point out that mania and melancholia could not be distinct diseases, since they were often correlated in the same case; but I did not consider this the epoch-making discovery that it is known to be now that these cases are called manic-depressive insanity; nor do I think that the disease well known in my youth as primary dementia was first discovered when it was agglomerated with other disorders and called dementia præcox. Of the alternatives of conforming to what I trust is a passing fashion in nomenclature—there are as many fashions in medicine as in woman's dress—and giving what I believe is a true account of insanity, I have chosen the latter, even though by so doing I prejudice the sale of the book.

Certain hitherto unrecognised kinds of insanity are described for the first time in this book. The form of stubbornness or resistiveness was described in the first edition. Some allusion to it may be found in other

books that have been published since, but its importance as a distinct form of insanity has met with no recognition. Its importance lies first in its clinical significance, as a very irrecoverable form of insanity, and second in its remarkable pathological affinity with paranoia, an affinity that is pathological only, and does not seem to extend to its clinical aspect. I was perhaps ill-advised in not giving to it a fancy title. If I had called it "dementia recalcitrans" or "manic-recalcitrant insanity" it might by this time have been accepted as a great discovery. The other kinds that are here described for the first time are the two kinds of insanity of childhood. The very important distinctions between the various defects of memory have never been described before.

The definitions of idiocy and imbecility proposed in this book have been adopted by the Royal College of Physicians, by the Royal Commission on the Feeble-Minded, and in substance by Parliament, but they have not yet found their way into books on insanity; nor has the origin of these defects from lapse of the developmental impetus yet been accepted. It will be seen that alienists are not precipitate in adopting novelties that originate in this country, but in time—in five-and-twenty years or so—we may hope that what is manifest to everyone else will be accepted by them. Meantime, as Dr. Johnson said, I can wait.

CHAS. A. MERCIER.

August, 1914.

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INTRODUCTION

WHEN the student of medicine passes to the study of insanity, he crosses a scientific frontier, and enters an entirely new province of knowledge. Hitherto his purview has been limited to the processes that go on within the body, and whatever references he had to make beyond that field were indirect and of secondary import. He needs to know the structure and functions of the several organs of the body, and, when any function is disordered, his calling is to take measures to readjust the bodily processes to one another so that they may work in harmony again. He has, in short, to maintain the organism in a fit state to do its work, whatever that may be, but with the doing of the work he has no concern. What the work may be, and with what efficiency it may be performed, is no concern of his, except in as far as these things may affect the general capability of the organism to continue its existence. His position towards the patient is the position of the shipwright and the engineer towards the vessel on which they are engaged. Like them, he must be thoroughly acquainted with the structure and function of every part, and, like them, he must be upon the watch to repair the structure and correct the function, when the one is damaged or the other is at fault; but with the ship's course he has nothing to do. That is a matter altogether beyond his province. When the student oversteps the bounds of medicine to enter upon the study of insanity, he leaves

the engine-room for the quarter-deck. He is no longer directly concerned with the integrity of the structure or the efficiency of the engines. His function now is to set the ship's course, to note the way in which she comports herself in wind and weather, to study charts and tides, stars and clouds, to watch the barometer and to sound the lead, and generally to relinquish the observation of the ship herself, and to take up that of her relations to the world in which she moves. This is the function of the student of insanity—to study the individual, not *per se*, or *simpliciter*, but in relation to the world in which he exists, and in which he has to maintain his existence.

Insanity is often called disorder of mind, and this it is, but it is much more than this. Were it disorder of mind alone, we should not be called upon to treat it; for we should know nothing about it unless we happened to be subject to it ourselves. What goes on in the minds of other people we can never know, unless and until it is revealed to us by their conduct. Only by disorder of conduct can we infer the existence of disorder of mind, and when conduct is disordered, we may safely and immediately infer, we are irresistibly compelled to infer, the existence of insanity, without stopping to investigate the condition of the mind. If a general officer goes on parade in flannels and practising the banjo; if a parson goes into the pulpit and plays cup and ball before the congregation; if a hostess comes down to a dinner party in her night-dress and curl-papers; if a smith pulls a glowing horse-shoe out of the fire with his naked hand; if a navvy tries to break up the road with a saucepan; we do not need to sit down and investigate the state of their minds before we pronounce them insane; the

state of the mind is left on one side and does not enter into our consideration. We say at once that such conduct is itself insane, and needs no further evidence to establish the insanity. It is true that there are cases, many cases, in which we do investigate the state of mind, and in which we should not pronounce an opinion on the sanity or insanity of the patient until his mental condition has been investigated; but these are cases in which a portion, it may be a very large portion, of the conduct exhibits no disorder; in which the disorder of conduct is only occasional, and affects only a small, though it may be an important, department of conduct; and in which we have, perhaps, no opportunity of witnessing any disorder of conduct. In such cases we investigate the state of mind in order to discover whether conduct is likely to exhibit disorder; and it is an index to the likelihood of disorder of conduct, not as in itself exhibiting disorder, that disorder of mind is important. If we discover a disorder of mind that has no influence upon conduct, we cannot regard it as an indication of insanity.

Mind and conduct are not the only things disordered in insanity. The former is a sign, the latter is a symptom, of disorder of the highest nerve processes, whose function it is to actuate conduct, and whose activity is the condition under which mental states arise. These highest nerve processes have a double function. Not only do they actuate conduct, and thereby regulate the whole of the commerce between the organism as a whole and the universe which environs it, but they regulate also the whole of the internal processes of the body with respect to one another, harmonise and balance and preserve due relations amongst them. When the highest nerve processes are disordered, therefore, there is disorder

among these bodily processes—disorder which is often inconspicuous, but which, in the deeper degrees of insanity, is often very pronounced, and exhibits itself in anomalies of skin, hair, nails, sweat, etc.—superficial and conspicuous examples of a disordered metabolism which is doubtless present in the deeper tissues also.

Conduct, however, is the main thing that is disordered in insanity. It is disorder of conduct that gives to insanity its whole significance. Disorder of mind without disorder of conduct, if it were possible, would be unimportant, if it were important, would be unrecognisable; and thus the first essential to a knowledge of insanity is an enumeration of the main features of conduct, and of the ways in which conduct may be disordered.

PART I

THE INSTITUTES OF INSANITY

CHAPTER I

THE CAUSES OF INSANITY

WHENEVER a mechanism fails to perform the duty demanded of it, the reason must be either that the work is too heavy for the mechanism or that the mechanism is not strong enough for the work; and the two things are not exactly the same. When a human organism breaks down under the stress of life, in a way that the majority of men do not break down, it is because either the person who fails is weaker than his fellows, or the stress brought to bear on him is greater. For every person, as for every beam and every rope, there is a breaking strain. Load a beam or a rope with sufficient weight, and, whatever its strength, it will break at last. Subject a man to sufficient stress, and however well he may be constituted, he will become insane. In estimating the factors that go to produce insanity in any case, we have to consider, first, the person who becomes insane, and, second, the stresses to which he is subject.

The fact that the majority of people are sane, indicates that they possess a nervous organisation of sufficient stability and strength to withstand the stresses to which it is subject; and if here and there one becomes insane, it is because either his nervous organisation was not strong enough to withstand ordinary stresses, or he has been subjected to stresses of extraordinary severity. The great majority of cases of ordinary in-

sanity belong to the former class; cases of insanity of drunkenness, and of general paralysis, belong to the latter.

We have no means of gauging the efficiency of a person to withstand stresses, except by observation of his behaviour under their incidence; but, since every person is the outcome and product of his ancestry, we may make a rough guess at his efficiency by investigating his heredity. That heredity has a very important part in the production of insanity is proved, not less by clinical experience than by the considerations just dealt with; but what it is that is inherited in cases in which insanity "runs in the family" it is difficult to say. Insanity is manifested in conduct, and it is evidently absurd to speak of what a man is now doing as an inheritance from his forefathers. The only thing that can be clearly conceived as transmitted by inheritance is structure; and if a son "inherits insanity" from his father, what is transmitted from father to son must be some structural peculiarity of nerve tissue. There are several such peculiarities that may conceivably be derived by inheritance. In the first place, the process of development may be deficient in impetus; it may come to a premature close; and in that case the part of the body which will remain undeveloped will be the part which is the last to be completed—that is to say, the highest regions of the brain. The degree of development which is reached by these regions varies much in different persons, according to the strength and persistence of the developmental impetus. When these are exceptionally great, the highest nerve regions become exceptionally well developed, and the person attains to a high level of intellectual development. When the process of development is feeble, and comes

to a premature close, the brain never attains full development, and the person never reaches the normal intellectual standard.

But there are other forms of insanity than idiocy and imbecility, and many of the insane whose insanity "runs in the family" are of average, and even of more than average, ability. How can we suppose that, in such cases, the insanity is "transmitted"? Or rather, what is it that is transmitted by inheritance in such cases? The analogous case of tubercle may help us to understand. That inheritance has a large share in the production of phthisis is as indisputable at the present day, when the tuberculous process is known to be due to the invasion of a micro-organism, as it was before bacilli were discovered; but, though it is known that phthisis is influenced by heredity, it is known also that the bacillus is not inherited. What is inherited is a "delicacy of constitution," a "vulnerability," a "feebleness of resistance," such that, when the organism is invaded by bacilli, it has less power to attack and destroy them, they more easily effect a lodgment, establish themselves and multiply, than they do in the tissues of a person of stronger constitution. And some cases, at any rate, of insanity are closely analogous. Among the stresses that do unquestionably produce insanity is that of poison circulating in the blood, and supplied in the pabulum presented to the nerve tissue. There is indisputable evidence with respect to some of these poisons that the nerve tissue of different people has different power of exclusion or of counteraction. No observation is more trite than the amount of alcohol, for instance, which will make one man beastly drunk, will leave another but slightly elevated, and have no appreciable effect upon a third. And these differences

in the power of the nerve tissue to exclude or to neutralise the alcohol that is supplied to it are derived from inheritance. They are part of the innate constitution which the person derives from his ancestry. There is therefore nothing inconsistent with experience in supposing that similar innate and inherited differences exist in the power of the nerve tissue to exclude or neutralise other poisons ; and if, as is probable, many cases of insanity are due to the action of poisons upon the nerve tissue, the influence of inherited quality of nerve tissue is easy to understand in such cases.

But although poisons are among the most powerful stresses that the higher nerve regions have to withstand, and among the most frequent, they are not the only ones. As we shall presently see, there are many other stresses that are provocative of insanity ; but the way in which inherited incapacity renders the person obnoxious to the action of poisons helps us to understand the way in which incapacity, similarly inborn, may facilitate the occurrence of insanity on other provocation than that of poisonous food. We see similar differences in the power of the nervous system to resist disturbing agents, and to maintain equable action, in other respects. We see that the disaster which will reduce one man to despairing impotence will stimulate another to energetic activity. We see that the same insult which will provoke one man to uncontrollable rage will be treated by another with contemptuous indifference. And these differences, again, are innate, and are derived from inheritance ; so that we can dimly understand how it is that a set of circumstances which will produce insanity in one man will have no such effect upon another.

So widely spread and so strong is the belief in the

hereditariness of insanity, that proposals are frequently made to limit by law the marriage, not merely of persons who have been insane, but of those who have insanity "in the family"; and the expediency of such marriages is a matter on which medical practitioners are frequently consulted. Such proposals are impracticable. If marriage is to be prohibited in all cases in which a clean bill of health cannot be shown for all the individuals in, say, three generations, the practical result would be to prohibit marriage altogether; and although the offspring of those who have been insane are more likely to be insane, and to have children who become insane, than are the offspring of normal persons, yet it by no means necessarily follows that such ill results will accrue. The children of any individual who errs from the general standard of the race in any respect exhibit, in the great majority of cases, a return towards the standard. The children of giants are not so tall, nor are the children of dwarfs so short, as their respective parents; and very many of the children of the insane are as sound in mind as they are vigorous in body. Even when insanity is strongly prepotent in a race, and when four or five brothers or sisters are insane, there is usually at least one brother or sister who never shows a sign of insanity. The influence of inheritance in producing insanity is great, but it should not be exaggerated; and it would be a gross exaggeration to suppose that the children of an insane person must necessarily be insane.

There is a widespread opinion that the children of cousins german are more prone to insanity, and especially to weakness of mind, than other people. The very thorough investigations of Mr. Huth into the marriage of near kin have not sufficed to dispel this

opinion, in the face of the occasional occurrence of idiocy or insanity in the offspring of persons so related. That such cases do occur is indisputable, but that in very many cases the offspring of cousins german are as normal and as well endowed as other people, shows beyond question that it is not the mere existence of blood relationship between the parents that produces this effect. The truth seems to be that if there is any heritable disposition in the common family, whether this disposition be to phthisis, gout, cancer, insanity, or what not, the inheritance in the child is intensified by its derivation from both parents. The same intensification would be produced even were the common grandparents destitute of any such heritable disposition, if such disposition existed in both of the unrelated parents of the cousins. Whether the person gets his morbid inheritance from the common ancestor of his parents or from unrelated ancestors makes little difference. The important consideration is whether he gets the same kind of inheritance—inheritance of the same disposition or defect—from both his parents. In such a case the gravity of the inheritance is more than doubled.

The stresses that produce insanity are of three kinds. The first consists of those in which a disturbing agent acts directly upon the nerve tissue of the highest regions of the brain; in which they are bruised by violence, compressed by tumours, damaged by inflammation, or vitiated by the supply of a poison in the blood. These we will call "direct stresses."*

* It should be mentioned that the term "stress" has of late years been used in a sense different from that in the text, which was first applied by me in 1890 to the agents that provoke insanity. It is used to mean exercise, fatigue, exhaustion of nervous tissue. The former meaning has been restored in the text.

Gross lesions of the brain, in their active stage, are seldom attended by insanity in the clinical sense. Meningitis, cerebral abscess, cerebral tumour, concussion, fracture of the skull, wounds, lacerations of the hemispheres, are attended, not by active insanity, but by various depths of coma; and coma, though scientifically it is a form of insanity, and though it is the form which all insanities assume at last, if they go on to the end, yet, since it is not clinically regarded as insanity, need not be dealt with here. Although, however, in their active stages, gross lesions do not produce clinical insanity, yet, if they damage or destroy convolutions, this damage may be evidenced in insanity when the coma is sufficiently cleared up for the defect of sanity to become recognisable. In every large asylum there is a proportion of weak-minded inmates whose defect of mind is owing to gross structural defect of brain, the result of previous active process.

By far the most important of the direct stresses, perhaps the most important of all the stresses which contribute to the production of insanity, is alteration in the composition of the blood by which the highest nerve regions are nourished.

Simple deficiency of nutriment reduces the efficiency of the function of the nerve tissue, which exhibits itself in deficiency of sanity. In starvation the mind is weakened according to the degree of the starvation, the attenuation of mind reaching to actual unconsciousness when the starvation is extreme, and when the deprivation of nourishment is complete and prolonged. Even when it is neither, but the heredity is bad, the weakness of mind may be accompanied by active insanity. In a large proportion of the cases of acute insanity that we have to treat, a greater

or less degree of starvation has been one of the factors in its production; and copious feeding is one of the most important modes of treatment of acute insanity.

The deficiency in the nutritive supply of the brain may be due, not to starvation, but to hæmorrhage, or to any other condition in which the blood is impoverished; and whatever the cause of the impoverishment, the deterioration of sanity is the same, provided the impoverishment is the same in degree, and the resistive power of the nerve elements is the same. Hence we sometimes meet with insanity, usually of a very intractable type, after severe hæmorrhage; and in all exhausting disease there is some deterioration of mind—deterioration which, in persons whose nervous system was originally badly organised, may attain to actual insanity.

More potent even than attenuation of the nutritive supply to the brain is its vitiation. By introducing a poison into the blood, we can produce insanity at will. We can regulate the degree of the insanity by the amount of poison that we administer, and we can maintain the insanity as long as we please by continuing the administration of the poison. Proof of these statements is exhibited by every case of drunkenness, by every case in which chloroform or ether is administered. The insanity of acute alcoholic poisoning is extremely instructive. From it we learn that the rapid administration of a very large dose of the poison will produce rapid death by coma; that the rapid administration of a smaller dose will produce a madness of short duration, passing, in a few hours, through coma into recovery; that a more gradual administration of several smaller doses, extending over some hours, will produce an exalted delirium of

a milder type, passing presently into sleep, and so to recovery; that in those who have been accustomed to take alcohol in great excess, the sudden deprivation of alcohol will produce an attack of acute insanity of very different form, characterised neither by maniacal fury nor by jovial exaltation, but by suspicion, misery, and prominent hallucinations of vision, a form of insanity which is of longer duration than the others, and lasts for several days; and, lastly, that the administration of alcohol prolonged for years, will give rise to yet another kind of insanity, a kind in which the exaltation of the third phase is often combined with the suspicion of the fourth, and to them are added pronounced defects of intelligence, and especially of memory, and in this form the duration is still further prolonged. It lasts for months and years, and is often irrecoverable.

The different effects of different dosage, and of greater or less prolongation of the administration of the poison, are not all that we learn from the administration of alcohol. We learn also that the manner in which the insanity is manifested depends not only on the dosage and the mode of administration, but upon the nature of the person to whom the poison is administered. One person becomes hilarious, jovial, and braggart in his cups; another becomes sentimental, maudlin, and confidential; a third becomes suspicious and morose; a fourth is cantankerous and quarrelsome, a fifth merely stupid, and a sixth, under the same administration of the same amount, becomes furiously maniacal, violent, and destructive.

Alcohol is very important, because it is not only one of the most frequent, but the most manageable, of all the poisons which produce insanity. The number

of these poisons is very large, and their constitution most diverse. They include such simple substances as carbonic acid, whose intoxicating effect is seen in the delirium of heart disease, and perhaps in that of pneumonia, and substances so complex as the toxins produced by the specific organisms of zymotic disease. They include foreign substances introduced into the body from without, as well as toxins produced within the body by variation of its own metabolism, and, perhaps most deadly of all, toxins produced by invading microbes. Seeing how readily and how frequently insanity is produced by the administration of alcohol, and how very familiar we are with the delirium of fevers, a form of insanity that has for many years been recognised as due to the action of poisons, it is a little surprising that the influence of poisons in producing insanity has only recently had its due importance assigned to it; but it is not at all surprising that as soon as the toxic origin of insanity is fully recognised it should be exaggerated, and that the claim should be made that every case of insanity is of toxic origin. This is certainly not the case; but still, the part of blood-poisoning in producing insanity is a very important one. It is probable that it accounts for all, or nearly all, cases of acute insanity; and it is now certain that it has a very large share in the production of general paralysis of the insane. The nature and mode of origin of the poison are often very obscure. It is no doubt often produced within the body by some fatal variation of its own chemistry, while often it is introduced from without. Disease that is due to poisoning, whether the poison is introduced into the body or produced within it, is usually febrile in character; it is usually accompanied by raised temperature and

other signs of fever; but the poisons that produce insanity do not usually produce fever. In the delirium of zymotic disease there is, of course, fever. There is fever in acute delirious mania, which is probably a disease of the same class. In some cases of puerperal insanity there is fever from absorption of the decomposing contents of the uterus; but in the great majority of cases of acute insanity, which are in my opinion due to intoxication, the temperature is not raised. This is a very important clinical observation, for occasionally the invasion of zymotic disease—of smallpox, scarlet fever, typhoid or other fever—is marked by an outbreak of acute delirium which is indistinguishable from the acute insanity due to other toxins, except by the temperature. A raised temperature in acute insanity should, therefore, always arouse suspicion of zymotic disease.

This is the most appropriate place in which to enumerate sleeplessness among the provocations of insanity. As with several other factors in the malady, it is difficult to determine how far it acts as a cause and how far it is a symptom merely. That there are very many persons who habitually sleep very badly—lightly, intermittently, and for an insufficient number of hours—and who yet never come within measurable distance of insanity, is certain. Equally certain is it that acute insanity is often preceded for days or weeks by a great and unusual degree of insomnia, and that the induction of sleep often marks the first step toward recovery; but whether the sleeplessness is a cause or a sign of the oncoming insanity is uncertain; nor is it very important, since in either case it is a warning, and in either case it is to be dealt with in the same way.

The indirect stresses that tend to produce insanity

are of two kinds—those which arise within the limits of the organism, and those which arise in the commerce between the individual and his circumstances.

In the first class are included all those bodily processes which make large draughts upon the stored energy of the nervous system, whether the demand is made by the process of growth and development, by that of reproduction, by bodily or mental exertion, by the processes of disease, or for recuperation after illness. Any process, in short, that is generally exhausting, may contribute to the production of insanity, and *à fortiori* the concurrence of two or more of these processes is eminently provocative of insanity.

Close observers of the development of children know that their mental development proceeds, on the whole, alternately with their bodily development; that they have periods in which their bodily growth is stationary, while their minds develop apace, alternating with periods in which their bodily growth is rapid and their mental development ceases, or seems even to retrograde. If, during the latter period, an injudicious attempt is made to force the mental development by close application to mental work, the consequence will be a serious "nervous breakdown" of the nature of insanity. The demand upon the energy of the brain is greater than it can supply; it becomes so depleted that it cannot carry on its current function, and the depletion exhibits itself in some form of insanity. The same condition may result, though more rarely, from excessive addiction to athleticism when the mental development is very active. If the combined effect of concurrent physical and mental development is exhaustive, still more exhaustive is the additional demand upon the energies of the organism which is made by the

evolution of the reproductive function at puberty, and when to this is added the further drain of frequent masturbation, we can understand how it is that insanity, or a minor disorder of the same nature, is so frequent in adolescence, and how it is that that is the period of life when stupor and hysteria are most frequent.

The dominant rôle of the reproductive function in the life of every organism will be pointed out in subsequent chapters. It has now to be noted that not only is reproduction the aim and end to which all life is subservient, but that reproduction and life are mutually antagonistic—that is to say, the full and complete life-worthiness of the individual is incompatible with reproduction ; and reproduction diminishes the life-worthiness of the parent so as in some cases to destroy him or her altogether ; and in all cases to render the parent, for a time at any rate, less capable of living, less apt and less competent to maintain the struggle for existence. Seeing that the motive of existence is the reproduction of the race, it is to be expected that, when this aim is attained, existence should cease, or at any rate should approximate to its close.

In the first place, the addition of the reproductive function to the powers of the previously unproductive organism is itself an occasion of disorder. The infertile organism consists of a large number of organs and functions co-ordinated together and acting one with another in due correlation as one harmonious whole. When a new set of organs and functions of dominant importance has to be added to those already in existence, has to be correlated with them, to be assigned their place in the economy, and to be allotted their share in the life, of the organism, it is evident that so far-reaching

and delicate a process of equilibration will be very apt to fail in exactitude, especially if the great co-ordinating agent, the brain, is lacking in power. Hence the period of the assumption of the reproductive function is always a period of danger, and very frequently of disorder. The liability to disorder is, in the early stage of the assumption, but small, and insanity at puberty is rare; but the reproductive function is not then fully acquired. It is not until after seventeen that the female is fully nubile, not until after twenty that the male is fully virile, and it is not until these ages that the incidence of insanity becomes serious. It is then only that the individual becomes, not merely capable physiologically of continuing the species, but awake to the responsibilities of life. It is then only that the real dangerous stress begins to bear upon the highest regions of the brain; and while insanity before these ages is rare, it then begins to be frequent.

The reproductive act is a great exhauster of energy. It is always and of necessity inimical to life. In many of the lower animals it is *ipso facto* destructive of life. In man, while it is not thus necessarily fatal, it is yet detrimental. It is exhaustive; it renders the organism less fit and less capable of resisting adverse circumstances; and, if it is repeated with undue frequency, its ill-effects become conspicuous. The woman who has children in rapid succession becomes enfeebled, anæmic, hysterical, the prey of neuralgia and of many nervous maladies, an easy victim to tubercle and other bacilli. The man who repeats the sexual act with great frequency becomes similarly etiolated and enfeebled; and both are apt to give evidence of the exhaustion of energy in neurasthenia or in insanity. The connection of masturbation with

insanity is very close. A few years ago masturbation was looked upon, it is scarcely too much to say, as the most potent cause and the invariable accompaniment of insanity; but nowadays masturbation is not regarded as the prime and sole cause of insanity. I may take some credit for exploding a belief which was once universal. In males, and especially in unmarried adolescent males, occasional masturbation is so extremely common that it is scarcely to be considered abnormal. The same is true of older men who have no opportunity for the normal gratification of the sexual passion. And by those who are becoming insane, or are liable to become insane, it is no doubt practised more freely, it may be to great excess. But insanity does not occur in people who are of sound mental constitution. It does not, like smallpox and malaria, attack indifferently the weak and the strong. It occurs chiefly in those whose mental constitution is originally defective, and whose defect is manifested in lack of the power of self-control and of forgoing immediate indulgence; and when it attacks those who were originally normally constituted, the breaking down of the power of self-control is among its first effects. It would be wonderful, therefore, if masturbation were not practised, and practised freely, by those who are liable to become, or are becoming, insane. And since the sexual act is in all cases a very efficient cause of exhaustion and depletion of energy, it cannot fail to assist the deteriorative process, to hasten the onset of insanity where this is impending, and to retard and impede recovery where insanity is established. But to look upon masturbation as the sole, or even the chief, agent in the production of insanity is to take a very exaggerated view.

In the female, indulgence in this vice is very much less common than in the male, and the mere fact that it is practised is *primâ facie* evidence that the girl or the woman who indulges in it has not attained to the normal standard, but is congenitally abnormal. In the female, however, the sexual act is less exhausting than in the male, and while the significance of masturbation as an indication of an abnormal mental constitution is greater, its importance as a contributory cause of insanity is much less.

While the female is less obnoxious to the deteriorative influence of masturbation than in the male, she is liable to other stresses of reproduction from which he is exempt. Upon her fall the stresses of pregnancy, parturition, and lactation, each of which may be the occasion of insanity. The "longings," and equally the aversions, of the pregnant woman are aberrations of mind so usual that they scarcely attract attention; but any occasion on which disorder of mind, however trifling, occurs in healthy and well-constituted people is an occasion on which insanity may occur in those who are less healthy and less well constituted. Indeed, considering how considerable are the mental disorders that often accompany pregnancy, the aversion to the husband, the excessive caprice, the restlessness and "nervousness," it is remarkable that insanity is not more frequent in pregnancy, for on the whole it is an infrequent occasion of insanity, only about one per cent. of all the cases of insanity that occur in women being associated with this condition.

The puerperal state is a much more frequent occasion of insanity, about six per cent. of all the cases among women occurring in connection with childbirth—that is to say, within a month or so of parturition—and

when we consider all that childbirth implies, we find no cause for surprise that this should be so. In the first place, when the child is born, an immense readjustment of physiological processes has to be made in the maternal organism. The great supply of pabulum that has hitherto been made to the uterus is now no longer needed there, can now no longer be dealt with there, and has in part to be drafted off to the breasts, in part to be dispensed with. The continual stream of effete products from the nutrition of the fœtus is suddenly cut off, all the arrangements for dealing with them are deprived of their material from this source. No doubt the rapid involution of the uterus supplies their place in so far as quantity goes, but the quality is probably very different, and needs further readjustment of excretory processes to enable it to be dealt with. Then the process of labour is itself a very severe drain upon the great reservoir of bodily energy, and thus diminishes its capacity to bring about these adjustments just at the time when they are needed. In addition to this, the hæmorrhage, frequently excessive, is of itself a cause of serious stress; and when to all these stresses is added the absorption of septic matter from the decomposing contents of the uterus, the wonder is, not that puerperal insanity is frequent, but that it is not much more frequent. In a certain proportion of cases of puerperal insanity, about one-fourth, the temperature is raised, and in these cases the suspicion that the insanity is dependent upon sepsis is often confirmed by the result of local measures directed to emptying the uterus of decomposing matter and sweetening its contents. But on the one hand, the adoption of these measures in such cases does not always produce improvement in the insanity, showing that even where the

temperature is raised, the origin of the insanity is not wholly septic; and on the other, we know that there are poisons which produce insanity without raising the temperature, so that we cannot be sure that where the insanity is not septic it is not toxic.

Puerperal insanity is most frequent in the first fortnight after labour, and when more than a month has elapsed before the outbreak, it is no longer called puerperal. At this period insanity is infrequent, and it is not until the later months of lactation that the liability again increases. The insanity of lactation is a disease of exhaustion. It occurs in women who have suckled long and freely, who have had insufficient food, and who have perhaps had to work hard ever since they rose prematurely from their lying-in. It is therefore much more frequent among poor women than among the well-to-do.

The climacteric is another of those periods of physiological adjustment which make so severe a call upon the powers of the highest co-ordinating organ. The deprivation of function, no more than the addition of function, can be effected without disturbing the general balance among the various functions of the body. This balance has to be readjusted, and the equilibration is sometimes beyond the power of the organism to effect, and the result is disorder of the highest nerve regions on which the strain falls. The climacteric period is always a period of some disorder in women. They are troubled with sleeplessness, irritability of temper, despondency, loss of energy, and lackadaisicalness; and in exceptional cases these aberrations are exaggerated into actual insanity. A similar affliction may occur in men at about the age of sixty, which is sometimes attributed to a climacteric

in them, though it is more usually associated with the total change of habits and loss of interests arising from retirement from business.

The other stresses of this class are those which arise from bodily disease. In these cases the stress no doubt very often belongs to the previous class, and is a poison produced by the morbid process, or perhaps, as in the case of myxœdema, a poison not so much produced as permitted. The poison is not actually produced by the morbid process, but owing to this process, it is no longer neutralised, and so produces its effect. Generally it may be stated that every bodily disease has its effect upon the sanity, even if it is only, by diminishing the full efficiency of the cerebral action, to produce a mild and inconspicuous weakening of the mental power; and in many cases of bodily disease the disorder of the cerebral processes is considerable enough to amount to actual insanity, as the frequency of delirium shows us. In the majority of cases, such insanity may be attributed either to starvation, or to poisoning of the convolutions; in some cases these two causes co-operate, as in bronchitis, asthma, and heart disease; in some cases we trace the origin of the insanity to exhaustion of the cerebral energy, as in epilepsy; and in others we are unable to offer a probable explanation of the mode in which the insanity is brought about. Among the starvation insanities may be instanced those which occasionally occur in anæmia and chlorosis, and post-febrile insanity, as well as that weakening of mental power which is observable in every illness of long standing—a weakening which often escapes notice, since persons so situated are not often called upon for severe intellectual effort. Among the insanities due to poisoning may be instanced those which occur

in Bright's disease, in gout, in lead poisoning, in diabetes, as well as the delirium of fever, and perhaps also the gloom, often deepening into melancholy, of chronic dyspepsia and intestinal torpor.

Bodily disease is often connected causally with insanity in the sense that the bodily malady supplies the localisation, as it were, of the delusions which are part of the insanity. Tinnitus aurium supplies the provocation for aural hallucinations; intestinal ulcer co-exists with the delusion that the bowels are obstructed; chronic dyspepsia may suggest that there is a live weasel or lobster in the stomach; some uterine affection may be at the root of a delusion of pregnancy; some vaginal irritation may so direct the delusion that the patient believes she is frequently raped, and so forth.

Lastly, as old age comes on, it may be attended, not by a gradual and equable decline of the faculties, but by a breakdown more or less catastrophic in character, which may take the form of depression, of excitement, of persistent delusions, of rapid dementia, or of several other forms of insanity.

Stresses of the third class are those which arise out of the relations between the organism and its surroundings, and may be dealt with in the order proposed for the activities of conduct in the next chapter. The circumstances under which these stresses arise are those which arouse emotion, and the more powerful the emotion aroused, and the greater the suddenness with which it is aroused, the more effectual is the stress in producing insanity. Stresses of this class are, upon the whole, much less potent than those of internal origin, which in their turn are less effectual than those which have been termed direct. The stresses with which we are now dealing do not produce insanity except in those

who are already predisposed to become insane by their heredity.

In the relations which directly concern the physical safety of the organism, the only circumstances that are capable of provoking insanity are those of fright, or "nervous shock." The stress is not a fertile cause of insanity, but a certain small proportion, about one per cent. of all the cases that come under treatment, are assigned to this cause.

Stresses arising in the circumstances under which the livelihood is earned are more important. It does not appear that extreme poverty is of itself provocative of insanity, for we do not find that it is very prevalent among those who live in penury, nor among the victims of what is known as the "sweating system." But the apprehension of poverty, the fear of losing the means of livelihood, and the descent from more prosperous to less prosperous circumstances, are very efficient occasions of insanity among those who are already predisposed by constitution to become insane. In about five and a half per cent., or nearly as large a proportion as can be assigned among women to parturition, insanity is traceable to the stress of difficulty in maintaining the standard of living.

Among the circumstances which have a certain efficiency in occasioning insanity is change in the mode of livelihood. When a man gives up one career, and embarks upon another, when a medical man turns journalist, or a solicitor is called to the Bar, the revolution in the mode of life, added to the anxiety as to the success of the venture, is occasionally a source of insanity; and the complete revolution of habit involved in retirement from business when mind and body are still active, and no provision has been made for their

employment in other directions, is also an occasional source of disorder. The form that the insanity takes in such cases is usually that of depression with delusions of poverty.

Stresses arising in connection with the family circumstances are a frequent source of disorder amounting to insanity. First in order among these come disappointments in love and other troubles arising in the course of courtship, which account for about one per cent. of the occurring cases of insanity. Now and then the circumstance of becoming engaged to be married will so agitate a nervous girl as to render her actually insane; and if this occurs upon engagement only, *à fortiori* it may occur upon the occasion of marriage. There are innocent girls who are totally ignorant of what marriage implies; who are coerced into marriage with men for whom they have no affection, whom perhaps they positively dislike; and who learn for the first time on their wedding night what marriage really means. Such cases are rare, no doubt, but they actually occur, and are responsible for a very small number of cases of insanity. As few are the cases in which connubial excess produces insanity in the husband, but such cases also occasionally present themselves.

No case has been recorded, so far as I am aware, of extreme unhappiness in married life being provocative of insanity, although it would seem *à priori* as if few stresses of the order that we are dealing with could be more severe. Cases have occurred, however, in which the discovery of the unfaithfulness of a wife has been followed by her insanity, and other cases in which it has been followed by the insanity of the injured husband.

The parental relationship is full of occasions of anxiety, which are stresses that may contribute to the production of insanity. Anxiety over the illness of children, the strain and exhaustion of nursing them, the grief over their profligacy or crime, worries as to the means of supporting them, are all stresses which help to produce insanity in parents who are not by nature constituted to withstand exhausting emotions.

The stresses that arise out of the social relations are not often sufficiently severe to provoke insanity, but sometimes they have this effect. Man is a gregarious animal, and cannot live a healthy life in solitude. If he is compelled to live alone, there is much danger to his mental health, and even if he does not live alone, but his social circle is greatly restricted, the integrity of the mind suffers. People who live in a very narrow social environment, especially if their time is insufficiently occupied and their interests are restricted, are extremely apt to exhibit morbid traits of mind and conduct. They attach a monstrous consequence to trifles ; they become fretful, irritable, and quarrelsome ; and they are extremely apt to take to drink. Drink is the curse of small communities. Prisoners who are kept in solitary confinement have often become insane, and although the causative influence of the solitude has been repeatedly denied, no one who has been deprived of congenial companionship for long stretches of time can doubt that the deprivation has a serious effect upon the mental health. When, as in the case of many criminals, the man who is subjected to the deprivation is originally a feeble being without mental resources, its effect is necessarily more severe ; and, in practice, solitary confinement for long periods has been in most civilised countries abandoned.

Not only is companionship of his fellows necessary to the mental health of man, but it is of prime necessity that he should secure their good opinion; and the loss of esteem, the knowledge that he is reprobated and held in contempt and aversion, is a stress of so severe a character that we might expect to find it a frequent occasion of the onset of insanity. In practice, however, we do not find it so. The Jabez Balfours and Benjamin Lakes do not appear to be more prone to insanity than are other criminals; and the reason may be that they are secluded from all actual experience of the expression of this reprobation, and find themselves but units among a crowd of others who are similarly treated.

The religious circumstances in which a person lives have not, at any rate nowadays, much influence upon his sanity. The tumultuous emotional experiences of a "revival," as it is termed, do, not infrequently, upset the mental equilibrium of the feebler folk; and we hear of their falling in trances and being subject to convulsions under the influence of the minatory preaching of some eloquent enthusiast, and cases undoubtedly occur in which such experiences are provocative of insanity in persons previously disposed to become insane; but, in this country at least, the number of such cases is insignificantly small.

CHAPTER II

CONDUCT

CONDUCT is the pursuit of ends; and an investigation into the several activities that together constitute conduct resolves itself into an analysis of the ends which mankind pursue, and the apportionment to each of its relative importance.

The outcome of the stupendous biological discoveries of the latter half of the last century is to show that all life is teleological, and that the great and ultimate end to which all life is directed, towards which every living being strives, for which every living being exists, and to which all other ends are but means, is the continuation of the race to which the individual belongs. To each individual, life is not a gift but a trust, to be employed in transmitting life to a new generation; and, this purpose effected, the reason for the existence of the individual is at an end. This is very clearly indicated in the lives of many of the lower animals, in which reproduction is followed at once by death. Hence the whole scheme of existence centres around the reproductive function, and the first, the greatest, the most important, the most fundamental group of activities of which human, in common with all other living, beings are capable, consists of those which directly subserve the reproductive function, activities which in mankind begin with the first approaches of courtship, and do not cease until the last child is established in

the world, and capable, in its turn, of handing on the sacred fire of life to a succeeding generation.

Although, however, the reproductive activities are the fundamental activities and the reproductive instincts the fundamental instincts out of which the whole vast fabric of human conduct has grown, yet these are not the only activities of which human beings are capable, nor are these the only desires they experience. We see in nearly all the lower animals that the instincts of reproduction, fundamental as they are, become active for short periods only of their lives, and in some, such as worker bees, ants, and wasps, the cruder desires are altogether evanescent, and have no part in their lives. In human beings also the instinctive desires of reproduction only occasionally obtain dominance, and in some are as evanescent as they are in worker bees. In spite of this very obvious fact, a new school has recently arisen which looks upon crude sexual desire as not only the fundamental desire, but also the dominant desire, and as not merely occasionally asserting itself, but as practically the one only continuous desire which dominates the whole of human life. Every act, however pure and remote from sexuality, even a day's shooting or the keeping of a pet cat, is regarded by this school as the expression of lust, so true it is that to the impure all things are impure.

Before considering disorder of conduct in detail, it should be noted that conduct of any kind is susceptible of four different kinds of disorder, according as the instinctive desire which prompts it is excessive, defective, perverted, or reversed. Excess and defect need no explanation, but I must explain that by perverted conduct I mean conduct which tends or is calculated to defeat the very instinct by which it is prompted. The

normal desire for food, for instance, prompts us to eat things that are nutritious, and therefore appetising to the normal man. When the appetite for food is perverted, it prompts the consumption of substances like coals or clay, that are manifestly innutritious, and unappetising to the normal man. By reversal of instinctive desire I mean the experience of a desire to do the very reverse of what is prompted by the normal instinct. The normal instinct of self-preservation prompts us to avoid pain and bodily injury and discomfort; above all to avoid death. Reversal of this instinct prompts to self-mutilation and suicide. The reproductive activities fall naturally into three groups—those of courtship, of reproduction proper, and of parentage.

The activities of courtship need not detain us, since they are not very important, and are but little liable to disorder. We witness in them, however, the same curious phenomenon of reversal that we shall have to notice in the manifestation of other instincts; that is to say, we witness conduct directed, not to the attainment, but to the defeat, of the instinctive end. We see women, instead of decking themselves in colours and endeavouring to make themselves attractive by becoming costume, assuming the trappings of a nun, and adopting elaborate devices to make their appearance repellent.

The reproductive function proper is subject to several morbid aberrations. The commonest of these is masturbation, to which a great deal of factitious importance has been ascribed. There are few diseases of the nervous system whose causation has not at one time or another been attributed to masturbation, and, in insanity, both the physician and the patient are accustomed to regard it as a factor of the greatest

importance. It is probable, however, that its share in the production of insanity has been much exaggerated. As far as it is possible to judge, it seems most likely that very few lads pass through the period of adolescence without sporadic and occasional indulgence in this vice; and it is certain that in many cases it is practised with considerable regularity and frequency without producing insanity. There is no doubt that it is practised before the outbreak of the insanity by a considerable proportion of those who become insane, and by all who become insane before the age of twenty-five; and although it has unquestionably an influence, varying with the person by whom, and with the extent to which, it is practised, in precipitating the outbreak and increasing its severity, yet it is to be regarded upon the whole rather as a symptom than as a cause of insanity in such cases. The excess with which it is indulged in is due to that inherent lack of self-control which is an inseparable part of insanity, and which is so often conspicuous in its early stages.

Perversion of the sexual passion, or its direction towards abnormal objects—towards the same sex, for instance—and its gratification in abnormal ways—with accompaniments of brutality and blood-thirstiness—are subjects which have of recent years been treated by certain writers with a lingering solicitude and a minuteness of detail out of all proportion to their importance. It is true that cases of such perversion are not extremely rare, but they are not usually attended by any other symptom of insanity, and the question whether this perversion in itself constitutes insanity is one which can scarcely be considered here at length. It is certainly not so in law, and the abnormal gratification of the sexual passion being a criminal offence, the persons

who are addicted to these practices are convicted and sentenced as sane people at every session of the Central Criminal Court, excuse or mitigation of the offence, upon the ground of the insanity of the act, being unknown.

Disorder of parental conduct is not infrequent. Among the lowest class of the population in large towns the obligations of paternity are frequently neglected or altogether ignored; and the occasional desertions of infants and young children are instances of defect in maternal conduct, defects which are sometimes paralleled by parents in higher social strata. Excess of parental solicitude, to the extent that the health of the parent is damaged, and even the life sacrificed, by devotion to the offspring, is not very uncommon, but is not a wide departure from the normal, for parenthood of necessity implies self-sacrifice. Nor can that diversion of the parental instinct which leads an old maid to lavish attention upon a pug-dog, a cat, or a canary-bird, in the absence of any more appropriate object, be looked upon as abnormal. There are, however, perversions of the parental instinct which evince manifest disorder. Chief of these is the rage of destruction, directed against the new-born offspring, which is such a frequent and terrible feature in the insanity of child-bed. It is remarkable that this reversion of the parental instinct occurs in connection with parturition among the lower animals also. Dogs, pigs, and rabbits frequently kill and devour their new-born offspring; and ewes will often repel, and leave to perish of starvation, the weaklier of their twin lambs. The parallelism does not explain the occurrence, however, though no doubt it indicates the direction in which an explanation is to be sought, and at present

this strange aberration of conduct remains inexplicable.

Next in importance to the reproductive activities are the directly self-conservative—those activities whose performance is necessary to the maintenance of life from hour to hour and from moment to moment —those by which obvious physical dangers to life are averted. These are the activities by which a person avoids falling into pits; collisions with moving, and eke with stationary, objects; falling into fire or water; drinking scalding fluids; running into dangers of ferocious or poisonous animals; and, generally, those obvious dangers which prohibit us from leaving young children without supervision. Defect of the activities of this class is presented by all young children, and in them the defect is normal; but when it is prolonged beyond the stage of childhood, the defect is morbid, and is characteristic of that class of the insane that is connoted by the term "idiot." Defect of these activities is not always original. It may be acquired. While idiots never attain to the degree of intelligence that enables them to guard themselves against these obvious dangers, there is another large class of the insane who have acquired the activities of this class in full, but who have subsequently lost them, and these activities are among the last to be lost in the deeper degrees of dementia. Deeply demented persons, no more than young children, can safely be trusted to be alone. They are apt to fall downstairs; to set their clothes on fire; to lie naked and shivering with cold, for want of sense enough to pull the bedclothes over them; to trip over steps, or buckets, or what not, and fall; and to incur in other ways dangers that arise from want of the simplest care and forethought.

Among these primitive modes of activity, which are acquired at a very early age and are lost only when the later stages of dissolution are reached, is that which mankind shares not only with the great majority of mammals and birds, but with bees and ants and other social insects, of depositing his excrement at a distance from his habitual haunts, and in such a manner that it shall not soil his person and render it offensive to himself and his fellows. This mode of conduct is very often defective in insanity, and very often affected out of its turn, as it were, and at a much earlier stage of dissolution than we should expect. It is common to find insane persons in good physical health, capable of acts of considerable elaborateness, able not only to feed themselves, to undress themselves, to converse with some intelligence, to find their way from place to place in their customary abodes, who yet, without any paralysis of sphincters, pass their water and motions under them as they sit and lie. Considering at what a very early stage of development this faculty is attained, it is remarkable that it should so often be lost long before other faculties of much later attainment; and its loss is very significant and of very unfavourable import. Whatever the form of the insanity, an insane person who lapses from cleanliness in this respect rarely recovers. Usually the first appearance of this symptom marks the beginning of the end. In acute cases it very often means that the patient is going to die; in chronic cases it means that he is settling into hopeless dementia.

This phase of conduct is susceptible not only of defect, but of perversion. There are many insane persons who not only soil their clothes with their fæces, but who revel in paddling in their filth. They

wash their hands in it; they knead it; they take it in their hands and plaster it about the walls and furniture of their rooms, on their persons, on their faces, and in their hair. Such reversal of the ordinary normal conduct of mankind is difficult to account for, but though it is not in all cases explicable, there are many in which an explanation can be conjectured. There are some lunatics who are so lazy, whose detestation of distasteful exertion is pushed to such an extreme that they will wet the bed from sheer dislike of the trouble of getting out to make water. Others there are who are possessed by an impish spirit of malignity, and whose desire to give trouble and to outrage the feelings of those around them will manifest itself in this way; and finally—it is an extraordinary fact, but one that cannot be doubted by those who have had much experience of the insane—that in some cases pleasure of a sexual character is derived from these practices, and they are undertaken with that end in view.

The other directly self-conservative activities are likewise frequently perverted, and even reversed. Instead of conduct being directed to the preservation of life and the quest of pleasure, it is directed by a fury of self-destruction and an unquenchable desire for the self-infliction of pain and suffering; and one of the commonest of the forms which is exhibited by the perversion of the self-conservative activities is the unwillingness, often amounting to obstinate refusal, to take food. The refusal to eat may be due to a conviction that all the food is poisoned, or it may be deliberately adopted as a suicidal expedient; and both of these motives are frequent. But often it is exhibited by patients who have not sufficient intelligence to form either the hypothesis or the inten-

tion, but in whom it is part of a brutish resistiveness which leads them to oppose every mode of activity that is proposed to them. They struggle against being fed with the same mulish obstinacy that they struggle against being dressed, against being undressed, against being sat down or stood up, against walking about, against standing still, against every form of activity that they are desired to undertake ; and their struggles are varied by endeavours to injure those who have care of them. The conduct that they exhibit reminds us, on the one hand, of a wild animal that resents its capture, and on the other of a jibbing horse ; and a plausible explanation is to regard it as a resuscitation of such obsolete instincts as these.

The craving for suicide and self-injury exhibits itself in many other ways besides that of refusing food, and perhaps its commonest expression is in a leap from a window. Persons without experience of insane people usually consider that if a window is shut and fastened so that it cannot be opened, the precaution against a suicidal leap through it is complete ; but a patient who is determined upon suicide takes no account of the obstacle of a mere pane of glass, and will jump through a shut window as readily as through an open one. The craving for suicide often exists without the pluck to carry the intention into execution, and even among the insane, many are saved from suicide by the lack of courage ; but, on the other hand, in many cases the determination is so fixed and obstinate that the most unlikely means are employed for the purpose, the greatest ingenuity and industry are exercised in finding an opportunity, and nothing but unceasing vigilance will suffice to prevent the act. A fragment of cup or tumbler, of window-pane or chamber-pot, will furnish a

cutting instrument which will serve to open a vein or an artery. A ligature will be found in a garter, an apron-string, a shred of clothing or sheet, or of unravellings twisted together to form a string. A couple of inches of water in a ditch or bath will suffice for drowning; the back of a chair or the rail of a bedstead is high enough for a gallows; a handkerchief squeezed into a ball may be stuffed into the throat; petroleum, or furniture polish, or anything that seems nasty and unwholesome, may be swallowed; and thus the resources of the would-be suicide are always at hand, and the only efficient preventive is incessant and vigilant watchfulness.

Short of suicide, the melancholic, who is deeply impressed with his own unworthiness, will endeavour to diminish and obviate his comfort as far as he can. If he will eat food at all, it must not be savoury or daintily served; his bed must be hard, his clothing coarse, his occupation distasteful. He insists upon a morbid and unreasoning asceticism.

The third class of activities of which conduct is made up comprises those which Spencer has termed indirectly self-conservative—those by which the livelihood is earned and the means are administered; and these also are often defective and sometimes perverted. When defective, the defect, as in the previous class, may be either original or acquired; the activities may never have been attained, or, once attained, they may be lost.

Original defect of the indirectly self-conservative activities is seen in two forms: the first, in which the general level of intelligence is low, and the defect is but a part and a manifestation of a general defect implicating all forms of conduct; the second, in which the defect

is either confined to this particular division of conduct or is in it much more pronounced than in any other, the remaining divisions being comparatively complete, and the general level of intelligence up to the normal. The first of these classes is constituted by the imbeciles, by those who attain to the directly self-conservative activities, but fail to progress further; or who attain to some degree of conduct of this second class, but who can never attain to the skill in any occupation that is necessary to give their labour sufficient market value for their support. They can do simple work, but they cannot, unless carefully supervised, do even the simplest work without making such blunders as deprive the work of all value; and when the cost of the supervision is deducted from the value of the labour, the balance is too small for them to live on. If they are set to weed a garden, they will pull up weeds and valuable plants indiscriminately; if they are set to beat a carpet, they will vigorously beat it into a hole at one spot and leave the remainder untouched; tools they will either break or injure themselves with; letters they lose, or deliver to any one but the addressee; and so forth.

Inability to earn a living may be due to a totally different defect. To earn a livelihood requires moral as well as intellectual qualities. It needs steady industry. It requires such self-control, such self-denial, such a degree of self-abnegation, as will allow of the steady pursuit of an uninviting and perhaps repellent employment, in spite of the solicitation of others by which immediate pleasure may be gained. It means, in short, the postponement of immediate pleasure and the suffering of immediate pain, for the sake of greater pleasure to be enjoyed in the future. And this ability

of self-control differs very widely in different people, and is by no means a function of the intellectual ability. Either may be highly developed while the other remains distinctly below the average ; and we frequently meet, on the one hand, with stupid people whose sense of duty is highly developed, and in whom self-control increases into self-denial, and self-denial is pushed to asceticism ; while, on the other hand, it is as frequent to meet with clever people, persons of nimble intellect and many accomplishments, who are so deficient in this moral quality that they are incapable of continuing any mode of occupation after it has ceased to be pleasant and congenial to them. Such people are deficient in the activities of the class now under consideration. They are incapable of earning their livelihood, and incapable by reason of a defect, which we may term mental or moral as we choose, but which is a defect, not in the direction of idiocy or imbecility, but of a totally different kind.

The ability to administer the means, when gained, is of equal and even of greater importance than the ability to earn a livelihood ; for, while the first is obligatory upon every one, there are many people who are relieved by the exertions of their predecessors from all need to earn their own livelihood. Defect in the administration of the means may take either of the forms exhibited by defect in the earning of the livelihood. It may be due to general defect of intelligence, so that the subject of it is unable to appreciate the amount of his income, unable to grasp the relative values of different commodities, unable to appreciate the different purchasing power of different sums of money ; so that he is at the mercy of any dishonest person who chooses to ask him half a sovereign for an

ounce of tobacco or a box of matches, or to palm off upon him a German lithograph as a genuine Raphael, a broken-winded screw as a certain winner, ormolu and glass as gold and diamonds; so that he expends his income and sinks into debt from sheer inability to appreciate the relation between income and outgo. Few persons are brought to ruin by this defect, however, for it is recognised in early life, and they are usually made wards of court before they come of age, so that the administration of their means is never in their own control.

But the next defect is a very frequent one, and brings scores of spendthrifts to ruin every year. It is the moral defect of inability to postpone immediate pleasure for the sake of a greater future benefit. The spendthrift knows and appreciates the amount of his income; knows that the rate of his expenditure cannot be maintained without inroad upon his capital; knows that he is living at a rate at which his capital will be exhausted in a few years; and yet the prospect of certain ruin is insufficient to check his immediate indulgence.

Allied to this defect is that which is known in Scotch law as "facility"; that which is characterised by an inability to say "No"; and this defect may be original or acquired. Often it is congenital. There are very many persons of weak character who are unable to withstand solicitation, who give to every beggar and lend to every "sponge" money which they know they cannot well afford, from lack of the moral courage, force of character, or strength of will to refuse. These are the people who are ruined by endorsing bills and becoming security for their friends. Again, there are people who, while in the vigour of health, are able to repudiate such proposals, but who weakly

accept them when enfeebled by illness or in the decay of old age. These are the people whose wills are disputed upon the ground of undue influence, who make wills or deeds of gift in favour of their nurses or landladies, to the exclusion of their own near relatives.

The administration of the means may be perverted. The instinct of accumulation may be present in such excess that expenditure is grossly inadequate. A man who is well able to afford a house and a decent establishment will live in a single room, cook his own food, go without such decencies of life as table-linen, carpets, clean crockery, or change of clothes, deny himself the use of artificial light, restrict to a dangerous extent his fire, live a stranger to soap, comb, blacking, and clothes-brush. When economy is pushed to such a degree of miserliness as in the cases of Daniel Dancer and John Elwes, the perversion of conduct in itself constitutes insanity.

The next class of activities are those by which the individual maintains his relations with the community to which he belongs, and these, like other activities, are susceptible of defect and perversion.

Communities exist by virtue of the self-restraint of the component individuals, by which self-regarding activity is limited so that the activities of the other members of the community shall have free play within similar limits; and in order that the community may hold together and continue, each individual must do things for the common welfare which, if he lived in solitude, he might without detriment leave undone. When he lives in a community, he must so restrain and regulate his activity as not to impair, nor even to jeopardise, the safety, the property, and the self-respect of his neighbours; and more than this, he

must take his share of the common burdens. He must contribute to its security and defence both from internal and external dangers; he must contribute to its solidarity and cohesion, not only by abstinence from disintegratory conduct, but by an active execution of such deeds as draw closer the bonds of fellowship and knit more securely the strands of society. He must abstain from violence, dishonesty, and slander; and, above and beyond this abstinence, he must exercise self-restraint in those hundred little ways by which the conduct of a person in the presence of others is shorn of indulgences which he allows himself when alone. He must pay taxes, serve on juries, and contribute by similar exercises to the common welfare; and, in addition to this, he must perform those acts of ceremonial and small benevolence which, under the name of politeness and courtesy, diminish repulsion and increase cohesion among the units of which the society consists. Thus each form of conduct, whether inhibitory or active, is divisible into a major and a minor section; and while the opportunities and occasions for the exercise of the activities of the major section are comparatively infrequent and few, the opportunities and occasions for the exercise of the minor activities are frequent and, so long as the individual is in the presence of his fellows, continuous. Each major section may be dealt with separately, while the minor may be considered together.

The exercise of self-restraint, when it is directed to the forgoing of whatever advantage may be gained by injuring others in person, or property, or feeling, is termed "morality"; and the doing of such injurious acts is "immorality," and may or may not be crime, according as it is or is not punishable by law. Im-

morality and crime, while they are disorders of conduct in the sense that they are departures from what the universal consent of mankind admits that conduct ought to be, are not necessarily disorders in the sense that they partake of the nature of insanity. They may be sane or insane according to circumstances, and the reader who is interested in the circumstances which distinguish the sane from the insane variety of immorality and crime should consult the article on "Vice, Crime, and Insanity" in Clifford Allbutt's "System of Medicine," and the present writer's book on "Criminal Responsibility."

The ability to serve the community in active ways, whether by partaking in its defence against internal or external foes, or by undertaking municipal or political duties, is precisely the same kind of ability as is required for the furtherance of the welfare of the individual himself, and the same act which is undertaken for the one end often serves the other; so that no separate treatment of the defects and disorders of this division of conduct is needed.

It is in the minor activities of social life, in matters of politeness, of convention, of ceremony, of courtesy, that defect and disorder of conduct first exhibit themselves in those cases in which insanity comes on slowly, or in which it does not advance far. As these are the latest activities to be acquired, so they are the earliest to decay in those cases in which an order of decay can be discerned. When the defect of conduct is merely quantitative—when, that is to say, there is a general diminution of the amount of energy available for expenditure in conduct, as in the gradual advance of age—then defect is first and most perceptible in those forms of conduct that demand for their actua-

tion the largest amounts of energy, and activities are abandoned in the order of the vigour which they need and of the fatigue which they entail. Athletic exercises, jumping, running, climbing, rowing, and so forth, are the first to go ; and the acts of politeness and courtesy which make so small a demand upon vigour and energy are retained to the last. But when, as in insanity, conduct suffers what may be termed a qualitative defect—when activities are lost without respect to the amount of energy needed for their execution, but in the inverse order of their acquirement—then these little offices are the first to show defect. In a large proportion of cases of insanity defect of these qualities is unnoticed, for the insanity comes on so rapidly that the more fundamental and important activities of self-conservation are reached at the outset, or very early in the course of the malady ; and the disorder or defect of these is such an important and such a conspicuous factor in the case that the loss of the others passes unnoticed. When a house is shaken by an earthquake, we are too apprehensive of the collapse of the roof and walls to notice the breakage of the crockery. Thus it happens that, in a large proportion of cases of insanity, defect and disorder of these qualities do not need to be considered. But there is a numerous and very important class of cases—cases that are the most difficult of all to deal with in practice—in which these minor activities alone exhibit disorder, and then it is often difficult to recognise that insanity exists ; difficult, when one has satisfied oneself, to convey the conviction to others ; and often impossible to establish a sufficient degree of insanity to set the law in motion and sequestrate the individual from the management of himself and his affairs.

When the minor social activities are disordered, then the minor activities among the self-conservative and reproductive activities are usually disordered along with them; and disorder of the whole group of minor phases of conduct may now be considered together.

The beginnings of insanity, when insanity begins slowly, are often very slight. The irritable man shows such an increase of irritability as makes his family stare; the talkative man monopolises conversation more completely than usual; the uxorious man becomes even more demonstrative; the egotist brags more audaciously; the querulous complains more bitterly; the moody man has longer and more frequent periods of deeper gloom; any little peculiarity of conduct which is native and not assumed becomes exaggerated. In this stage insanity is not recognised; indeed, in this stage insanity does not exist. It needs a wider departure from the normal to justify us in diagnosing insanity, but yet this is the beginning of the malady; the difference between this state and recognisable certifiable insanity is a quantitative difference, a difference of degree only, and a further advance of the malady is marked at first by an exaggeration of the same defects.

But if the most conspicuous features in the man's normal conduct were artificial and assumed, if they were the expression, not of deeper and more fundamental peculiarities of nerve structure, but of characters of late acquirement, and therefore of little fixity and endurance, then the mark of the onset of insanity is a "change in the nature" of the man, and the change is always in the direction of degradation. The kindly and forbearing man becomes irritable and quarrelsome; the reticent man becomes expansive, and expatiates

to strangers and servants upon the misdeeds of members of his family; the refined and gentlemanly man consorts with artisans and labourers, and frequents low public-houses; the man of cleanly life visits brothels, and chums with loose women; the cautious, prudent man of business launches out in wild speculations; the modest, retiring man thrusts himself forward into all kinds of society, writes long and familiar letters to persons with whom he has only a bowing acquaintance, asking favours, offering benefits, and making appointments; the parsimonious man becomes lavish, and the generous man parsimonious.

In this early stage of the malady no intellectual defect may be apparent, or if there be any intellectual defect, it is displayed only in the inability to recognise and realise the impropriety of the conduct. If you remonstrate or reason with him, you will be astonished at the astuteness with which he justifies and accounts for his conduct. You adduce instances of his irritability and quarrelsomeness, and he admits that he lost his temper, but, then, consider the provocation! and he gives you an account of the incident, not wilfully garbled, but highly coloured, and such as, if you admit that it appeared so to him, you must admit that his retaliation was not excessive. Does he consort with labourers in low public-houses? He was unable to sleep, and at four o'clock on a summer morning he dressed and went abroad. He has always been interested in the lives of the labouring class, has held night-schools for them, and started slate clubs, and so forth. On this morning he met some of his former pupils going to their work, and naturally began to talk to them; the conversation became so interesting that he accompanied them to the house where they

took their breakfast, and then could do no less than stand them beer all round. Tell him that he is squandering his means, and he will almost convince you in spite of yourself that his expenditure was justified; that, in the first place, he could afford a flutter; and, in the second, the chances of success in his venture were so great as to justify the speculation.

Disorder of other divisions of conduct is scarcely of sufficient importance to need separate consideration. Defect of religious conduct is common enough without carrying with it any implication of insanity; but excess and disorder are occasionally seen, and are more decidedly abnormal. When a girl passes whole days and nights upon her knees in prayer, and cannot be prevailed upon to rise, even to eat and drink, or to take her fair share in the duties of the household; when a youth enters his father's office, harangues the assembled customers upon their sins, prays aloud for them, and finally dismisses them with his blessing; the morbid degree of the excess is no longer in doubt; but such disorder of the religious portion of conduct is rarely the most important, is rarely even the most conspicuous disorder. It is not so much the time spent in prayer as the neglect of all other and more urgent duties that is the important disorder in the first case; it is not so much in the second case the prayer, as the inability to appreciate the inappropriateness of his conduct, that is the important element in the conduct of the youth.

The whole subject of Conduct and its Disorder is dealt with fully and elaborately in my book so entitled, which is the foundation of the study of insanity for the advanced student.

CHAPTER III

MIND

ALTHOUGH, as has been said, insanity is not exclusively, nor even primarily, disorder of mind, and although there are many disorders of mind that are not insane, yet some part of mind is always disordered in insanity, and no account of insanity, or of the institutes or prolegomena of insanity, would be complete in which the constitution of mind and the disorders of mind were ignored.

It is many years since I first urged that since mind is always disordered in insanity, and since the study of order and of the normal should always precede the study of disorder and of the abnormal, therefore an indispensable preliminary to the study of insanity is the study of the normal mind, and every alienist should prepare himself for the study of insanity by acquiring a competent knowledge of psychology. This doctrine has at length been accepted, and to adopt a saying of the late Sir Vernon Harcourt, we are all psychologists now; but the result has been not a little disappointing. The study of normal psychology, as taught in authoritative text-books, has proved of very little use, I may say of no use at all, in assisting us to comprehend insanity. I can scarcely recall a single instance in all the writings of alienists of any application to insanity of any doctrine taught in any text-book of psychology, nor do I find that

a knowledge of psychology, as taught in any book on the subject, has been of the slightest use to myself or to anyone else, either in the investigation of any individual case of insanity, or in the systematic study of insanity at large.

If we compare this result with the result of the corresponding study of the pathology of the nervous system, we are struck by the discrepancy. Knowledge of the pathology of the central nervous system has proceeded *pari passu* with knowledge of its physiology; and our knowledge of both has advanced by leaps and bounds in the last thirty years, while our knowledge of the physiology and pathology of the mind has been almost stationary. The moment we inquire into the reason of this discrepancy we are struck by the fact that our knowledge of the physiology of the central nervous system is derived very largely from a study of the changes produced by disease. It was by studying the effects of disease on the central nervous system that Hughlings-Jackson made those discoveries that afterwards received experimental corroboration from the researches of Hitzig and Ferrier; and ever since then the study of disease has gone hand in hand with experimental research in elucidating the physiology of the central nervous system. In psychology, the experimental method is not open to us, for the mind of man is so immeasurably superior to the minds of even the most intelligent animals, that conclusions cannot be carried across from the one to the other; and moreover, as I have so often insisted with so little effect, we cannot observe directly the mental states and processes of others. But for the study of mind we have at our service a method that is not available for the study of the central nervous system. We have the method of intro-

spection, by which each one can investigate his own mind, and observe what passes therein. This method takes the place, in the study of mind, that is taken by experiments on animals in the study of the central nervous system; but whereas in the latter the results of experiments are perpetually collated with the results of disease in the human subject, in the former the results of introspection have never been collated with the phenomena of disease; and consequently the two methods of research have afforded no assistance to each other, and their results have diverged so widely that, until some effort is made to collate them, they can afford no assistance to each other.

It is found by the physician that certain faculties of mind are frequently disordered, and the disorder of them is a prominent and important symptom in the cases that come before him; but when he turns to psychology for a description of these faculties, he finds that they are not mentioned, and that psychologists do not know of their existence. For instance, Self-estimation, which undergoes such extremely important disorders in insanity, is not so much as mentioned in any book of psychology known to me. Nothing is more important to the student of insanity, and to the student of sane disorders of mind, than the grading of the several mental faculties into their several evolutionary levels or strata, without which it is quite impossible to understand, much less to localise, the different disorders of mind, or to distinguish those that are compatible with sanity from those that are insane; yet no attempt to distinguish any evolutionary grade except the lowest is made in any book on psychology. While these factors in mind that are so important to the student of the disordered mind are omitted from

every treatise on psychology, these treatises devote a very large proportion of their space, and assign a very prominent position, to matters that are to the alienist utterly unimportant and useless. The whole analysis of Sensations, in as far as it is of value at all in medicine, is relegated to the province of the physiologist and the general physician, and does not concern the alienist as such ; nor need he ever consider, except as an academic exercise, the association of ideas, the nature and varieties of attention, the relation of thought to language, imagination, conception, or a hundred other topics which the psychologist treats at length. The differences between Analysis and Synthesis, between Affirmation and Negation, between Association and Suggestion, are naught to the alienist ; what may be the basis of Time perception, or Space perception, or of apprehension of Form, is a matter of utter indifference to him ; the various laws discovered by psychologists—the laws of Relativity, of Suggestion, of Association, Weber's Law, Fechner's Law—are not violated in insanity, or if they are, the violation has no significance whatever for the alienist ; and if he ever learns what is meant by Apperception, he finds, when he enters the wards of a lunatic asylum, that the sooner he forgets all about it the better he will understand the disorders of mind from which his patients suffer.

In order to understand disorders of mind, to distinguish the disorders of mind that are sane from those that are insane, to analyse disorders of mind, and to localise and identify the faculty and grade of mind that are disordered in any particular case, it is necessary to forget all the teachings of psychologists, and to formulate a scheme of mental faculties *ad hoc*. I do not say that the text-books of psychology are wrong ; I only say,

what every alienist will corroborate, that for the purpose of the alienist they are useless. For this purpose it is necessary to make such a division and explication of the various faculties of mind as shall throw into prominence those that are liable to be disordered, any others not so liable, or whose disorder cannot be discovered, being neglected ; and it is of even greater importance to grade these faculties into what Hughlings-Jackson called "evolutionary levels," that is to say, into degrees of elevation from the simple to the complex, from the crude to the elaborate, from the fundamental to the accessory, from the primitive to the derivative, and from that which was earliest in origin to the most lately acquired product of evolution. Dr. Hughlings-Jackson marked off in the nervous system three such grades or levels, lowest, middle, and highest, but he would have been the first to admit and declare that such levels are but arbitrary divisions of a series that is, in fact, continuous, just as the horizontal bars of a window divide the gradual tints of the sunset sky. In such a continuous gradation it is a matter of mere convenience and of arbitrary convention how many divisions we make and where we place them, and therefore I have no hesitation in substituting for the three levels into which Hughlings-Jackson divided the nervous system, a fourfold division of grades or levels of mind, which enables us to localise disorders with greater minuteness and accuracy.

I first divide the mind into certain primary faculties, each of which is found in experience to be subject to disorder. These are seven in number, and five of them are then redivided into four evolutionary grades or levels, so that if we range the faculties side by side, and regard the horizontal division into levels as cutting

across them, we obtain, as it were, a series of pigeon-holes, vertically four deep, and numbering horizontally as many as the faculties that we choose to constitute. Into one of these pigeon-holes every disorder of mind should be placeable. Perhaps it is as well that I should declare that I do not regard the mind as composed of pigeon-holes, nor do I suppose that it is actually constituted on any such plan, any more than I suppose that the surface of the earth is truly represented by a map on Mercator's projection. Nevertheless, maps are useful helps to finding our way about the country, and estimating the relative positions of places on the surface of the earth; and such a Mercator's projection of the topography of the mind as I propose will be found useful in understanding the intricacies of the mind, and in estimating the relations of the several parts that participate or do not participate in any disorder.

The plan by which I represent the constitution of mind is a complicated one, but then the mind of man is extremely complex, and any simpler plan would not represent that constitution with any approach to correctness. I do not say that the plan that I propose represents the true relations of the several faculties of mind, for it is obvious that that which is not in space can scarcely be accurately represented by spacial relations. My scheme does, however, provide a systematic plan of a large area of mind, a plan such as has not hitherto been in existence; and although some departments of mind will not go very comfortably into my pigeon-holes, and others are advisedly omitted altogether, and although the scheme is admittedly crude and imperfect, and will no doubt be found susceptible of improvement in the future, yet I submit that even a crude and imperfect plan is better

than no plan at all; and I have myself found it of such great assistance in investigating and classifying mental disorders that I cannot think it will be useless to others who are engaged in the same pursuit.

The primary faculties into which I divide the mind for the purpose of studying and localising mental disorders are five :—Desire, Will, Feeling, Thought, and Memory, or, since I divide each into grades or levels, they may be termed, Desires, Volitions, Feelings, Thoughts, of which the most important are Beliefs, and Memories. Two of these, Feelings and Thoughts, are split down vertically into an objective and a subjective side, so that in all there are seven primitive faculties of mind. All these, with the exception of Memory, are again divided horizontally into grades or evolutionary levels, of which I make four, so that altogether there are twenty-five pigeon-holes or compartments, in one or more of which every disorder of mind can be placed.

Let me again declare, though no doubt I shall be taken to task just as if the declaration had never been made, that although the mind is rightly and naturally divisible on this scheme, yet the distinctions and divisions are arbitrary, conventional, and made more for the purpose of practical convenience than of scientific accuracy. Emotion, for instance, is classed among the objective feelings, though it contains large ingredients not only of subjective feeling, but of thought also. Ingenuity is classed on the objective side of thought, though it contains a large subjective element.

The second principle of division, into evolutionary grades or levels, should be familiar to every student of neurology, and should need little explanation. I take it that there is a continuous series of desires, from the crude desire for food to the refined desire for justice;

that there is a continuous series of volitions, from the elementary choice of this potato out of the dish, or this cigar out of the box, to this rather than that career in life; of thoughts, from the simple perception of an object to the highest flights of speculative genius; of feelings, from the crude pleasure of eating and the crude pain of bodily injury to the refined pleasures of benevolence and sympathy and the refined pain of bereavement and indignation. In each of these continuous series I draw, at arbitrary distances, three transverse lines, dividing them into four levels or strata; and thus the skeleton outline of my plan is complete. It now remains to fill it in.

Before doing so, however, it will be well to state generally, what will be abundantly illustrated in particular cases, that in practice we find that any one of these faculties may alone be subject to disorder, the others remaining normal, or with only such errors in action as are strictly consequential to the disorder of their erring colleague; and not only this, but any level of any faculty may suffer disorder without implicating the level of that same faculty above or below the level that is disordered. It is this possibility and this occurrence of limited disorder that gives to the plan of mind here elaborated most of its validity and usefulness. It is quite true that several faculties may be simultaneously disordered on the same or on different levels, and it is true also that any one faculty may be disordered on more than one level; and it is the occurrence of these single or multiple disorders that constitute the various types and kinds of disorder of mind and the various forms of insanity; but the important thing is that when we have a plan of this kind before us, it constitutes a system on which the mind may be investigated; and

it constitutes also a plan upon which the disorders can be mapped out, so that we can see at a glance in any case what faculties are disordered, upon what levels, and how far the disorder extends in this direction or in that.

DESIRE

Insanity is disorder of conduct, and conduct is prompted and actuated by desire. Without desire to achieve ends, without aversion to certain experiences, there would be no motive to conduct, and therefore no conduct. All conduct is undertaken for the satisfaction of some desire or the avoidance of some aversion, which is the complementary antithesis to desire, and the first department or faculty of mind, the faculty that lies at the base of mind and constitutes its foundation, the faculty to which all conduct is due, is Desire.

The several grades of desire correspond with the several departments of conduct that have been already enumerated and examined. It has been pointed out in a previous chapter that all life is teleological—is inspired by a purpose—and that the prime purpose of every living thing is to continue the stirp to which it belongs. In the human being this primary purpose is so overlaid and obscured by a multitude of secondary and subsidiary purposes, many of which have become, by a process explained in my book on Conduct, ultimate purposes pursued for themselves alone, that the primary end of the life of man is apt to be forgotten or to remain unrecognised, but in him it is the same as in all living beings ; and since animate beings do not strive to effect a purpose unless they are prompted and urged to do so by desire, the central fact in mind is the existence of the desires of reproduction and of maternity.

desires, therefore, form the lowest stratum or level of the series or stack of Desires. Reproduction cannot be effected unless life is preserved to the reproductive age, nor can the offspring be reared, nor reproduction be repeated, unless life is preserved after reproduction is effected; and hence self-preservation is a necessary preliminary and accompaniment of reproduction, and the corresponding desire for self-preservation, the dread of death, of bodily injury, and of illness, are immediately necessary and subservient to the racial desires. The desire of self-preservation from injury and death forms, therefore, the second level or stratum in the stack of desires. But immunity from bodily injury is not the only condition necessary for the survival of the individual. If he is to survive and to reproduce his kind, it is necessary, as human life is now carried on, that he should be fed, clothed, housed, and employed to advantage; and in order that he may do the things necessary to secure these requisites, he must have a further set of desires—for occupation, of accumulation, and so forth, and these form the third stratum in the stack of desires. Lastly, struggle for life with circumstances, inorganic, organic, and super-organic, has led to the desire, so powerfully effectual in securing survival, of living together in communities; and the exigencies of social life have given rise to another large and important group of desires, which prompt and urge to conduct tending to preserve and consolidate and advance the community to which the acting individual belongs. These form the topmost level of desires, and complete the four grades into which this, in common with the other compartments of mind, is divided.

The disorders of desires are for the most part ex-

pressed in corresponding disorders of conduct, and what has been said in a previous chapter of disorders of conduct need not be repeated here; but there is one disorder of desire that often struggles to express itself in conduct, but that is usually overborne by will, and prevented from finding expression. This disorder is Obsession, a term that like other terms in psychology is constantly misused. It is employed to mean delusion, imperative idea, prejudice, and other mental states. The true meaning of obsession is a morbid desire to do some act which the would-be actor discountenances, struggles not to do, and can usually, probably always, succeed in refusing to do. Most of us have experienced at one time or another a minor and trivial form of obsession. We find some familiar form of words—a proverb, a line of verse, a text from Scripture, or what not—"running in the head." We say it over and over again silently to ourselves, and as we do so we experience a more or less urgent desire to say it aloud. This desire can be resisted. Very often it is not resisted, for the whole affair is so trivial that it is not worth while to summon up the will to overpower the desire; so at length the words get themselves uttered aloud. Or it may be that in walking along the street, we have the absurd and irrational desire to step upon the divisions between the flagstones, or to avoid stepping upon them, as the case may be, and here again, the desire is often not resisted because it is not worth while to resist it. It is allowed to have its way, and we regulate our footsteps accordingly. But we feel all the while that we could resist if we pleased, and could if we chose disregard the desire, and pursue our walk without reference to it. Sometimes, however, the obsession is not of this innocent nature. The words

that arise in the mind and clamour for utterance may not be mere innocent proverbs or texts; they may be objurgatory, or obscene, or blasphemous. The act that suggests itself and demands execution may be not the innocent act of stepping on or avoiding the divisions between the flagstones: it may be the act of cutting a throat or throwing a child out of window. In such cases it is urgently necessary to summon up the will to inhibit and prevent the execution of the act; and in experience it is found that the will has almost always sufficient power and authority to keep order in the mental household and prevent the perpetration of the act. There are, indeed, a few cases on record in which the will has been felt incapable of resisting, and external aid has been sought. The unfortunate sufferer has given himself up to the police, or sought the shelter of an asylum, and begged to be physically restrained from carrying out a purpose that he felt was not *his* purpose; and now and then a case has occurred in which some minor obsession, such as that to steal objects of a certain class, has been yielded to. But it is still doubtful whether the will would have been ineffectual to restrain these acts if it had been sufficiently appealed to. No doubt, when the obsession is unusually intense and persistent, such sufferers do become after a time weary of the struggle, but in the cases in which they place themselves under restraint, it is clear that their wills are competent to overcome the morbid desire up to the time of so placing themselves, and my own opinion is that such persons place themselves under restraint, not so much because they feel their wills giving way, but in order to obtain relief from the fatigue of the conflicts between will and desire. In the rare cases of stealing under obsession, I believe that the appeal to will was ineffectual because

it was half-hearted—in other words, that the thief could have resisted, but did not.

In all cases of obsession, what happens is a conflict between a lower desire and one that is more elevated, an occurrence that is frequent enough in the experience of us all. What stamps the obsessive desire as morbid, and removes the conflict from the class that is so frequent with us all, is its unprofitable character. The desire, if carried out into action, would do the actor no good. He would not benefit, nor would anyone else benefit by the accomplishment of the purpose represented by the desire. This is true even of obsessions to steal, for the objects on which the obsession fixes are not usually objects whose possession would materially benefit the obsessed.

In obsession, then, we witness a disorder of desire, whose nature is a rebellion of a lower desire, a desire whose purpose is always useless, and is sometimes highly pernicious to the person by whom it is felt, against the higher desires for his own welfare and that of those who are near and dear to him. It is the rebellion of a lower level against a higher level, the like of which we shall witness again and again in the other faculties, and thus, although it is always regarded as a unique, a bizarre, and an unaccountable disorder, we find that it ranges itself along with others, and belongs to a class of mental disorders that is by no means uncommon.

WILL

As has been said, Desire is the motive of all conduct, and without the prompting and urging of desire, animate beings would undertake no action, and display no conduct; but between desire and action there inter-

venes a second mental factor, without which desire, however urgent and overwhelming, would never find expression in action. This factor is Will, or Volition, the immediate antecedent, and as far as we know, the immediate cause, of action. In the experience of us all, desires often conflict. One desire pulls this way, another pulls that: one desire prompts to a certain course of action, another to the opposite. It seems that in such a case the stronger desire will and must prevail, but examination of our own consciousness does not support this view. It seems, if we watch the turmoil in our own minds, that on some occasions will intervenes, and gives the weaker desire dominance over the stronger. However that may be, it is as certain as universal experience can make it that whatever the urgency of a desire may be, it can to some extent be checked and controlled by the will, and in no case does it find expression in conduct until will gives its sanction and exerts itself to produce the outward act. Volitions, then, constitute the second of the great faculties of mind, the second nest of pigeon-holes into which mind is for convenience divided; and volitions, like other mental processes, may be graded into levels.

On the highest level are those volitions which determine our conduct in the gravest and most important affairs of life—in those matters which determine our general success or failure—affairs whose success gives rise to exultation, and whose failure causes despondency. On the upper middle level are those volitions by which choice is made and action determined of the means that should be employed to attain the important results determined on by the highest class of volitions. The lower middle level is constituted of volitions on matters less important and subsidiary to the last, the

daily decisions about daily affairs ; and the lowest level by choice on trivial matters of momentary import, such as which shoe or stocking to put on first, which book to amuse an idle hour with, which peach or which potato to select out of the dish, and so forth.

Volition is subject to several disorders, which fall naturally into two kinds, the spontaneous and the reflective. By a spontaneous disorder of will, I mean a disorder of will which is manifested spontaneously by the person affected, and does not need the incidence of circumstances to call it out. By a reflective or elicited disorder of will, I mean one which is not manifested except under the influence of the wills of other persons.

The spontaneous disorders of will are three—Delay, Vacillation, and Precipitation. Whenever the will is exerted, whenever a volition is effected, the mental operation is preceded by an interval, which may be prolonged, or may be so brief as to be inappreciable, and which is called hesitation. The duration of this preliminary interval varies with the level of the volition that is being exercised. Volitions of the uppermost level may normally be preceded by a prolonged period of hesitation. When the choice to be made is on a matter that will influence the whole of the subsequent life, when, for instance, it is the choice of a calling, or of adhering to or abandoning a calling, or when it is whether the calling should be followed at home or abroad, whether an appointment of less but certain advantage shall be sought rather than one of greater but less certain advantage, when it is whether some important offer shall be accepted, or some important step shall be taken, it is legitimate, normal, and desirable to hesitate long, and to ponder deliberately, it may be for weeks or months, before the volition is exercised

and the final decision taken; but when the matter in question is of the means to carry out an end already determined upon, when it is not whether we shall spend the greater part of our life in India or South Africa or at home, or whether we shall leave the Church of our fathers and our upbringing and join another, or enter into partnership with Jones or not, or some such momentous decision, but is whether we shall take a house in this suburb or that, or an office in this street or that, or invest a spare thousand in this security or that, a hesitation of weeks or months would be manifestly inappropriate and excessive. Hours or days would be long enough to hesitate over such matters as this. Decisions on the lower middle level may properly be still more brief. Minutes would be enough time to consume in hesitating whether to send for Dr. Smith or Dr. Brown for the baby's illness, whether it is necessary to go in person from London to Birmingham to transact the business, or whether a letter will not suffice; whether to buy this picture or that bracelet would or would not be unjustifiable extravagance. Finally, volitions on the lowest level are normally made without appreciable hesitation. In novels, it is true, the characters always "carefully select" a cigar out of the box, but anyone who did so in real life would be stared at. A choice of this kind is made instantaneously, and even in buying a pipe or a walking-stick, no normal person would hesitate more than momentarily; and so with the decision whether to walk or take a cab; whether to go to church or stay at home, whether to play billiards or cards, whether take the short and muddy path across the fields or the longer and cleaner way by the road, may admit of momentary hesitation, but not of a hesitation that is more than momentary.

No doubt other considerations than the importance of the decision do enter into the determination of the length of hesitation, and such determinants as the number of the alternatives among which the choice is to be made, and the equality in advantage of the different alternatives, have an important effect; but for the present purpose all that we need take into account is the importance of the decision, or the evolutionary level of the volition concerned.

The first of the spontaneous disorders of volition is the undue prolongation of the period of hesitation. In this disorder there is abnormal delay in "making up the mind," and it seems that even when the mind is made up, and the course of conduct decided upon, there is some obstruction to the exercise of the will, so that the action is delayed. In such cases not only is some choice of the lowest level, such as which shoe or which stocking is to be put on first, preceded by a period of hesitation that may run on for ten or fifteen minutes, but when some simple act, such as pouring out the tea, is decided upon, an unaccountable delay occurs before the hand can be stretched out and the teapot grasped and lifted. In the latter case the interval is usually occupied in giving way to the obsession of counting. Before every action of the most trivial kind the patient is obsessed, and yields to the obsession of counting, usually up to ten, or some multiple of ten. Before the teapot can be grasped, ten must be counted; before the tea can be poured into the cup, ten more must be counted; before the milk can be added, ten must be counted again; and yet again before the sugar is dropped in. In other cases there is merely excessive hesitation without obsession.

Closely allied to excessive hesitation is Vacillation,

a disorder which occurs at a slightly later stage, after the action is begun, and consists in repeated interruption and renewal of an act. In this disorder the patient will not, as in hesitation, sit contemplating his shoes, unable to make up his mind which to put on first, but will seize first one, with the intention of putting it on, and will instantly abandon it and take up the other. He will get the right shoe half on and kick it off again in favour of the left, and so he will go on with other acts throughout the day. He decides to go and buy something—starts and comes back half a dozen times. He gets to the shop at last, enters it—and comes out again without making his purchase. He goes back and selects the pair of gloves he wants—rejects them in favour of another pair—rejects these and takes the first pair—rejects these again for the second, and so on; and so throughout the day. Undue hesitation often exists alone, without a trace of vacillation, but vacillation, which seems to be a more advanced stage of hesitation, rarely exists without hesitation.

The third variety of the spontaneous disorder of volition is the reverse of undue hesitation. It is precipitation in volition. It is the sudden and precipitate willing of an act whose advantage and disadvantage have received no adequate consideration, or have not been considered at all. Some degree of precipitation is common enough, and does not transcend the limits of the normal. There are plenty of people who act impulsively upon occasion, and who suffer the consequences of doing so, without the impulsiveness reaching the degree of actual disorder of mind. The impulsiveness that constitutes disorder is very rarely precipitation pure and simple; that is to say, it rarely or never consists in the precipitate choice of one out of several

sane and reasonable alternatives. Such impulsiveness is frequent enough, and may be supremely sane, for there are a few rare spirits, of whom Napoleon Bonaparte is the most conspicuous, who appear to seize instantly and intuitively, even in the most important and most complicated affairs, upon the course of conduct that proves in those circumstances the most advantageous. The impulsiveness that marks disorder of mind is the precipitate willing of some act that is itself on the face of it unreasonable and disadvantageous, and that it is difficult to believe that even the disordered intellect would have suffered the person to choose if time had been allowed for a deliberate choice to be made. Precipitate volitions that are morbid are morbid not only in their precipitation: they are morbid also in the character of the act that is done, but still, the impulsiveness of the act is its leading and most distinctive quality. Morbid impulsiveness may show itself in a sudden leap from a window, and then the impulsiveness may be so extreme that no time is taken even to open the window; or it may show itself by a sudden tearing of the cloth off the table with all the covers and viands upon it; or it may show itself in any other sudden act, which may be self-destructive, or destructive of others, or destructive of things merely; but which is usually destructive of something.

The reflective or elicited disorders of will are, as the title implies, not exhibited except in circumstances that call them forth; and these circumstances are the expression of the will of others. It is a common observation that different persons differ normally both in the power of impressing their wills on others, and in the power of resisting the will which others seek to impress on them, or do impress on them without seeking to do

so. Here we do not consider the power of impressing the will on others, but solely the power, and aptitude, and practice of resisting the will or the suggestion of other people. This power, normally variable, attains in disease to extremes that are in themselves manifestly morbid. There are persons in whom it is so deficient that they are at the mercy of those around them, or more usually of one person of their acquaintance, and fall in, with canine obedience, with every suggestion that these others or this other may make to them. Such suggestibility is recognised by Scotch law as an occasional feature in human nature, and certain provisions of that law are specially designed to protect the Facile person from plunderers who would take advantage of his facility.

The opposite attitude of Stubbornness or Resistiveness, though not very frequent, is sufficiently frequent in insanity to render it remarkable that it was never described until the description appeared in the first edition of this text-book. That description may be repeated here:—Patients of this type do not speak. They make for the door, the window, or the fire, and when restrained will continue for hours the same silent, dogged, determined effort to reach the desired destination. They, too, undress themselves, but they do so, not, as the acute maniac does, from the mere exuberance of their activity, which must find some vent, it matters not what, and which, when restrained from taking off the coat, begins to unbutton the waistcoat or trousers. A patient of the resistive type undresses himself with the same blind dogged obstinacy that he does everything else. He persistently, again and again for hours together, attacks the same button, or tries to remove the same garment in the same way. He, too, refuses food,

but he refuses it not, as far as can be judged, with suicidal intent, but with the same resistiveness with which he stubbornly opposes everything that is done for him, and everything that is suggested to him to do —refuses to be dressed and to be undressed, to sit down or stand up, to go to the closet or come away from it, to walk about or to stand still. Stubbornness seems to rest, in the last resort, upon excessive suspicion, and it is probably on account of the suspicion, or more, the conviction, that everyone is antagonistic towards him, that the stubborn person adopts his attitude of stubbornness. At present, however, we are not concerned with the combinations of disorders, but solely with single disorders of single faculties, and of these Stubbornness is one of the most pronounced and remarkable.

FEELING I. SUBJECTIVE

Under this heading I include two different groups of mental states, each of which is susceptible of division into the four evolutionary levels into which the other faculties have been divided. I call the two groups respectively Subjective and Objective, names that have been so abused and are so generally misapplied that I hesitate to use them, but no others are as appropriate.

By a Subjective Feeling I mean a feeling of pleasure or pain; and it is easy to see that there are several grades or evolutionary levels of pleasure and pain. On the lowest level are those crude pains, often miscalled bodily pains, that arise from structural damage to the tissues of the body and from many functional disorders. Such are the pains of wounds and burns, of colic and cramp, of inflammation and cancer; the corresponding

pleasures being those of warm or cool and soft contact, of stroking and rubbing, of normal functions actively performed. On the second, or lower middle level, are those general and voluminous feelings of well-being or ill-being, of buoyancy or depression, of high spirits or low spirits, euphoria or dysphoria, that do not admit of analysis, of division into parts, or of description. Everyone knows what they are : everyone has experienced them at one time or another. The aspect of them that is important to the alienist is that in the normal they correspond with and depend upon our estimate of our circumstances and achievements, as favourable and successful or the reverse. If and when circumstances are such as to fulfil or favour our aspirations, and especially if we are successfully approaching the achievement of any task or aim, or have actually just attained it, then we experience a feeling of elation, high spirits, and buoyancy ; but when circumstances frown upon us and oppose to our efforts difficulties that appear insuperable, or when we recede from the end we have in view instead of approaching it, or when we fall short or fail completely in attaining any desired object, then we experience depression, low spirits, misery, in proportion to the importance to our general welfare of the aim toward which we were striving. In such circumstances, and such being our experience, the feeling of buoyancy or depression is justified, legitimate, and normal so long as it is in proportion to the importance of the aim or end concerned ; but when the proportion is disturbed or faulty, and especially when the elation or depression is felt in the absence of any justifying circumstance or experience, then it is morbid in proportion to the width of the discrepancy. Such unjustified elation or depression is frequent enough, and is sane or

insane according as it is or is not recognised by the subject of it to be unjustified.

Normally, the affection, that is to say, the feeling of elation or depression, is a consequence of the circumstances or the experience, and therefore follows the appreciation and knowledge of the circumstances or experience. However adverse our circumstances may actually be, we do not feel depression until we know of the adversity. Many of the passengers by the ill-fated *Titanic* did not know, for an hour or more after the event, that the ship had suffered such damage as must speedily consign them to a watery grave ; and till that knowledge was brought home to them they were free from the depression that overwhelmed them when they appreciated the circumstance. In disease, this order is frequently, if not invariably, reversed. The depression is felt first, and after a longer or shorter interval some circumstance or experience is imagined that would, if it existed, justify and account for the depression, and this imagination speedily assumes the form of a belief, which in this instance is a delusion. In some cases no such imagination is formed. The depression is felt, but no fictitious circumstance is imagined to account for it. Usually in such cases when the depression is deep, some actual circumstance or past experience of an unfavourable character is fixed upon as accounting for and justifying the depression, but the depression is out of proportion and excessive with respect to the experience, and this excess may even be recognised by the subject of the depression. It seems, however, that whenever depression is felt, there is a very strong tendency to find in circumstances or in past experience a provocation and justification for the depression ; that some actual circumstance or experience will be selected if one can

be found, and if intellect participates but little in the disorder; but that if, as is usual, intellect as well as Subjective Feeling is disordered, some circumstance or experience of sufficiently disastrous character will be imagined and believed in to account for the depression. And the same is the case, *mutatis mutandis*, with euphoria or exhilaration. To take a concrete case: a man who feels deeply depressed will, if his intellect remains unaffected, or but little affected, dwell upon some pecuniary loss that he suffered some time ago, and that did not greatly concern him at the time, and will worry and fret over this loss as if it were a justification for his present depression; and if he were asked he would say that he is depressed because of his loss. If, however, he has had no such loss, and if his intellect participates, as it often does, in the disorder of feeling, then he will imagine disasters, either past or impending, sufficient to account for the depression, and will believe these imaginations represent the true state of his affairs. He has lost all his money; his business is ruined; his wife has run away from him; he has committed some crime; he is the unpardonable sinner; or if these things have not already happened, they are about to happen, and no effort of his can avert them.

Since, in the normal, appreciation of circumstances or of experiences, favourable or the reverse, always precedes exhilaration or depression, it is natural to suppose that the same order would be followed in disease, and that morbid exhilaration and morbid depression would always depend upon misappreciation of circumstances or misrecollection of experience: and this view is often taken by alienists. They find depression or exaltation accompanied by a deluded belief in facts that, if it were true, would go far to justify the exhilaration

or depression; and they assume that the normal order has been followed, and that the state of affective feeling is a consequence of the delusion. Careful study of the history of such cases would show them that this is not the sequence of events. In every case the history shows that, where there is an appreciable order in the events, the affective feeling alters first, and the delusion is subsequent and consequential.

Rising now from the lower middle to the upper middle level of pleasures and pains, we may constitute this level of the pleasures and pains of æsthetics. On the one aspect are the pleasures experienced in appreciating beauty, whether of form, of colour, or of sound, of nature or of art, and on the other aspect are the corresponding pains produced by the appreciation of harshness and ugliness. How much the appreciation of beauty and ugliness varies in different people is sufficiently notorious, and it is well known, though scarcely as well recognised, that it varies very widely in the same person for different impressions. Those who keenly appreciate beauty and ugliness of form are not always equally appreciative of the same qualities of colour, and those who can appreciate both may be very inappreciative of beauty and ugliness of sound.

To the student of disorder of mind, these subjective feelings of the upper middle level are of little importance, and their disorders have attracted little attention, though instances in which they have suffered disorder will not have escaped the vigilant student of insanity. In a treatise like this, however, which does not profess to be exhaustive, but gives only a bare outline of disorders of mind, it is unnecessary to pursue further a matter of minor importance.

The topmost level of pleasures and pains is consti-

tuted by those of the moral order, or what is much the same thing, those that arise out of our social circumstances and the fulfilment or neglect of our social obligations. On the active side there is the pleasure of duty well done, of happiness conferred, of services rendered, of benefits bestowed, with the corresponding pain of remorse for abstention and neglect, and it may be, alas! for active misdeeds; on the passive side are the pleasures of receiving approbation and applause, the signs of being liked, respected, admired, with the corresponding pains of receiving the marks of disapprobation and reproof, of being disliked and despised.

The subjective feelings share in the general degradation of mind that takes place in many cases of insanity, and not infrequently the whole of the topmost level of pleasures and pains is completely wiped out; indeed, it is the rule in insanity that these mental qualities, which are among the last to be acquired, both in the race and in the individual, are among the first to suffer diminution and obliteration in the dissolution of insanity. Duties are neglected, the welfare of others is regarded with indifference, occasions of conferring benefit, especially those trifling but valued benefits that ordinary politeness and good breeding dictate, are ignored, without any remorse or regret following the omission; and correspondingly there is no sensibility to either approbation or reprobation, to applause or reproof; and the tributes of love and admiration no more arouse pleasure than the expression of dislike and contempt excite pain.

It happens often enough that the pleasures and pains of the moral level are experienced inappropriately, when there is no justification for them in the experience of the person who feels them; but in such cases the

disorder is not in the faculty of feeling, which faithfully responds to the information it receives from intellect. When remorse is felt for sins that have never been committed, when complacency is felt at liking and approbation that have never been expressed or felt, what is at fault is not the feeling, but the belief to which the feeling responds. If the information that reaches the Faculty of feeling were correct, if the sin really had been committed, or the applause or token of affection really had been received, the corresponding feeling of remorse or complacency would be justified and normal. Feeling acts normally on the information supplied to it, and if the information is erroneous, the fault lies at the door of intellect, which supplies it, not of feeling, which does the best it can with the material at its disposal.

FEELING II. OBJECTIVE

By Objective Feelings I mean the residue that remains of compound feelings when the pleasure or pain that accompanies them, or enters into their composition, is abstracted and removed. In actual experience, the pleasure or the pain is in many cases inseparable from the rest of the feeling, is in many cases an integral component of the feeling; but in many cases also some element of thought, or desire, or will enters into a complex mental state, and yet we have no difficulty in abstracting that element and giving to it a separate consideration, as if it occurred alone; and there is no more difficulty in disregarding the pleasure or pain of an emotion, and contemplating separately the other constituents of the compound mental state so denominated, than in disregarding the reasons why we

come to a certain determination, and fixing our attention on the determination alone.

All feelings are identified more or less completely with the Self, or the subjective side of mind, but with the feelings of pleasure and pain the identification is especially close and inseparable, and therefore to them the title of Subjective applies with great appropriateness. The feelings of the present class, which I call in contrast Objective, are slightly more detachable, and although the term must appear a contradiction, it may perhaps be allowed to pass.

The lowest level of Objective Feelings is occupied by Sensations. By a sensation we understand a state arising in the mind in response to an impression received, a quasi-passive state, into the composition of which no responsive activity of mind enters. When a sensation is received or aroused in the mind, a responsive activity does in fact take place. The mind seizes upon the new content and elaborates it into something more than a sensation, as we shall presently find ; but for the purpose of description and of understanding the composition of the mind, it is necessary to analyse its processes and make distinctions that are to a certain extent arbitrary. One of the least arbitrary of these distinctions is the separation of sensation from perception. Sensations are divided according as they are or are not brought into being by bodily activity ; and the latter class according to the sense organ by which the impression is received. The sensations that are preceded or accompanied by bodily activity to which they owe their existence are those of Resistance and Freedom and of Effort. The sensations of the passive order are the Visual, including Light and Colour, the Auditory, the Tactile, the Olfactory, the Gustatory, the Sense of

Temperature, and perhaps some others. The whole realm of sensation, together with its disorders, is in the province of the physiologist and the physician, and has no bearing on the work of the alienist. It is a very large and a very interesting field, and is cultivated with much assiduity in most books on Psychology, but it need not be traversed here.

The two middle levels of Objective Feelings are occupied by the emotions, divested of their ingredient of pleasure or pain. An emotion is a mental state of considerable complexity, and has been analysed with great skill by William James and others; but the composition of emotions is not a matter of any concern to the alienist, and there is no need to examine it here. What the alienist is concerned with is the circumstances under which emotions normally arise in the mind, and the alterations that occur in disease in the relations between emotions and circumstances. In my book on the Nervous System and the Mind is an elaborate classification of Feelings, and amongst them of Emotions, based upon the differences in the circumstances that normally call them forth. Anyone who is sufficiently interested in the subject will there find a complete enumeration of the emotions, together with a description of the circumstances in which they severally arise; but such a complete enumeration is not needed in such a mere outline as this. All that is necessary for the student of alienism to bear in mind is that every emotion is aroused by a certain appropriate circumstance, which must be cognised and appreciated by the intellect before the emotion can come into being; and that emotions may be broadly divided into two groups, one of which is aroused by circumstances, or events or experiences that are, or are believed to be, antagonistic or beneficent

towards the person, or towards others with whom he is in relation, while the emotions of the other group are aroused by circumstances and experiences that are neutral in this respect. The first group, consisting of the Emotions of Antagonism, Repugnance, and Kindliness, and including such emotions as Anger, Fear, Triumph, Contempt, Disgust, Horror, Anxiety, Sorrow, Joy, and their associates and congeners, I place on the lower middle level; the upper middle level of Objective Feelings being constituted by the Æsthetic Sentiments of Admiration, Awe, Wonder, Surprise, and so forth, which are called forth by circumstances and experiences that have no direct effect on the welfare either of the subject himself or of those with whom he is in relation. The topmost level of Objective Feelings is occupied by those which are aroused exclusively by social circumstances and experiences, and which comprise the feelings of Approbation and Reprobation, Pride, Dignity, Shame, Guilt, Martyrdom, Sympathy, Pity, Benevolence, and so forth, in as far as these feelings can exist free from the pleasure or pain which enters so largely into their composition.

Disorder of any of these feelings exists when the feeling is entertained apart from the special circumstance or experience which normally calls it forth and justifies it; and disorder of less degree exists when the emotion is out of proportion to the justifying experience or circumstance. Fear, for instance, should normally arise only when we are threatened with injury by some agent superior in power to ourselves; and in order for fear to be justified there should be no mistake in our estimate. It should be a fact that we are threatened, and that we are threatened by an agent of power superior to our own, and if these two conditions are

fulfilled, the emotion is a normal emotion. It may be, however, that we have made a mistake—that we are not really threatened, or that if we are, we can easily evade or antagonise the action that is threatened, and in this case the emotion is unjustified, but it is not necessarily disordered. It is not disordered if the mistake can be corrected upon trial, or upon other sufficient evidence. If, however, fear is still felt when there is no antagonistic agent, or no threat, or if the threat is manifestly idle, then there is disorder. It may be that the agent is purely imaginary; or that, a real agent existing, its antagonism and threatening are imaginary; or that a real agent, actually antagonistic and threatening, its power of harm is imaginary, as when an earwig cocks up its tail; in either case, and especially in the former, there is disorder, but in all these cases the disorder is manifestly not disorder of emotion, which faithfully follows the facts as the facts are supposed to be. The disorder is in the intellect, which chooses to misapprehend the circumstances, and to give to emotion a false representation of them. It sometimes happens, however, that fear, anger, or some other emotion arises in force without the excuse of even an imaginary circumstance to justify it, and in such a case it is emotion itself that is disordered. Both kinds of disorder occur, but in the majority of cases there is an erroneous belief as to the facts, and if the facts were as they are erroneously or deludedly believed to be, the emotion would be justified. Even in these cases, however, it does not follow that the mistake or the delusion as to the facts is the first event in the order of time. Not infrequently it can be found that an unreasonable and unjustified emotion of fear, or anger, or what not, was first experienced, and that subsequently circum-

stances were imagined to fit in with and justify the emotion.

The whole Faculty or group of Feelings may be stated in tabular form thus :—

FEELINGS

Subjective (Pleasure and Pain).	Objective.
Moral.	Moral Sentiments.
Æsthetic.	Æsthetic Sentiments.
Euphoric and Dysphoric.	Emotion.
Crude.	Sensation.

INTELLECT OR THOUGHT

The word Thought, like innumerable other words in the English language, is used in two senses, as a verb, to mean the doing of a thing, and as a noun, to indicate the thing done. It may mean the process or operation of thinking, or it may mean the result of this process, the thought that results from the operation. With the process of thought the alienist is not much concerned, and in fact no allusion whatever is made, to my knowledge, in any book on insanity to error or disorder of the process of thought. This is not because such errors or disorders are infrequent in insanity, for in fact they are frequent enough. The attention of alienists has been concentrated upon Belief, one of the results of thought, and it does not seem to have occurred to them that if the result is erroneous, the cause is to be sought in error of the process that leads to this result. This is probably because the process of thought is transient and cannot be easily traced, while the belief that results from it is enduring, and is usually as easy to identify and examine as the process is difficult; and in the second place

because the process of reasoning has been completely misunderstood, and the only description of it that has been at the service of alienists has been the crude, erroneous, and imperfect description of Aristotle, which is ludicrously inadequate and ineffectual.

The true reason for the superior importance that has always been attached by alienists to disorders of belief or delusion is that upon belief all conduct is founded; and although alienists have neglected and scorned the systematic study of conduct, and although they refuse to admit in words that insanity is primarily disorder of conduct, yet conduct is so manifestly of paramount importance in insanity that a blind but sure instinct has compelled them to pay special attention to that factor in mind by which conduct is mainly guided. Every act of every human being is determined by belief. We should not walk across a room to get a book unless we believed that the book was at the other side of the room, and that the floor would bear our weight.

There is another good reason why the intellect should have been looked upon as of paramount importance in insanity, a reason which has never been formulated or discovered by any alienist, but which in some dim and inchoate form has probably been at the back of their minds. This is that disorder or defect of the highest level of intellect is a necessary ingredient in insanity. Mind may be disordered in any faculty and on any level of any faculty, but unless the disorder implicates the highest level of thought, objective or subjective, this disorder of mind is sane and not insane. It is by virtue of the highest level of thought that we recognise and gauge our own mistakes and disorders, and as long as this highest level is intact, so that we can and do recognise that our mistakes are mistakes, and our disorders,

whether of mind or conduct, are disorders, so long sanity is unaffected, and our mistakes and disorders are sane. As soon, however, as we become incompetent to make this adjustment, and proceed to act on the supposition that our disordered mental processes and states are valid and correct, and make no attempt to correct our mistakes, the Rubicon is passed, sanity is left behind, and insanity is established.

It is not on this account, however, that alienists have confined their study of the disorders of mind exclusively to disorders of thought. It is because disorders of thought are so conspicuous, dramatic, and impressive, that it was for long held universally, and is still held by some, that the disordered belief that is termed delusion is the only disorder of mind, and is co-extensive with insanity. Delusion was for long the sole criterion of insanity: without delusion there was no insanity; and an insane person meant a deluded person and no one else. Once held universally, and formally laid down in Courts of Law, this doctrine still lingers, not only amongst the laity, but even amongst medical practitioners, some of whom to this day refuse to certify a person as insane unless they can discover in him evidence of delusion. This long identification of insanity with delusion was no doubt largely answerable for the blunder, which should now be considered an anachronism as well as an absurdity, of identifying insanity with unsoundness of mind.

To give here a complete account of the normal process of reasoning and of the normal conditions of belief would be to interpolate a treatise on Logic and a treatise on Epistemology; and although either would be of more value to the alienist than learning to fiddle with the ergograph, and the other instruments that make up the

armentarium of the "experimental psychologist," and although an alienist can scarcely be considered expert in his profession without some knowledge of both, yet their direct bearing upon the study of individual cases of insanity and other mental disorders is not sufficient to warrant the space being given to them here. Those who wish to follow up this line of study should read "A New Logic" and the sections on Truth, Certainty, Likelihood, etc., in my book on Psychology.

Intellect has two sides, of which one only has hitherto been recognised. By means of Intellect or Thought we judge or estimate the nature and bearings of our surrounding circumstances, and devise methods of dealing with them in such ways as to turn them to our advantage. This is the external or objective side of intellect, and it is the only aspect of intellect that has received any attention, or is recognised or known to psychologists. But there is another side to intellect, and one that is of the utmost importance to the alienist, for it is the seat of frequent and grave disorder. By means of intellect we judge not only of external circumstances, but of our own powers and capacities and other qualities; and a moment's consideration will show that in dealing with circumstances, and in devising methods of dealing with circumstances, it is quite as important to form a just estimate of our own powers as to judge accurately of the circumstances without. If I find an obstacle in my way, it is important to discover its nature, and its mobility or immobility; but it is evident that its mobility or immobility is relative to my own strength. What I mean by the mobility or immobility of the obstacle is whether I have or have not the strength to move it; and it is evident that what appears to be a quality in the obstacle is really dependent on a quality

of my own. If I have to catch a train, it is very necessary that I should estimate the distance of the station and the time at my disposal; but these are no use to me, however accurately I may estimate them, unless I estimate also the rate at which I can walk or run. It is impossible to deal with circumstances, or to devise ways of dealing with circumstances, unless we take into consideration and estimate our own powers and capacities. This side of intellect, which I call the Subjective side, does not appear to have been discovered by psychologists, but the disorder that it frequently suffers makes it very conspicuous to the alienist, and very important to him. I therefore treat of Intellect on two aspects; first the Objective aspect, or the Estimation of Circumstances, and second the Subjective aspect, or Self-estimation.

OBJECTIVE INTELLECT

There are three processes of Reasoning, two of which, or rather parts of two of which, are known, very imperfectly, to Logicians. They are Induction, Deduction, and Analogy, but the last two of these may be neglected, for neither of them leads directly to Belief, and therefore neither is of direct importance to conduct. Induction is the reasoning process with which the alienist is most concerned, and fortunately for him the process of Induction is a simple one. Induction rests upon this simple principle—that if two things resemble each other in some material respects, they will resemble each other in other material respects; or to put it otherwise, if two things have certain qualities in common, they will have in common certain other qualities that have been found in experience in constant association

with, or to depend upon, the first common qualities. For instance, if a certain fruit resembles in material respects another fruit that has been found in experience always wholesome or always poisonous, the first fruit will be found wholesome or poisonous as the case may be. What respects are material cannot be stated generally. That is a matter for experience in each case as it arises ; but granted that there is similarity in material respects, the induction will be sound and the resulting belief justified.

The simplest beliefs result from those simple inductions that are, as it were, forced upon us by sensation. The sensation of a small patch of brown colour on the green grass arrests my attention, and instantly arouses the remembrance of innumerable patches, similar in material respects, that I have seen before. These other patches of colour I have found in experience to possess certain qualities. I have submitted them to examination by various senses, and have found that they indicate thin, brittle, light, fragrant, rustling laminæ, that they are in fact dead leaves ; and I reason or induce that this new patch that I see before me, since it is similar in the material respects of light and shade and outline and mobility in the wind, is similar in other material respects also, and would, if I examined it closely, prove to be a thin, brittle, light, fragrant, rustling lamina, similar to others that I see hanging on the tree. The result of this induction is the belief that this patch of colour represents a dead leaf, and beliefs of this class, that are initiated, and in a measure forced upon us, by an impression on the senses, are called Percepts ; and the process of induction by which they are reached is called Perception. The process is the simplest and most rapid instance of induction—is so simple and so rapid that its nature is

obscured, and by most psychologists it is considered not to be induction; but this is merely an instance of the familiar fact that wide superficial differences often conceal a deep and fundamental similarity or identity. Percepts vary, of course, according as the sensation that initiates them is visual, auditory, tactual, or what not, but all are arrived at by the same simple process, and all are beliefs of the same simple character.

The process of perception may be ill-performed, and the resulting belief may be erroneous; and in this case the error may be corrigible or incorrigible—sane or insane. Mistakes in perception of greater or less degree are not very infrequent. We see an aneroid barometer of the shape and size of a watch, and on a casual glance we perceive that it is a watch. The percept is a mistake. The belief is erroneous. Such a belief is, however, corrigible. If we examine the thing more attentively, we shall perceive that it is not a watch, and if we are already familiar with barometers we shall perceive that it is an aneroid.

Graver mistakes are frequent in disease. In some states of disease, a man seeing a piece of string lying on the floor, will read into it the qualities of a worm or a snake. He will perceive it, not as a piece of string, but as a worm or a snake; and this percept may be corrigible or incorrigible. If he has the courage and presence of mind to pick it up and examine it attentively, he may correct his percept and arrive at the valid belief that it is a piece of string; or he may be unable to make the correction, and still perceive it as a snake. In the first case the mistake is a sane mistake, and is an example of a sane disorder of mind that is by no means infrequent. In the latter case the mistake, being incorrigible, is insane, and is an example of insane

illusion, an insane disorder of mind that is frequent enough.

Similar mistakes occur in interpreting or perceiving auditory sensations. We hear a voice, and perceive that it is the voice of A. It is in fact the voice of B ; and if B is before us and we see as well as hear him speaking, we may be able to correct the process and arrive at the valid belief that we had been mistaken, and that the voice was in fact the voice of B. If, however, we cannot make the correction, but continue to believe that B is speaking with the voice of A, the belief is no longer sane. It is an insane illusion. Still graver is the disorder when some inarticulate sound, such as the song of birds or the wind in the trees, is perceived as spoken words. In such a case the mistake is nearly always incorrigible, and the illusion is therefore insane.

A still wider departure from the normal takes place when a percept is perceived without any provocation or basis in the shape of a sense impression to justify it, or any percept. Whether such an event ever really takes place I take leave to doubt. The sense organs are never wholly free from stimuli, internal or external. Even in the dark and with closed eyes we see clouds and rings of colour. Even in the silence of the dead of night we hear the rush of blood in the cerebral arteries ; and a very trifling sense impression is enough to form the nucleus of a percept in certain morbid states of mind. However, whether this is so or not, it is manifestly a wider departure from the normal to found a percept on a sensation, if sensation there be, that no one else can appreciate, than on one of a grosser character ; and percepts of this nature are distinguished from other illusions and receive the title of hallucinations.

Perception is the most rudimentary process of thought,

or intellect, and Percepts are the simplest of Beliefs. These then constitute the lowest level of Objective Intellect.

The next step upwards in Objective Intellect after perceiving an object is to form an estimate of the beneficence, the maleficence, or the neutrality of that object with respect to one's own life-worthiness or welfare. The lowest and most rudimentary process of thought answers the question, What is this? What manner of object is it that produces this impression on my senses? Immediately following the determination of this problem comes the further question, Now that I know what this object is, is it potentially harmful or beneficial to me? Is it dangerous, and in what way? Can I utilise it, and in what way? The estimation of beneficence or maleficence is often almost as instantaneous as perception itself; but it is different from the perception, and the difference is well brought out by the discrimination of disease. A housewife who has had abundant experience of the kettle and the wash tub, and whose experience of the destructive and painful effect of boiling water on the skin is ample, becomes demented to a certain depth, such that while she retains the power of perception, and can perceive that the vessel before her contains water, and by the abundant steam that rises from it, scalding water, yet has lost her power of estimating the harmful quality of scalding water, and immerses her hand in it, well perceiving that it is scalding hot, but not estimating that it has the power to scald. Similarly, a man accustomed to the traffic of the streets may perceive that the object which approaches him is a two-horse van, but he fails to estimate that this object possesses lethal qualities, so that if he gets in its way it will knock him down and injure him. This power

of estimating the harmful or beneficial quality of perceived objects or appreciated circumstances I call for want of a better title, Caution. Thus characterised, the power or process of estimating the beneficial or harmful quality of familiar objects constitutes the lower middle level of Objective Thought.

Defect of caution is not the only disorder of the lower middle level of thought. A frequent disorder of this level is an exaggerated estimate of the potential noxiousness and maleficence of surrounding agents, an estimate that results in a general attitude of suspicion. The estimate may be thus general, or it may be concentrated upon certain specific things or persons. The most exaggerated instances are seen in the disease of paranoia, of which exaggerated and unreasonable suspicion, unjustified by circumstances, is one of the most prominent features. Usually in paranoia there is more than suspicion: there is settled and deep conviction of the hostility and noxiousness of some one or more persons, who may be real or may be imaginary, but in any case the settled belief in the noxiousness and hostility of this person or of these persons is but the nucleus of a cloud of suspicion that spreads far beyond them, and is apt to become almost universal. The most innocent acts of the most utter strangers are enveloped in the suspicion. The casual greetings of strangers in the street, the public utterances of public men, the leading articles in newspapers, are all suspected; and subtle references, offensive references, to the suspicious person are found in them all.

The upper middle level is constituted by inductions of a more elaborate character, dealing with more general circumstances, and may fitly be represented here by the means which are devised to meet circumstances whos-

quality, as beneficial or otherwise, has been determined on the level below. This faculty, which we may term Ingenuity or Cleverness, takes cognisance not of mere objects that can be seen, heard, or touched, but of whole situations, constituted by a complete set of circumstances, such, for instance, as those embodied in the terms of an agreement, the lease of a house, or a deed of partnership. Caution advises us that our informant is not trustworthy, and ingenuity sets to work to sift his information and compare it with that from other sources. Caution tells us that a storm is imminent and ingenuity looks about for shelter. Caution shows us the danger of a conflagration, ingenuity devises means to prevent and to extinguish it.

The highest level of Objective Intellect is the faculty of Wisdom, which estimates by and large the important circumstances of life, and thinks out what our conduct should be in order to secure the main purposes of life. If ingenuity settles the terms of an agreement, wisdom determines whether an agreement shall be made or no. Ingenuity may settle the terms of a lease, but wisdom decides whether or no the house shall be taken. Ingenuity governs the clauses of the partnership deed, but wisdom decides whether or not it is expedient to enter into the partnership. Shall I make a public proclamation of my opinion and attitude on this vital question? Wisdom ponders the pros and cons, and lays them before the highest level of Will for determination. Cleverness or ingenuity devises the method by which the position is to be stated. Caution estimates the appropriateness of the words and phrases. Perception sees to the spelling. Or we may illustrate the several levels thus: Ought I in these circumstances to bring an action at law? Wisdom, in the person of

counsel, gives the opinion. That being decided, Ingenuity, in the person of the solicitor, takes the proofs of the chief witnesses and devises the means for putting the decision into force. His clerk, who represents Caution, sees the formal witnesses and attends to details; and the office boy, who personifies the lowest level, takes the names of the witnesses and shows them in. Shall I or shall I not go to that place? Wisdom discusses the alternatives. How shall I get there? Ingenuity finds the way. Shall I go by train or motor? Caution dictates the choice. Is that a taxi or a private carriage? Perception makes the judgment. Wisdom settles the strategy of the campaign; Ingenuity devises the tactics of the battle; Caution directs the operations of the units; Perception is the Tommy who makes the firing line and comes into contact with the enemy.

Objective Thought may be disordered on any of its levels, but before examining actual disorder, I may draw attention to the disproportion that frequently exists between the highest and the second level. It is a frequent occurrence to find ingenuity developed out of proportion to wisdom, and *vice versâ*. When cleverness is in excess with respect to wisdom, the resulting character is that of the clever fool—the man who is full of ingenious devices to do that which is not worth doing. To say that he will invent a machine for turning fresh eggs into stale ones is no doubt an exaggeration, but many of his devices are not much more useful. He will scheme and plot to save sixpence—at an expense of half a crown. He is full of schemes and devices which make us wonder that so much ability is incompetent to recognise the uselessness of them all, or at least how much better such ability would pay if it were turned

into other channels, and expended in attaining other ends. But wisdom being deficient, the choice of ends is injudicious, for it is the function of wisdom to select the main ends to be sought. It sometimes happens that wisdom is conspicuously deficient while ingenuity is highly developed, and the consequence of this combination is the "sane lunatic," who is such a puzzle and such a trial to those who have charge of him. His conduct is such that it is difficult, and may be impossible to lay one's finger on any act or speech that is certainly insane. We cannot say of any one thing he does or says "This is insane: this is a thing that no sane man would do or say," and yet, when viewed by and large, the whole trend of his conduct leaves no doubt upon our mind that he is insane, and enables us, with more or less difficulty, even to convince a court of law that he is insane. We are all familiar with such cases, and it is extremely difficult to formulate in words what the peculiarity in mind or conduct is that justifies us in finding insanity, and compels us to find insanity. Such persons are the despair of their families, and are insoluble problems to the general practitioner, who may be for years convinced that they are insane, and yet may be wholly unable to state in a certificate any single "fact indicating insanity at the time of examination." Yet if we keep in mind the different levels of intellect, and especially the difference between wisdom and cleverness, we shall have little difficulty in discovering where the disorder is, and not a great deal in putting it into words.

Such a patient is for ever plotting and planning and scheming; and his plots and plans and schemes are very ingenious, very clever, and very often successful in achieving their immediate purpose; but when they have achieved their immediate purpose, the success is

worthless to the actor. It does not advance him in the least towards any ultimate goal: on the contrary, it retards him and baffles him in attaining what he most desires. He is, we will say, a lunatic so found by inquisition, and the main, the ultimate purpose of his life is to get his supersedeas. He is for ever contriving dodges, tricks, and devices to outwit those who have charge of him, and he is often successful in outwitting them. He gets letters that he has no business to post posted on the sly. He tempts and bribes the attendants and others to commit faults, and then rounds upon them, accuses them, and may succeed in getting them punished. He obtains goods here, credit there, and money in another place; in spite of all our care and vigilance he succeeds in a score of subtle devices; but put all these successes together, and what do they amount to? Do they carry him a hair's-breadth nearer his ultimate object of proving his sanity? Not a bit. The more he succeeds in his malicious tricks and dodges, and the more he gives himself up to them, the more you recognise the ingrained insanity of a really able man squandering his ability on such unworthy objects. Many of the things that he seeks to obtain by cunning and underhand devices he could have for the asking if he chose to be straightforward, but the defect of wisdom prevents him from seeing this; and owing to the same defect he cannot appreciate, even when he is told, that by thus acting he is demonstrating, not his fitness, but his unfitness to be at large. It was just such a succession of impish tricks that brought him to the asylum, and yet the defect in his wisdom prevents him from understanding that the continuance of these impish tricks is keeping him there. He cannot understand this because the highest level of his intellect is disordered and

inefficient. He can act with abundance of cleverness because the second level of intellect, originally highly developed, retains its integrity: he is incapable of directing his ability to the highest service of his own welfare because the highest level, wisdom, is out of order and incapable of utilising the cleverness and ingenuity that are at its service.

On the other hand, there are plenty of dull people, more or less lacking in cleverness or ingenuity, who are nevertheless successful in life, and prove by their success the possession of a normal quantum of Wisdom. Realising the limitation of their own cleverness, they take such places in the world as do not require cleverness to fill capably. They set before themselves no aim that they are incapable of attaining, and therefore do not fail. Deficient as they are in ingenuity, which is the capacity of meeting new circumstances in new ways, they are careful to keep to old ways, and never to adopt a new device until it has been well tried and found successful by others. The determination of the main ends in life is the function of Wisdom, and in wisdom they are not deficient; hence their lives, while never strikingly or brilliantly successful, are never arrant failures. Of such characters the great bulk of the population in every country is composed.

It has been said above that disorders of Objective Intellect have received from alienists a monopoly of importance to which they are not entitled. This is true, for, as is now being explained, mind may be disordered in many ways and in many departments without displaying any of those erroneous beliefs that were once supposed to be necessary to render a person insane. But at the bottom of the practice of alienists there was a residuum of truth. Mind may be disordered in many

departments without disorder of intellect; insanity may include many disorders of mind that are not disorders of intellect; but whatever the disorder of mind may be, it does not amount to insanity unless the highest level of intellect is defective, so that the disorder of mind is not recognised and known to be disorder; and whenever this highest level of intellect is disordered, then the disorder is insanity, whether or no other levels and other faculties of mind are implicated in the disorder. The consequences of this doctrine are of the highest importance, as will be seen as we go along.

When the second level, the level of ingenuity, is disordered or defective, the result is dullness, stupidity, and confusion of thought; but these defects are by no means necessarily insane. If the highest level remains unaffected, the subject of the disorder recognises and admits the disorder, and adapts himself to it as far as he can. Recognising that his mind is unequal to the performance of his daily work, he rests from it. He does not attempt the ordinary tasks that are now beyond his power, and he consults his doctor for the malady that he knows is attacking him. In so doing he proves the sanity of his mind, disordered though it is. As long as the highest level of intellect is intact, any disorder that occurs on the inferior levels is recognised as disorder, and measures are taken to counteract and correct it. Illusion is known to be illusion; hallucination to be hallucination; groundless suspicion, fear, panic, depression, are known to be groundless; imperative idea is known to be absurd. All these are then sane disorders of mind, and such sane disorders are frequent enough. Every book on psychology expatiates at length on sane illusions. Sane hallucinations, that are known and

recognised by the subjects of them as hallucinations, though not frequent, are well known to occur; and frights, panics, depression, suspicion, as well as many other states of mind that are unjustified by circumstances, and are known and recognised by the subjects of them to be unjustified, are of frequent occurrence. Such disorders are quite sane. There is no trace of insanity in them. They are not described in books, for they rarely come before writers on insanity, and if they did, the writers on insanity, holding as they all do that insanity is disorder of mind, and that disorder of mind is insanity, would of course regard them as insane; and if they come before neurologists, as they probably do, the neurologist gets what knowledge of disorder of mind he has from the alienist, and takes the same view.

SUBJECTIVE INTELLECT

Subjective Thought is a department of mind that has not hitherto been described or even recognised. It consists, as already explained, in the estimation of our own qualities, and its extreme importance to conduct, and therefore to the estimation of insanity, is plain. Intention or determination to do this or that depends on several factors, some of which—desire, estimation of circumstances, etc.—have already been examined; but it is clear that no course of conduct will be determined on that is not believed to be within our powers, and this belief must rest upon the estimate that we form of our powers. We may desire to get from Dover to Calais, and we may correctly estimate the distance to be about twenty miles, but in casting about for means to compass the journey we shall not take into practical

consideration the project of jumping across. Why not? Clearly because we estimate our own powers of jumping, and have a settled belief that twenty miles is more than we could manage. If the gap of water that we want to traverse is not twenty miles, but twenty feet, the difficulty for most of us is still insuperable; but still, in this case it is not so utterly and outrageously beyond our powers that we do not give it at any rate a momentary consideration. If it is but ten feet, we may seriously consider it, and if only five, many would try it without hesitation, and many would succeed; but in any case, whether an act is to be attempted or not depends, among other things, upon our own estimate of our own ability to accomplish it; and therefore this field of estimation is a very important department of the province of thought. It is the more important to the alienist since it is very liable to disorder.

The four levels of Subjective Thought are determined by the grade of the power, capacity, ability, or other quality that is the subject of the estimate. On the lowest level are the estimates of mere physical capacity. Everyone can tell, with a more or less close approximation to accuracy, what his physical powers are—whether the ditch is or is not too wide to leap; whether the stile is or is not too high to jump; whether he can reach up to this object, or lift that one; what distance he can walk, and in what time; how far he can throw this ball or that stone; his powers of endurance, his manual dexterity, and so forth. Such estimates are perpetually being made, and conduct is perpetually being regulated in accordance with them. Another branch of the estimates of this character are those concerning the magnitude, weight, and other statical attributes of our own bodies, and of parts of them.

Lying, as they do, at the base of subjective estimation, estimates of this level are disordered late in disorder of mind, and show that the disorder is profound. They are therefore not nearly so frequent as disorders on the higher levels, but still we sometimes witness them. We see patients with the most exaggerated estimates of their own powers, and of the magnitude of their own bodies or limbs. This one can jump over a house, that can lift a ship out of the water by his own unaided strength. The feat of jumping across the straits of Dover appears to another well within his powers. One patient of an amorous disposition assured me that his penis was fifteen miles long, and his testes as big as castles.

The next level is constituted naturally by estimates of mental capacity, and the estimates that we form of our own ability are of two kinds—relative and absolute. Everyone in his progress through life, and his constant intercourse with his fellows, measures himself more or less deliberately against them, and estimates his own intellectual capacity relatively to theirs, gets to know whether he is above or below the average, not only generally, not only with respect to his wisdom, cleverness, or caution, but also with respect to special accomplishments. He learns to rank himself as indifferent, fair, good, or excellent, as a linguist, as a bargainer, as a musician, an organiser, a judge of character, a chess-player, or what not. Besides this relative estimate, he learns to form also an absolute estimate of his intellectual powers. He knows what he can understand at once, what he can by application learn to understand, and what is wholly beyond his comprehension. He learns what mental capacities he possesses, what occupation is suitable and what unsuitable for him, what

problems he can solve unassisted, and for what he must ask for assistance, and so on.

These estimates are liable to err, and the error may be within or without the limits of sanity. Some people are so happily constituted that they habitually overrate their own capabilities; and although this leads them to undertake tasks for which they are incompetent and in which they fail, the failure has not the same effect in producing depression and despondency that it has on other people. Others, unduly modest, underrate their own capabilities, and shrink from tasks that they are well able to perform. In such cases, however, the defect is often not so much a mistaken underestimate of their own intellectual powers as a lack of courage, a shrinking from responsibility, an unwillingness to incur the risk of failure; and the fear of failure is often itself a source of failure.

In all this, however, there is no insanity. Insanity does not exist unless the estimate of mental capacity is grossly and exorbitantly excessive or defective; and gross and exorbitant error in either direction is frequently witnessed. One person will cover reams of paper with wretched doggerel, and boast of it as glorious poetry; another will be certain of selling for enormous sums mere unintelligible scribbling; others, again, will lay claim to supernatural acuteness and ability in the most various directions—acuteness and ability of which there is no evidence beyond their own claim. They can square the circle, and demonstrate the flatness of the earth; they can read the thoughts of persons a thousand miles away; they know what song the Sirens sang, and will sing it to you in a voice that they declare is comparable only to a seraph, but that seems to the hearer a discordant noise; they can penetrate the

secrets of all the Chancelleries of Europe, and tell exactly how each of them ought to act; there is, in short, no limit to their capacity.

On the other hand, there are unfortunates whose underestimate of their own powers is certainly great, but cannot be proved, and for the moment may even be not very inaccurate. They stand appalled and helpless before problems and difficulties that in health they could meet and solve easily enough, but that now are beyond their capacity; so far their own estimate of their own powers is not perhaps inaccurate, but they extend this inability into the future and the past, and declare that they have always muddled everything they ever undertook, and will never be competent to transact the simplest business. In this the limits of sanity are passed.

The upper middle level of Subjective Thought is composed of estimates, not of physical or mental capacity, but of powers more extended—of the powers arising from the possession of wealth, influence, and honour. Of course, these are not, strictly speaking, altogether subjective estimates, or estimates of subjective powers. They involve and require as antecedent conditions certain estimates of external circumstances. They are, however, so closely bound up with the purely subjective estimates; they so surely, or at least so commonly, suffer disorder when the purely subjective estimates are disordered, the disorder is so invariably in the same direction, and the recovery from the one so regularly accompanies recovery from the others, that it would do violence to evident natural affinities to place them anywhere but in association with these others. The estimates of this class are estimates of possession: they refer to wealth, power, influence, honour, titles,

possessed by, or due to, the estimator. Normally there is little room for error in estimates of this class. A man of great wealth may not know the whole of his possessions, but he knows that he is a very wealthy man. A poor man whose affairs are very complicated may not know whether he is actually solvent or insolvent, but he knows quite well that he is near the border line. A man can scarcely make a normal mistake as to his position in the world, or the title by which he has a right to be addressed; and though he may not have a very accurate estimate of the esteem in which he is held by his neighbours, he knows pretty well if they are prepared to acclaim or to execrate him when he appears in the street.

When this faculty is disordered, these estimates are erroneous, and are often grossly erroneous. The poor man, or the man of moderate means, believes that he is possessed of wealth beyond the dreams of avarice; the humble dweller in a back street fancies that he can determine the fate of cabinets, and influence the destinies of nations; the city clerk or the bricklayer's labourer arrogates to himself the highest titles in the peerage, monarchy, popedom, godhead itself. The ordinary titles are not enough to satisfy his overweening and grotesque self-estimation, and he invents new ones of which no one has heard the like. In the opposite direction of self-depreciation the exaggeration is never so enormous. He who is near the ground has not far to fall, though the boundless expanse of heaven is above him to soar into. The man of substantial means, or even of great wealth, often believes that he is ruined, but never, in my experience, that he is groaning beneath a load of inextinguishable debt. He looks upon himself as despised and rejected of men, as insignificant, of no account, as

neither possessing nor deserving of influence or power, but he does not often invent for himself titles of ignominy and disgrace. One patient, however, stigmatised himself as the Awful of Awfuls.

Lastly, the highest level of self-estimation is constituted by estimates of our own moral worth. This is a matter that in the normal does not much occupy our thoughts unless we have unhappily some fault to regret; and when the faculty is disordered, the disorder is seldom in the direction of exaggerating our own moral excellence, or if it is, the exaggeration of this quality is swamped and concealed beneath the exaggeration of the estimates on the second level—of wealth, power, and honour. Self-depreciation with respect to the moral qualities is, however, a frequent symptom of disorder, and may take the form of self-accusations either of crime or of sin. False but conscientious self-accusations of crime are frequent enough, both in the transient insanity of drunkenness, and in cases of more enduring alienation; and, without any definite self-accusation of a specific crime, a general feeling of moral delinquency, and a belief in a past of criminal actions that can no longer be individually remembered, is not very infrequent. More frequent still are ungrounded self-accusations of sin, often culminating in confession of the unpardonable sin, an expression that, for the sake of these unfortunates, one could wish to see expunged from the authorised version. What men mean by the expression is usually the practice of masturbation, to which the laity attach such exaggerated importance, taught so to do, no doubt, by the medical profession, which held the same view until I ventured to question it five-and-twenty years ago. When women confess to the same inexpiable offence, its nature is not usually to be ascertained. It

is certainly not, as one might perhaps have expected, inchastity, but is usually a vague conviction of moral turpitude of no specific character. Sometimes, however, it is a specific act. One poor girl, described to me how, when her lover jilted her, she lay upon her bed and cursed the Almighty, who had suffered him to do so; and this was, to her conscience, the unpardonable sin.

The exaggerated estimate of our own powers and worthiness, upon whatever level the estimate is made, may fitly be called Exaltation, and should be distinguished from Exhilaration, or unjustified joyousness or gaiety, with which it is always confused by alienists. Similarly, Abasement, which is the morbid underestimate of our own powers and worthiness, is confused with Depression, which is lowness of spirits or misery. The two are manifestly different. One is a state of feeling, the other is a belief, the result of a judgment or estimate. The belief that constitutes abasement may be a logical ground for depression, but it is not the same as depression, though it often accompanies depression. The very fact that depression occurs apart from abasement is enough to show that the two things are not the same. I do not know that abasement occurs apart from depression, but exaltation occurs often enough without any exhilaration, and exhilaration apart from exaltation. The exalted person is rarely depressed, but he may be depressed, and I have witnessed the combination, though it is certainly unusual; but he is very often little or not at all exhilarated by his exaltation; and the queen may be found at the wash-tub and the emperor carrying coal, neither exhilarated by their exalted rank, nor impressed by its incongruity with their present occupation.

The structure of Intellect on the plan here proposed will be as follows:—

THOUGHT OR INTELLECT

Objective Thought	Subjective Thought (Self-Estimation)
Wisdom.	Moral.
Ingenuity.	Possessive.
Caution.	Mental.
Perception.	Physical.

MEMORY

The last constituent of mind that needs consideration at the hands of the alienist is Memory, and as already said, memory differs from the other constituents of mind in as much as it is not, as they are, susceptible of division into grades or levels. It has, however, different aspects, which the alienist must bear in mind.

That memory varies much in different persons, so that some have a good memory and others a bad memory, is sufficiently notorious; but what is insufficiently appreciated is that memory differs much in the same person for different things, so that the same person remembers some things well and other things badly; and the person who is noted for the wonderful retentiveness and accuracy of his "memory," meaning thereby what is usually meant, viz. his verbal memory, may have an exceptionally bad memory for other things that cannot be, or do not happen to be, expressed in words; and may in this respect be vastly inferior to the person with a reputed "bad memory." For instance, two men who are commonly singled out as the possessors of extraordinarily good memories—Dr. Johnson and Lord Macaulay—had, indeed, wonderful verbal memories,

so that they could repeat accurately whole pages of books that they had recently read but once, and quote accurately passages that they had read but once and that years ago; but they both had exceptionally bad memories for musical sounds and melodies. Of Macaulay it is reported that he once recognised "God Save the Queen," but no similar instance is recorded of Dr. Johnson, and it is unlikely that if such a startling event had occurred, it would have remained unrecorded.

It is not necessary to discuss here the various factors that help or interfere with the tenacity of memories; they are fully described in my book on Psychology, and elsewhere. It is, however, necessary to insist here that it is as normal to forget as to remember, and that it may be as abnormal to remember as to forget. It depends upon what is remembered and what is forgotten. To have enduring memories of all the details of the domestic day, every petty act and movement, every sound that is heard, every thing that passes under the eyes, every trivial word that is interchanged, would be intolerable. All these things are remembered momentarily, can be recalled after a short interval, but are obliterated by the first sleep, and thereafter are remembered no more. On the other hand, there are certain things that, either for their importance in our lives, or from perpetual repetition, are never forgotten unless the memory is obliterated by disease. No one normally forgets the way about the house or the neighbourhood in which he has lived for any length of time, unless, indeed, he is bedridden. No one normally forgets the name of wife, husband, or child, the nature of his business, or the matters of daily routine; and of single events, no one forgets the church in which he or she was married, no woman forgets the style and material

of her wedding-dress, the place in which she spent her honeymoon, the time and place at which her first child was born; no man forgets the nature of his first paid employment, the place to which he went on first leaving the parental roof, and so forth. These things, and such things as these, are indelibly impressed upon the mind, and not to remember them is clear evidence of morbid forgetfulness.

Morbid defect of memory is of three main kinds, which are quite distinct, occur in different people, and are different morbid conditions.

The first defect is that in which those things are forgotten which are enumerated above, and which it has been said that no one normally forgets. From time to time persons are found wandering in the streets and unable to give any account of themselves, to say who they are, or where they live, or to give any information about their past lives. They have forgotten not only the names of their nearest and dearest, but even their own names, and the whole of their past lives seems to be completely obliterated from their memories. Such people are not always found wandering. The lapse of memory sometimes takes place in their own homes; and curiously enough, they may recognise the familiar faces and figures of those about them, though they are unable to remember their names. Sometimes, however, they are unable to remember whether the husband or wife is the husband or wife. Some such cases are allied to, if they are not indeed identical with, post-epileptic automatism on the one hand, and alternating personality on the other, two conditions that in my opinion are variants of one another.

The second defect of memory is an exaggeration of the senile defect. In this condition the events and experi-

ences of the moment are forgotten as soon as they occur, while the events of the remoter past are remembered with full, and it may be with much exaggerated, vividness and detail. In extreme cases of this kind, an experience is instantly forgotten the moment it has occurred. The patient has no sooner written a letter and laid it on one side than he starts to write it again, oblivious that it has been written already. His daughter has no sooner left the room than he begins to whimper and complain that she never comes near him—has not seen him for a month. His dinner is no sooner cleared away than he rings to know why it is so late ; and so forth. The commonest and mildest example of this defect is seen in the practice of elderly people to tell the same story again and again at short intervals to the same person, oblivious of having told it before. This, with a difficulty in recalling proper names, is the first mental sign of oncoming senility. Together with this lapse of memory for the most recent affairs is apt to go an undue vividness of the memories of things long past. The incidents of youth and childhood pass before the mind with a vividness and persistence that may make them seem more real than the state of things actually existing. The old man passes into a veritable second childhood, and calls his grandchildren by the names of school-fellows with whom he has not associated for sixty or seventy years, mistakes his daughter for his first love, and his wife for his mother, and seems to live in a world that has long passed away.

The third defect of memory is of a totally different kind. Having stated once in the witness-box that the plaintiff suffered from defect of memory, I was asked in cross-examination whether he had not shown in his evidence that his memory of the events he described was very good ; and I admitted that he had, but these,

I said, were past events. "And would you expect him," said counsel with something of a sneer, "to remember future events that have not yet happened?" and he was considerably taken aback when I answered, "Precisely. It is for future things that his memory is so defective." The statement is paradoxical, but it is quite true. Among the things that we have to remember, and that it is most important for us to remember, are things that are going to happen. We should not often catch a train unless we remembered at what time it is going to start. How often do we not—some of us—find our visit to a shop fruitless because we have forgotten the hour at which it was going to close! What is more important to a business man than to remember the appointments that he has to keep? The whole efficiency of men in many occupations lies in remembering correctly what things have to be done at what times. What is the value of a nurse who forgets when dressings are to be changed, when food is to be given, when remedies are to be administered, when the doctor's visits are to be expected? This is a special form or mode of memory, quite different from the memory of what one has read or heard or seen, which is what usually comes into the mind when memory is spoken of. It is the form of memory which is by far the most useful in the practical affairs of life, and is by no means necessarily developed in proportion or in association with the memory of what has been read in books. Rather there seems to be a certain antagonism between them, so that the most learned man is the man least likely to remember an appointment, and the practical man, who never forgets to perform in due order any of his multifarious duties, is the man least able to acquire knowledge from books. Defect of what may be called the practical

memory is a frequent disorder of mind. In many people it seems to be either originally defective, or to be defective from want of cultivation, and in these people, who are called absent-minded, it is not serious; but when it becomes defective in those in whom it has been cultivated to a high pitch, the defect is a serious one, not only on account of its practical inconvenience, but because it may mean grave disease. It is among the earliest signs of one form of general paralysis. It is sometimes the consequence of injury to the head. And it is usually accompanied by confusion of thought.

The last disorder of memory, and the last disorder of mind with which the alienist need concern himself, is not a defect. It is rather an excess. It consists in what I have called mnemonic delusion; that is to say, an event which never occurred at all is remembered, or appears to be remembered. It is imagined and projected, or retrojected, back into the past, and is to the subject of it a memory. Such false memories, or mnemonic delusions, occur chiefly in chronic alcoholism; and the vividness, detail, and particularity of the memory are often remarkable. A single instance will suffice. I was driving one day with an old gentleman, the subject of alcoholic insanity, when all at once he tried to get out of the carriage while it was going rapidly. I forcibly prevented him from getting out, and in the struggle one of his fingers was dislocated. The dislocation was reduced and the finger put up in a splint, and a few hours afterwards, when he was asked how the accident happened, he gave the following account of it: "I was going upstairs," he said, "and one of the stair-rods had been taken out, leaving the stair-carpet in a loose fold. It slipped under my feet, and I fell forward, catching the tip of my finger against the edge of the

stair above. The finger was bent quite back, and put out of joint." To this account he adhered for a time, but it was subsequently changed for another, equally imaginary, and related in equally good faith. Fortunately the delusion was innocuous, and implicated no one in any fault; but it is manifest that the imaginary memory might have been of an unjustifiable assault; and in any case my old friend would have been quite prepared to go into the witness-box and swear with a clear conscience that his account was the true one. Such delusions are therefore not free from danger to others.

SUMMARY

The total constitution of Mind, as far as the alienist needs to take it into his consideration, that is to say, the regions of mind that are subject to such flagrant disorder as to enter into insanity, or otherwise to call for the services of the physician, may be tabulated in the following manner :—

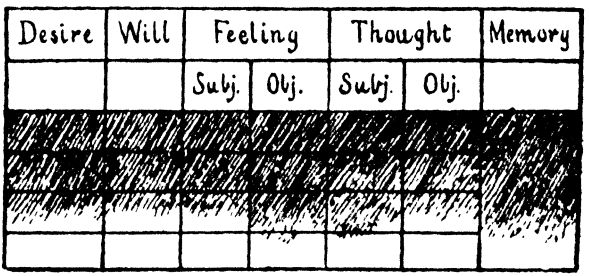
Desire.	Will.	Feeling.		Thought.		Memory.
		Subjective	Objective	Subjective	Objective	
Social	Main Ends	Moral	Social	Moral	Wisdom	
Selfish II	Subordinate	Æsthetic	Æsthetic	Possessive	Ingenuity	
Selfish I	Sub-subordinate	Euphoric	Emotion	Mental	Caution	
Racial	Trivial	Crude	Sensation	Physical	Perception	

This Table is complicated and elaborate, no doubt, but it is less complicated and elaborate than the constitution of Mind. There is no faculty, and no level of any

faculty, that is enumerated in the Table that is not subject to disorder of such consequence as to call for the investigation of the physician; and the physician for mental diseases who has not them all at his fingers' ends, and cannot immediately relegate a disorder to its proper compartment, is not equipped for his profession, and, to put it bluntly, does not know his business. It would be easy to simplify the Table by omitting some faculties, but then it would not serve its purpose. As it is, it does not pretend to be an exhaustive account of the constitution of mind; it is merely a convenient plan of so much of mind as is found in the consulting room to be subject to disorder.

Blank forms of this diagram should be inserted in the case book of the physician for mental diseases, and the faculty and level that are disordered in any case can be indicated by shading. A few specimen diagrams of various forms of disease are here inserted as models.

I



Anoia in deep dementia.—All the highest and upper middle levels are lost. Memory also is for the most part absent. The lowest level remains—sexual and crude self-preservative desires, simple efforts of will, feelings of effort are left, but some sensations are diminished. The

lowest level of subjective thought is damaged, so that the patient does not know of what exertion he is capable. Perception remains, but the estimation of the harmful action of things perceived is diminished.

II

Desire	Will	Feeling		Thought		Memory
		Subj.	Obj.	Subj.	Obj.	

Exalted delusion without elation. — Delusion shows disorder of thought. Exaggeration of his own possessions, titles, etc., shows disorder on the upper middle level of subjective thought. Inability to correct shows defect of the highest level of both subjective and objective thought.

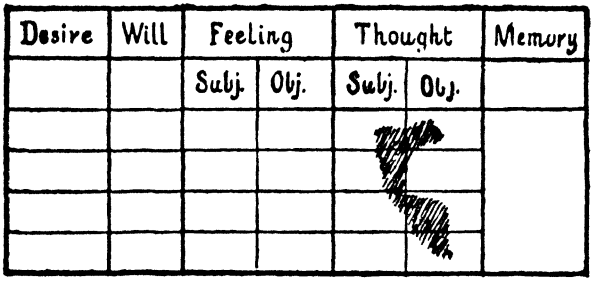
III

Desire	Will	Feeling		Thought		Memory
		Subj.	Obj.	Subj.	Obj.	

Sane hallucination.—The only disorder is of perception. As the patient is able to correct his perception,

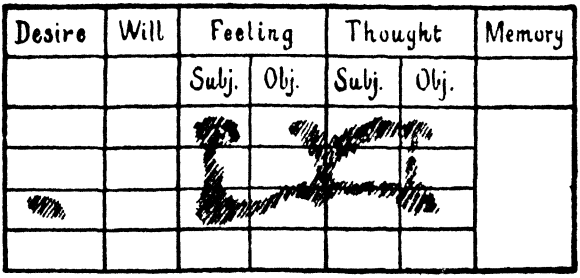
and knows that it is erroneous, the highest level of thought is unaffected, and there is no insanity.

IV



Paranoia with grandiose delusion and hallucination. Shading of the lowest level of objective thought indicates the disorder of perception. The lower middle level of the same faculty—estimation of the harmful quality of circumstances—also is disordered. The patient overestimates his own ability and his rank, shown by shading of the two middle levels of subjective thought. The inability to correct these errors indicates defect of the highest level of both sides of thought. Cleverness is but slightly diminished.

V



Acute insanity of melancholic type with suicidal

desire (*lower middle level of desire*). — Dysphoria is shown by shading of the lower middle level of subjective feeling. The disorder spreads to the highest level as shown by feeling of wickedness. Uncalled-for fear shows disorder of emotion (lower middle level of objective feeling) and spreads up to the highest level of this faculty, where it exhibits itself as remorse. Both subjective and objective thought are disordered on the upper three levels, as shown on the subjective side by underestimation of moral worth and mental ability, on the objective side by delusions of misfortune in circumstances, by diminished intelligence and by loss of wisdom and of the power of estimating self and circumstances correctly.

VI

Desire	Will	Feeling		Thought		Memory
		Subj.	Obj	Subj.	Obj.	

Agorophobia or Claustrophobia. — Malestimation of the power of perceived circumstances to harm (lower middle of objective thought) and unjustified fear (lower middle of objective feeling).

PART II

FORMS, TYPES, AND KINDS OF INSANITY

CHAPTER IV

THE CLASSIFICATION OF INSANITY

THE classification of insanity is admitted by everyone to be unsatisfactory. Every writer on the subject has his own classification, which is different from that of every other writer. Various schemes have been drawn up by committees and official bodies, but, I say it after examining a very large number of classifications, the results both of individual and of collective effort, there is not one that does not violate the fundamental rules of classification.

In the year 1905 a strong Committee of the Medico-Psychological Association drew up a classification which has since been adopted by the Lunacy Commission, and owing to this official approval has superseded, in this country at least, all previous classifications. To that Committee I was Secretary, and I am therefore without antagonistic bias when I say that, having taken into consideration all previous classifications, it produced a scheme which is almost as faulty as any of its predecessors—a scheme which violates every canon of classification; which does not define or delimit the group of things to be classified; which fails to find a place for some of these things; and which admits things that are outside the boundary of insanity. The several classes of equal rank are founded upon different principles of division, and therefore the scheme allows of abundance

of cross-classification. These objections are common to this and to every other scheme of classification of insanity that has ever been proposed, and it is sufficiently clear that no classification can possibly be satisfactory to which any one of these objections can be justly made. It is clear that no previous classifier has ever been at the trouble to acquaint himself with the rules or canons of classification, still less to make any attempt to abide by them. It may be well, therefore, to set them forth here, in order that critics may judge whether they are observed or not.

The first step towards forming a valid classification is to delimit the group of things to be classified—to draw a line round them, including them all, and excluding all other things. The second requisite is that each step in the classification must be made according to the presence or absence of one single quality, or according to the modes or degrees of one single quality and no more. If these conditions are observed, the classification will include all the things that ought to be included in the classification, and nothing that ought not; and the classes will be mutually exclusive, so that nothing that is in any one class can possibly be placed in any other also. In other words, the classification will be a valid classification. If either of these conditions is violated, the classification will be faulty in one or other of the respects mentioned, and will not be a valid classification. In every classification of insanity hitherto proposed they have both been violated.

The first step in making a classification is to settle what it is that we have to classify—to set out the limits of the class of things that we propose to subdivide, so that the classification may include them all, and may exclude everything else. In other words, the first step

in making a classification is to define the group of things to be classified.

The things to be classified are cases or instances of insanity, and one reason for the utter failure of every classification of insanity hitherto proposed is that insanity has never been satisfactorily defined. It never could be satisfactorily defined, and for this reason, that the name insanity has always stood for more than one concept. We have been and are in the habit of speaking of insanity as if by this name we meant only one thing and always the same thing; whereas, in fact, the name insanity stands for more than one thing—has more than one meaning—and when we use the name we mean sometimes one thing and sometimes another. This would not matter in the least if we knew and recognised that the name has more than one meaning, and if we always kept the meanings distinct in our minds. No confusion arises from our habit of calling a beam stuck upright in the ground by the same name as is used to denominate a delivery of letters; but to a person who did not know these two meanings of the word "post" the use of it alternately in the two senses would be puzzling. No confusion need result from using the name insanity in more than one sense, but confusion does result because the meanings are not distinguished, and we do not know that we are using the word in more than one sense.

We found in a previous chapter that insanity is a quadruple disorder of (1) Conduct, (2) Mind, and (3) Metabolism, all dependent on (4) disorder of the action of the highest region of the brain. This is one concept of insanity, but it is not the only, nor even the usual concept. I do not think that anyone but myself includes disorder of metabolism in the concept of insanity, though

it is often a very conspicuous factor in the concept to me; and it is certain that we can think and often do think of insanity as disorder of conduct and mind, not only without connecting these disorders with disorder of metabolism, but also without at the moment taking up into the concept the disorder of brain process. Here, therefore, are three different concepts all called by the name insanity—the fourfold disorder of conduct, mind, metabolism, and brain-process; the threefold disorder of conduct, mind, and brain-process; and the twofold disorder of conduct and mind. There are alienists who deny that disorder of conduct forms any part of their concept of insanity, but those who make this denial have peculiar notions of conduct and of disorder of conduct which put their views outside the pale of the present discussion. What they mean by conduct I do not know, except that they, or some of them, consider it a part of mind. It is clear that they do not mean by it what I mean by it, that is to say, the way a person acts and talks, for if they did mean this, they could not fail to admit that erroneous ways of acting and talking do enter into the concept of insanity. Others evidently think that disorder of conduct means disorderly conduct in the police court sense, and I do not think this view merits serious refutation. Everyone who understands ordinary familiar English words in their ordinary familiar meanings must admit that it is impossible to think of insanity without including in the concept disorder or error in what the insane person says and does.

The necessity of including disorder of mind in the concept is a little more doubtful. Insanity is already complete when conduct is disordered, and in many cases no more need be considered: in many cases no

more is considered, for a time, at any rate; and in those cases in which disorder of mind does enter into the concept, the nature and extent of the disorder is always somewhat conjectural, and is often largely or entirely conjectural. It is quite true that insanity is always called disorder of mind, and is never called disorder of conduct, but this is merely an instance of the common tyranny of the word. When we *say* that a person's mind is disordered, what we *mean* is that he acts or talks strangely and abnormally; and if he did not so act and talk we should never know and never care whether his mind was disordered or not. Still, apart from the mere use of the terms mental disorder and disorder of mind, which are used as equivalents of insanity without any necessary reference to actual mental states or processes that are working in a disorderly manner, no doubt we do in many cases of insanity look behind the disorder of acting and talking, and infer from them some disorder of mind; and no doubt we always ought to regard the disorder in acting and talking as representative and significant of disorder of mind, and so bring mental disorder into our concept of insanity. We may take it, therefore, that the very minimum concept that is in our minds when we speak or think of insanity is the twofold disorder of conduct and of mind.

Although we can, and often do, thus conceive insanity, we do not often allow this concept to remain in our minds in its simplicity. We usually bring it into relation with disorder of brain function, and bring it into relation in one of two ways. In the first way, we keep the disorder of brain function separate from the disorders of conduct and mind, and regard the latter as a symptom of the former. In the second, we combine

the three disorders together into a single concept, and regard this threefold disorder as a disease. In the first case, there are two concepts, the disorder of conduct and mind on the one hand, and the disorder of brain function on the other, and these are regarded in the relation of symptom and basis. In the second case there is but one concept, of disorder of conduct, mind, and brain, amalgamated into a disease.

It is as well to state here exactly what I mean by a symptom and by a disease, since there are no authoritative definitions of these terms, and until they are defined it is difficult to make my meaning clear. By a symptom I mean a sign or manifestation of disorder of some function. The sign may be perceptible to the patient alone, as in the case of pain; or it may be perceptible to the bystander alone, as in the case of coma; or it may be perceptible to the skilled examination of the physician alone, as in the case of a cardiac murmur or a water-hammer pulse; or it may be perceptible to both the patient and the bystander, as in the case of tumour or rash; but in any case a symptom is a sign or manifestation, perceptible to someone, that some function is gone wrong. Disorder of conduct is a sign or manifestation that the higher function of the brain is gone wrong, and we often infer so directly from disorder of conduct and from altered demeanour, which is, of course, a part of conduct, to disorder of mind, that we seem to observe the disorder of mind; and no doubt uneducated and untrained persons think they do observe the disorder of mind. So that, by a little straining and stretching of the meaning of the words, we may regard the disorder of mind that we do not observe, but infer, as a symptom of disorder of brain-function, just as we regard the endocarditis that we do

not observe, but infer, as a symptom of acute rheumatism. The expressions are not strictly correct, but they are convenient fictions.

By a disease I mean the whole group of correlated disorders from which the patient suffers. The whole of the disorders from which a patient suffers need not be a single disease. A person may suffer from two or more diseases at the same time. He may suffer from curvature of the spine and psoas abscess, and since these are correlated together by their dependence upon a single cause—tuberculosis of the vertebræ—they are not different diseases, but parts of a single disease. But he may suffer also from chilblains, or from scarlet fever, or from rickets, and since these cannot be correlated together by dependence on a single cause, since they are not different manifestations of a single disorder, they are not one disease but several diseases. Cough, dyspnœa, lividity, dropsy, and a cardiac murmur are all symptoms of mitral disease. Taken together with the distortion of the mitral valve, and with any other disorder produced by this distortion, such as alteration of the pulse, they constitute the disease from which the patient suffers, the disease being the whole group of correlated disorders—the whole group of symptoms together with the underlying disorder to which they are all due.

In the light of this definition, is insanity a disease? If we mean by insanity disorder of conduct and mind only, then insanity is not a disease, but a symptom of disorder of brain. But if we mean by insanity disorder of conduct and mind *plus* disorder of brain, is such insanity a disease? Clearly it is, if these constitute the whole of the group of correlated disorders from which the patient suffers. Thus in many cases dysphoria

with its expression is a disease, and in many cases excited conduct is a disease. But there are also many cases in which the disorder of conduct, mind, and brain do not constitute the whole of the group of correlated disorders from which the patient suffers. We frequently see this group correlated with specific fevers—with typhoid, scarlet fever, measles, small-pox, and so forth. When so correlated, insanity is not a disease, but a symptom of the wider disease. So well is this recognised that in such circumstances insanity is not called insanity. It is called delirium, and regarded as a symptom of the fever. But if insanity can be a symptom of fever, it can be a symptom of other diseases, if it is correlated with those diseases and due to the same underlying cause. Now insanity as a symptom—disorder of conduct and mind—is found associated with some other diseases, such as myxœdema, gout, Graves' disease and so forth, sufficiently often to lead us to suppose that it is correlated with them, so that whatever poison or other agent produces the other symptoms of these diseases produces the insanity also. In such cases the insanity is not a disease, for it does not constitute the whole of the correlated group of disorders, and is therefore one of the symptoms only of the disease. It would be a great improvement in our nomenclature if the symptom insanity were always called delirium, as it is when it is a symptom of specific fever. We are accustomed to think of delirium as a symptom, just as we are accustomed to think of insanity as a disease; and if the separate names were allotted severally to the distinct things, it would save a good deal of confusion of thought.

I have said that in one concept of insanity, and that which I regard as the only complete concept, the disorder is fourfold, and includes disorder of metabolism,

disorder which shows itself sometimes in conspicuous alteration in the integuments, in the skin, sweat, hair and nails, and in chilblains and other cutaneous change. If these are correlated with the insanity, if, that is to say, they depend on the same disorder of the brain as that to which the insanity is due, then according to the doctrine here laid down, they are part of the disease. The whole disease may still be called insanity, and of this disease the structural change in the integuments is a part and a symptom. If the symptom insanity occurs in the course of some specific fever, then the insanity is similarly accompanied by a structural change in the skin—by a rash—but we do not now call the whole disease insanity and regard the rash as a symptom of the insanity, and the reason is plain. The disease is not insanity because the disorder of conduct, mind, and brain is not the whole disorder from which the patient suffers; and the remaining disorder is not part of the insanity, because it is not due to the disorder of brain function which is the central disorder in the insanity and to which the other disorders of the insanity are due. On the contrary, the factor which correlates the whole of the disorders, causes them all, and constitutes them one disease, is the microbe of small-pox, or scarlet fever, or measles, or what not.

Now apply this principle to the case of general paralysis of the insane. Is it a bodily disease, of which insanity is a symptom, or is it insanity of which bodily disease is a part? Certainly, the symptom insanity—the disorder of mind and conduct—is far from being the whole of the disease. The physical symptoms also are conspicuous and important, and of these the patient at length dies. From the pupillary disorders and the altered knee jerks of the early stage of the disease to the

contractions and bed-sores of its final stage, physical symptoms are of high importance throughout. The question is, Are these physical symptoms produced by the very same changes in the brain that produce the delirium, or do they, as in the case of specific fever, own some other and deeper cause, to which the brain change also is due? The puzzle is that both questions may be answered in the affirmative. The whole of the disorders, brain change and all, are due to the poison of syphilis, just as the whole of the disorders in delirious small-pox, brain change and all, are due to the poison of small-pox; but the difference is that, in small-pox, the rash on the skin and the other symptoms are produced directly by the local action of the poison on the skin and other parts displaying the symptoms, while in general paralysis the whole of the physical symptoms are produced indirectly by the action of the poison on the brain, and it is the impairment of the trophic and other functions of the brain to which the physical symptoms are due. In general paralysis, therefore, all the symptoms are correlated by the brain disorder; in small-pox we must go behind the brain disorder to the widespread action of the poison in order to discover the correlating agent. Hence, general paralysis may be regarded as an instance of the disease insanity, in which the disorder of metabolism, which I say is part of the disease, is unusually profound, widespread, and severe.

It is of the greatest importance, therefore, in dealing with insanity, to remember that insanity may be a symptom or a disease; and it is expedient, when we are speaking of disorder of conduct and mind alone, that is of the symptom insanity, to call it delirium, or some other title than insanity, and to reserve the name insanity for diseases. Since, however, delirium has an old and

prescriptive right to characterise that peculiar form of the symptom that occurs in specific fevers and in some other bodily diseases, I shall here call the symptom insanity by the name of the form of insanity, and the different diseases that insanity includes—for it does include different diseases—by the title of kinds of insanity.

CHAPTER V

FORMS OF INSANITY

(INSANITY THE SYMPTOM)

A FORM of insanity is therefore a correlated couple of disorder of conduct expressing disorder of mind, or of disorder of mind expressed in disorder of conduct, provided the disorder is not recognised as disorder by the subject of it. For instance, grievous expression and demeanour, accompanied, it may be, by lamentation, express dysphoria, or misery of mind. If this misery is manifestly unjustified by the circumstances in which the patient is, it is disorder of mind; and the grievous expression and demeanour which express the disorder of mind are disorder of conduct. If the sufferer recognises that his misery is unjustified by his circumstances, and looks upon it as disorder, then, although it is disorder of mind, it is sane disorder. If, however, he does not recognise that it is unjustified, and especially if he attributes his misery to misfortunes or other circumstances that are imaginary, and for which there is no sufficient evidence, then the misery is insane disorder of mind, and the grievous demeanour and lamentation are insane disorders of conduct. This correlated couple of insane disorder of mind plus the insane disorder of conduct that expresses it, I call a form of insanity. The correlated couple may also be called a symptom of disorder of the brain.

Of course, strictly speaking, the disorder of mind is not a symptom, since it cannot be observed. We cannot observe the patient's misery, but we can observe the expression of it in his conduct, and we infer so directly from this expression to the state of mind that it expresses, that we may, without much straining of language, speak of them both as symptoms, or at least of the combination as a symptom. It is quite clear from the language used by many alienists that they think they do observe the state of the patient's mind.

Misery, expressed in grievous demeanour and unjustified by the patient's circumstances, is called by alienists melancholia, and this word is a good example of the confusion of our nomenclature, and of the ideas expressed by our nomenclature. These are some of the meanings for which the term melancholia stands :—

1. Unjustified misery, known by the patient to be unjustified, and therefore sane.

2. Unjustified misery, not recognised to be unjustified, and therefore insane.

3. Unjustified misery *plus* the expression of it in demeanour and other conduct.

4. Unjustified misery and its expression *plus* disorder of brain.

5. Unjustified misery, together with its expression in conduct and the disorder of brain on which it is supposed to depend, *plus* gastro-intestinal and other bodily disorders.

6. Unjustified misery together with the elements previously mentioned, or some of them, *plus* delusion and its expression.

7. Some or all of the previous elements *plus* abasement.

8. Suicidal conduct, with or without some or all of the elements above mentioned.

9. Silence and resistiveness.

It would be absurd to dispute, and I do not dispute, that it is useful, and indeed necessary, to characterise definite clinical pictures by specific terms; but I protest against the application of a single term to such a heterogeneous collection of different disorders, some simple, some very complex; some sane, others insane; some of them mere symptoms, others complete diseases. Our nomenclature is to a great extent a measure of the stage to which our thought has progressed, and as long as our nomenclature is as confused as this, our thought will be equally confused.

Although when mind is disordered, the disorder is always expressed in some disorder of conduct, and but for the disorder of conduct we should not know that disorder of mind exists; and although when conduct is disordered, this disorder is always the expression of some corresponding disorder of mind; yet it happens in some cases, and often in dysphoria, that we infer so directly and immediately from conduct to mind that we are apt to forget the disorder of conduct, and to concentrate our attention on the mental disorder alone.

In other cases, as in excited conduct and in destructive conduct, the disorder of conduct is conspicuous, and it is difficult to interpret, or to infer with any confidence, what disorder of mind is expressed by the disorder of conduct. In such cases we speak of the insanity as disorder of mind, but we think of it as disorder of conduct.

In a third class of cases the disorder of mind cannot be definitely known except by the verbal confession and description given by the patient,

which, of course, is a part of conduct; but even then, though we witness disorder of other parts of conduct, and though we have the patient's own description of the disorder, or some of it, that is present in his mind, yet it is impossible to interpret the disorder of conduct by the disorder of mind, or to connect the one with the other. It is difficult to see, for instance, what connection there can be between exaltation and delusions of grandeur and of increased consequence on the one hand, and such conduct as washing the face in the pan of the water-closet or throwing the bed-clothes out of the window. No doubt these acts were prompted by some other disorder of mind that was not discoverable.

Still, when allowance has been made for these difficult cases, we must assume that every disorder of conduct expresses a corresponding disorder of mind which prompts it, and that every disorder of mind finds expression in corresponding disorder of conduct; and though it is in many cases difficult to trace the connection between the one disorder and the other, yet in a wide range of cases we can discern a connected couple of disorder of conduct and disorder of mind, affording a symptom of a more or less hypothetical disorder of brain.

In a previous chapter I showed that mind is divisible for the purposes of the alienist into five principal divisions or faculties:—Desire, Will, Feeling, Thought, and Memory, and the first four of these are further divisible into grades or evolutionary levels, and having regard to the further division of Feeling and Thought into subjective and objective sides, there are altogether five-and-twenty departments, in any of which mind may be disordered; and in some of these departments mind may be disordered in various ways. Each department was taken singly, and the disorders to which it is

subject were described, but the several departments of mind are not, as a rule, disordered singly. Sometimes they are so, and instances of such localised disorders are witnessed in simple dysphoria, sane hallucination, imperative idea, excessive hesitation, facility, obsession, vertigo, claustrophobia, and other disorders. Usually, however, the disorder implicates more than one level of a faculty, it may be more than one faculty, either on the same or on different levels, and some disorders are so widespread as to implicate every level of every faculty.

In describing any large number of objects of the same kind, it is manifestly desirable to begin with the simplest and gradually proceed to the most complicated, but in the case of disorders of conduct and mind, that which is simplest from one point of view is the most complicated when viewed in the reverse direction, and *vice versâ* In other words, we may pay attention either to what is taken away or to what is left. The less the area of mind that is disordered, the more of normal mind remains, and the cases in which but a very small area of mind is disordered are, from one point of view, the simplest; but these have always appeared the most puzzling and the most difficult to account for, as appears when it is remembered that they include such maladies as imperative idea, obsession, and claustrophobia. On the other hand, the greater the area of conduct and mind that is removed, the less remains as an object of study, and such maladies as stupor and coma, in which every level of every faculty of mind and conduct is abolished, are, in spite of the extreme extension of the disorder, the simplest to study, because little or nothing remains to observe. Here it will be advisable to regard those cases as simplest in which the disorder is most limited, and the complementary area of the normal largest, for

these have been described in the last chapter, and their description forms a starting-point for that of the more complicated disorders. In each case I shall take the leading disorder, the most conspicuous disorder, and show what other disorders are commonly associated with it.

I. DISORDERS OF DESIRE

When these are primary, they are usually single, that is to say, they are uncomplicated with disorder of other faculties or of other levels of desire. Keeping always in mind that no disorder of mind is insane unless it includes disorder of the highest level of thought, so that the subject of it is unable to recognise that the disorder is disorder, we come first, on the lowest level of desire, to sexual perversion. This is undoubtedly disorder of mind, but with equal absence of doubt it is not insanity, for it is uncomplicated, and unaccompanied by disorder of the highest intellectual level. It is undoubtedly disease. Should it then be punished? Certainly not. A man should no more be punished for experiencing a desire that he cannot help than for suffering a pain in his head that he cannot help. We ought not to punish the sexual pervert for entertaining a morbid desire—and we do not punish him for it. But if he acts in pursuance of his desire in such a way as to gratify it, then we punish him, and rightly, granting that it is expedient for the welfare of society that such acts should be punished. It is right that he should now be punished, for the act is the product of his will, to which the disease does not extend.

It will be unnecessary to go through all the manifestations of morbid desire, since these have been sufficiently described in a previous chapter, but something

must be said about defect and disorder of the highest level of desires, those, namely, that affect our relations to our fellows. Ninety-five per cent. of the crimes that are investigated by the courts are crimes of dishonesty; that is to say, they are due to the improper preponderance of desires of the upper middle level—desires of acquisition and of livelihood—over those social desires for the welfare of others and the good of the community at large which keep honest men honest.

It is often said, by those who have no clear notion of what crime is or of what insanity is, that all crime is insane—that criminality is a disease of the nature of insanity. There are those who hold that all crime is *ipso facto* insanity; but I do not know that anyone who holds this opinion has any clear notion of what he means by crime or of what he means by insanity, and until he is prepared with some sort of justification for his opinion, it is scarcely worth while to discuss it. It is certain that the general opinion, which holds the field, which has prevailed among all nations and in all ages of which we have any record, is that insanity and crime are distinct; and if anyone holds the opposite view, the onus is upon him to justify his opinion and prove his case. Up to the present he has made no attempt to do so. On the other hand, there are some, among whom I reckon myself, who hold that there are such things as moral imbecility and moral insanity; in other words, that there are not only criminals who are insane and criminal acts that are insane—everyone is agreed upon that—but that there is a certain form of criminality that is insane, although the great bulk of criminality and the great majority of criminals are sane. I now proceed to elucidate these propositions and to show cause why they should be accepted.

Crime consists of acts that are destructive or detrimental to society, and arises from the preponderance of selfish over social desires, that is to say, of the preponderance of desires on the three lower levels over those of the highest level, which should prevail over the lower whenever they are in conflict. I do not here labour to establish this theme, which I have treated at sufficient length in my book on Criminal Responsibility. The doctrine is generally accepted as true, and has never, as far as I know, been contested. Insanity, on the other hand, is disorder of conduct and mind of a certain kind. No doubt criminal conduct may be called, with a certain stretching of the meaning of words, disordered conduct, but even if it were disordered conduct, it would not necessarily be insane conduct, for, as already stated with repetition that is, I fear, becoming wearisome, disorder of conduct and mind is not necessarily insane. If it were, the reeling and clutching of the giddy man would be insane. As already explained, that conduct only is insane which is unregulated by the highest level of intelligence. Criminal conduct is the expression of a mind in which the highest level of desire is defective; but the highest level of desire may be defective without any accompanying defect or disorder of the highest level of intellect, and unless this level of intellect is disordered there is no insanity. Criminal conduct may be not only ingenious in a very high degree, witness the operations of the accomplished burglar, or the long firm expert, but also regulated by a competent wisdom or prudence as far as the welfare of the criminal himself is concerned. For what manner of man is the criminal? More than ninety per cent. of recorded crimes are crimes of dishonesty. They are committed by persons who have an aversion to steady industry, who desire to enjoy the

fruits of labour without undergoing labour to secure them, who estimate the risks they incur, and face them for the sake of the advantage they secure. And the advantage is often great, and the risk not prohibitive. We hear much of the habitual criminal, who is convicted time after time, and spends the greater part of his life in gaol or under sentence; but these are the unskilful or unsuccessful practitioners, and for very good reasons we do not hear of the successful expert, who contrives, not only to keep out of prison, but to accumulate wealth, or at least to keep himself in comfort by his depredations. Crime not only exists but is increasing, and crimes of dishonesty would scarcely exist, and would certainly not increase, if they were uniformly unprofitable. In the very long run, and if we take into account the necessity to each individual of preserving the community of which he is a part, and the tendency of crime to deteriorate the community, no doubt there is unwisdom in crime; but as far as the individual himself is alone concerned, there is, or may be, no unwisdom in crime. He may, by a life of crime, achieve a degree of success in preserving his own life and securing the amenities of life that he could not achieve, or could not achieve so quickly, in any other way. Criminality is therefore not inconsistent with a good development of wisdom, or with the integrity of the highest level of intelligence; in other words, it is consistent with sanity.

But some crimes are undoubtedly insane. What these are, I need not here discuss, for the whole subject is thrashed out exhaustively in my book on Criminal Responsibility, but here I may point out that not only are some criminals insane, but also there is a form of criminality that is itself insane, and I have made a certificate of lunacy, stating, as facts indicating insanity,

criminal conduct of this description. Criminals of this type are criminals from birth, and the peculiarity of their criminality is that it is unprofitable. They are often—usually—of good birth, and of good prospects—and good abilities. Ingenuity or cleverness is often in them so highly developed as to mask the insanity to an unskilled observer. Their crimes, it is true, are often clumsy enough, but their subterfuges to escape the consequences of their crimes are often extremely ingenious, and their lies have a plausibility and verisimilitude that would deceive anyone who has not had experience of them. The quality that distinguishes their criminality and marks it as insane is the conspicuous want of prudence and wisdom. The crimes are committed often for gain which is manifestly not worth the risk, often for objects which could be obtained equally well and with equal ease by honest measures, and are often committed with such lack of precaution as renders speedy detection certain. Moreover, the whole criminality is unnecessary and supererogatory. With their birth, their start in life, their opportunities, their family influence, their education and social advantages, it would be easier to make an honest living than to make a living by crime; and the life that they could live honestly would be far more advantageous in all ways than that to which they condemn themselves. Such criminality is insane, and is insane by reason of the defect in the highest level of intellect.

II. DISORDERS OF WILL

Of these, Obsession is almost always uncomplicated, at least, I have never seen a case in which any other disorder of mind except hesitation was associated with

obsession. It is never, in my experience, insane; for I have never seen a case in which the patient did not recognise and deplore his disorder, and do his best to restrain it and correct it. The obsessed are, it is true, often depressed, but the depression is thoroughly justified by their experience of their malady, and is in no sense abnormal.

Morbid impulsiveness, on the other hand, is always associated with insanity, at any rate at the time the impulsive act is committed. In some cases, especially those in which the impulsive act is unsuccessfully suicidal, the patient does recognise shortly after the commission of the act, that it was insane; but he never realises this at the time; and in most cases impulsive acts are utterly irrational, and are committed by persons already certified on other grounds to be insane.

Morbid hesitation and morbid vacillation are never, in my experience, insane. The patient always recognises and deplores his malady. Morbid hesitation is sometimes accompanied by the obsession to count, as has already been described, but this is the only disorder with which it is associated.

Facility occurs as a symptom both in the sane and in the insane

Stubbornness never occurs except as the most prominent symptom of a widespread and deep insanity. The obstinate silence of the patient renders it difficult to investigate his mind, or to ascertain with any confidence the range and extent of the disorder, but there is strong reason to suppose that the three uppermost levels of objective intelligence are disordered, and possibly the lowest level, that of perception, also is disordered. Certainly the highest level—Wisdom—is gone, for the whole conduct of the patient, regarded from the point

of view of his own welfare, is unwise in the extreme. Cleverness also gives scarcely any manifestation of its existence, the few stratagems and subterfuges of the patient being childish and transparent. It is the third level of intelligence, however, that which estimates the beneficence or maleficence of surrounding agents, that is most impaired. As far as can be judged, the stubborn person lives in a pervading atmosphere at first of suspicion, and at length of rooted conviction of the animosity and malignity of all around him. Only by this supposition can we explain his extreme recalcitrancy to every suggestion, to all persuasion, his determination to do the opposite of everything that he is advised, and his occasional unprovoked violence to those around him. The natural expression of suspicion is by taciturnity, and the stubborn are taciturn to complete silence.

III. DISORDER OF SUBJECTIVE FEELING

The chief disorders of this faculty are on the lower middle level, and consist of the opposite states of dysphoria and euphoria.

Dysphoria, or misery in various degree, is perhaps the most frequent and most widespread of all disorders of mind, and that with the most numerous associations with other disorders. As previously stated, it may exist alone, and is then, of course, sane; and a transient depression of spirits, usually associated with some digestive trouble, is one of the commonest of mental disorders. The most frequent mental accompaniment of dysphoria is abasement, or underestimation of self, on any or every level—physical, mental, possessive, or moral. With this underestimation on the subjective side of thought there often goes overestimation of the

maleficent influence of circumstances, a disorder which may affect any level of objective thought, even the lowest, in which case it produces terrifying or depressing hallucinations and illusions.

In consequence of the universal prevalence of the doctrine that insanity and disorder of mind are convertible terms, it is necessary to emphasise again in this place that depression of spirits is not necessarily insane.

It is, of course, completely normal when it is due to the appreciation of adverse circumstances that really exist, of failures and disappointments that have actually been experienced; but when quite unjustified by circumstances, it is still not insane, though it is disorder of mind, when it is known and recognised by the patient who experiences it to be morbid. Nor is it necessarily insane, nor even morbid, when it accompanies disorder of mind in other departments. Persons with obsession, or with imperative idea, or with agoraphobia, are often depressed, but their depression is a normal and justified consequence of the discomfort and inconvenience which their malady inflicts upon them.

When disorder of mind begins in dysphoria and spreads, the departments of mind next involved are usually the other levels of intellect, both objective and subjective. Disorder of the corresponding—the lower middle—level of objective thought produces misappreciation of circumstances, such that they are invested with maleficent and terrifying qualities that are purely imaginary. Spread of the disorder to the upper middle level of the same faculty gives rise to delusions of past and future experiences of depressing character; and invasion of the highest level prevents the correction of these errors by the judgment. Invasion of subjective thought results in abasement, and depreciation of some

or all of the powers of the patient, physical, mental, possessive, and moral. Dysphoria is, however, sometimes accompanied by a very peculiar form of abasement which paradoxically partakes of the nature of exaltation. The patient exalts his own powers—for evil. He overestimates his influence for harm. He believes that the sin with which he debits himself will ensure, not only his own damnation, but the ruin of his family, of his country, it may be of the whole human race; that his financial ruin will bring penury on all connected with him; that his personal uncleanliness contaminates everything he touches or everything he comes near. It is when the moral worth of the patient is underestimated by himself, when he erroneously attributes to himself crime, sin, and moral worthlessness, that the disorder spreads into the lower middle level of desire, and the tendency to self-destruction, self-mutilation, and self-injury appears. In my experience, which I give for what it is worth, suicidal desire and suicidal attempts do not appear unless and until moral abasement is reached. I have not found that underestimation on the second level, that is to say, delusion of poverty, of loss of consequence, is associated with the desire for death unless there is also depreciation of the moral character; and this is the more remarkable since the sane motive for suicide is almost always pecuniary ruin. If this exclusive association should be corroborated by general observation, and found to be a universal rule, it will be of the highest clinical importance, for it will enable us to expect attempts at suicide in cases in which no intention is expressed, and it will free our minds from anxiety and render precautions unnecessary in a large number of cases that now give us great solicitude.

All the different disorders into which dysphoria enters,

and some others, such as stubbornness, are lumped together by alienists under the title of melancholia, a name that comes down to us from the time of Hippocrates, and signifies black bile. It is, perhaps, fitting that a name derived from an extinct pathology should be applied to an agglomeration of disorders, some sane and some insane, some simple and others extremely complex, some attended by excitement and others by lethargy, and it is about time that the agglomeration was analysed into its component parts and the name of it discarded for ever.

Dysphoria is expressed in conduct by a sad and grievous demeanour, which is the only feature in conduct common to all cases. In certain cases other features are added, the most frequent of which are lamentation, more or less bitter, and self-accusation. The activity of conduct varies much, from lethargy, from which the patient can be aroused only temporarily and with difficulty, to considerable excitement, which is always of a character consonant with the dysphoria, and is displayed in pacing up and down, in wringing of the hands, in loud lamentations, or it may be in determined effort at self-destruction or self-mutilation.

The older alienists divided madness into two kinds, melancholia and mania; and although this division is no longer sustained, yet the two states are still contrasted and considered antithetic of each other. This view is absurd. If there is any antithesis to dysphoria, the only element, if there is any element, common to all cases of melancholy, it is euphoria, the antithetic state of unjustified elation. Mania, as far as it means anything definite, which is not very far, means excited conduct, or over-action, and the true antithesis of over-action is under-action, or lethargy. Dysphoria may,

as has been said, be accompanied and expressed by over-action, and therefore cannot be antithetic to over-action, even if, in any case, a disorder of mind could properly be compared with a phase or mode of conduct.

The antithesis of dysphoria is, of course, euphoria, or elation, high spirits, gaiety, which may be justified by the favourable circumstances of the patient, just as low spirits may be justified by the circumstances of the patient, and in either case the state of mind is wholly normal. Like dysphoria, however, euphoria or elation may exist without any justification from circumstances, and when the circumstances, truly considered, would rather justify unhappiness. In such circumstances, elation is a disorder of mind, and this disorder of mind is frequent. Like dysphoria, morbid elation may be sane or insane, but it is to the disadvantage of humanity that morbid but sane elation is very much less frequent than morbid but sane dysphoria. The former is indeed rare. It is natural that it should rarely come under the notice of the physician, for people are not likely to seek relief from undue happiness, even if they recognise that it is undue ; a case has, however, come under my own notice, in which a young man declared that he could not account for feeling so happy.

There is, however, a pretty common case of euphoria which may be considered morbid, and which is, at any rate, in its early stage, quite sane, and that is the temporary elation that is produced by alcohol, and to some degree doubtless by opium, and other drugs. It is in order to experience this elation that, in a large number of cases, alcohol is taken to excess ; and there is in very many cases, before the intellect becomes dulled, an interval in which an euphoria, which is well known to

be unjustified by circumstances, is experienced by the drinker.

Such uncomplicated elation is exceptional, however. Usually elation is accompanied by exaltation, by which is meant, as already explained, overestimation of one's own powers and qualities, physical, mental, or moral. The distinction between elation and exaltation has never hitherto been made, partly because they usually, though, as we have seen, not always, occur together, and partly because psychological analysis of the disordered mind has never hitherto been attempted. The exaltation that accompanies elation is less often confined to a single level of subjective thought, or self-estimation, than the abasement that accompanies dysphoria. Abasement is often limited for a time, or throughout the malady, to underestimation of possession, and delusions of poverty may exist for years unaccompanied by underestimation of mental, physical, or moral qualities; but overestimation is rarely limited to one level. The megalomaniac who believes that he possesses millions of money and extravagant titles, believes also that he has superhuman strength, perhaps that he has several bodies, hundreds and thousands of children, intellectual genius such as the world never saw, and moral worth unspeakably great. Even the euphoria of drunkenness is pure in the early stage only of drunkenness. As the drunkenness progresses, exaltation is soon added, and the drunkard boasts of the qualities, physical and mental, with which drink invests him. The exaltation of drunkenness rarely extends, however, to the upper middle level. Drunkards do not often exaggerate their wealth, though they may spend and bet recklessly as if they did. Their profligacy arises not so much from overestimation of their

wealth as from confusion of mind and recklessness, and inability to realise that they are spending beyond their means.

Objective as well as subjective thought is usually disordered in euphoria if this is considerable. It is on the lower middle level that disorder is most conspicuous, so that the euphoric overestimates the propitiousness and good fortune of his circumstances, and their beneficence towards him; but the highest and the upper middle level also are defective, for the exalted euphoric is always wanting in cleverness and ingenuity, and is sadly lacking in wisdom. He is quite unable to order his life with prudence, and is invariably insane.

Objective as well as subjective feeling always partakes in the disorder in exalted euphoria. Sympathetic joy at the good fortune of others is freely expressed; benevolence is boundless; and gifts are scattered in profusion upon all and sundry; admiration is evoked by quite commonplace spectacles; and all the joyous emotions—freedom, self-reliance, power, dignity—are expressed to the full.

Disorder of the lowest level of desire is a frequent accompaniment of euphoria with exaltation, and persons so affected are often amorous to excess.

Volition also shares in the disorder, though not very conspicuously, and the exalted euphoric is usually facile and easy to manage, though he may be subject to outbreaks of rage, which are usually shortlived.

Though euphoria is nearly always accompanied by exaltation, and euphoria, when considerable, is never seen without exaltation, the converse is not true. Exaltation is often seen without elation, and every large asylum contains its kings and queens and millionaires who are by no means elated at their exalted

position or wealth, but pursue their menial occupations with contentment, but without extravagant joy.

Exaltation alone may exist without a trace of excitement in conduct, but exalted euphoria is, as long as bodily strength is maintained, usually accompanied and expressed by over-action in conduct. The patient teems with plans for the benefit of others as well as of himself, and in his endeavours to carry out these plans he exhibits over-action on a high level of conduct. He is restless and animated; he talks incessantly except when he is writing, and he writes incessantly except when he is talking.

IV. OBJECTIVE THOUGHT

The lowest level of Objective Thought is perception, and the disorders of perception, illusion, and hallucination have already been described. They sometimes occur alone, without any other mental disorder, and are then, of course, sane. It is a commonplace among alienists that hallucination indicates deep disorder, and usually irrecoverable disorder, of mind, and is present only in severe cases of insanity. This is a mistake. Hallucination or illusion may occur alone without any discoverable disorder of any other department of mind, and since without disorder of the highest level of thought there is no insanity, such hallucinations and illusions are not insane. The subjects of them know and appreciate quite clearly that their morbid percepts are morbid, that they answer to no objects in the external world, and that any objects that they think they perceive are imaginary. Indeed, those who are deeply insane usually recognise a difference between the normal and the abnormal percepts. They speak of their hallucinatory percepts as "voices" and sometimes express a doubt of

their reality. When other disorder of mind does accompany hallucination, this disorder may be of the most varied character, and may be very widespread. The reason why hallucination is looked upon as a grave symptom is that, being a disorder of the lowest level, it naturally appears late and at an advanced stage, when the disorder has begun in the highest level and has gradually spread downwards until the lowest level is reached. In such cases it is a serious symptom, for in such cases it means that the disorder has struck deep; but when it occurs as an early symptom, and especially when it occurs without other disorder, it has no such grave significance.

The lower middle level of objective thought is that by which we estimate the beneficence or maleficence of those circumstances which the level next below acquaints us with; and when that function of estimation is primarily disordered, the disorder is always in the direction of exaggerating the maleficence of the circumstances. This exaggerated estimate may express itself merely in suspicion, or may develop into definite beliefs of malevolent action, either of certain agents, specified or unspecified, or more often of mysterious agencies, or it may be of circumstances in general.

Suspicion, like other attitudes of mind, may be justified or unjustified by circumstances, and in the latter case may be sane or insane. A general attitude of suspicion or confidence is, in the normal, a matter partly of temperament, partly of experience. Some persons are by nature confiding and apt to impute beneficence rather than maleficence to others and to circumstances generally. Some have been well treated by others and by fortune, and have had no occasion to suspect; others have been betrayed, ill-treated, unfortunate, and expect

to meet in the future experiences similar to those of the past. All these are within the limits of the normal. But suspicion may be carried to excess, and whether it remains within the limit of the normal or surpasses it is a matter of degree. Those who see in every stranger a possible enemy do but reproduce an ancestral attitude of mind, for in many languages the name for a stranger and the name for an enemy are the same. When, as in this case, and as in the case of failure of memory, the transition from the normal to the morbid is a matter of more or less, it is not possible usually to draw a sharp line between the two, but in the case of suspicion we have in many cases the aid of a qualitative difference, for suspicion may be fastened upon circumstances that plainly cannot be maleficent, or that cannot be maleficent in the manner that is suspected. A man who suspects that he is robbed by some person whom he has never seen, and of whose existence he has no evidence whatever, exhibits suspicion which is insane by reason of its degree: a man who suspects another of imparting diseases to him from a distance by means of a system of mirrors and lenses, shows suspicion which is insane by reason of its quality. Robbery is a possible mode of ill-treatment: the production of disease from a distance by means of mirrors and lenses is not.

Insane suspicion rarely exists for long as an isolated disorder. The suspicion usually soon becomes confirmed into belief, and the disorder spreads up to the higher middle level and invokes the aid of ingenuity to concoct beliefs of the most extraordinary and far-reaching character. Some mysterious agency—anything the operation of which is to the patient mysterious or unfamiliar—steam, electricity, telephones, X-rays, wireless telegraphy, mesmerism, hypnotism, or what

not—is invoked to account for the occurrence of events untoward to the patient, and of bodily uneasiness that they suffer, and in addition, suspicion or conviction, as the case may be, fastens upon certain persons, real or imaginary, as the agents who utilise these means of injury.

To these disorders of objective thought the malady is in many cases confined; but in many other cases it spreads across to the upper middle level of subjective thought, and implicates self-estimation with respect to rights, honours, titles, position, and perhaps money. The person who is insanely suspicious of hostile agency often attributes the hostility to the fact, which soon becomes a fact to him, that he is entitled to some high position which the hostile agents are keeping him out of. He is heir to a dukedom or a throne, or is the rightful tenant of one or the other, and is deprived of them. If the over-estimation of self came first, the belief that he was rightfully entitled to a certain position which he has sense enough to know he does not actually possess might logically lead the patient to the belief that he was being wrongfully deprived of them by some hostile agent, and this may be the origin of the suspicion in certain cases; but when intellect is disordered, its deductions are not necessarily logical, and as far as we can judge it would seem that in some cases the belief in hostile agency comes first, and the belief in an over-estimated self-importance second.

The chief modes in which suspicion is expressed in conduct are reticence, reserve, and recalcitrancy, and on these follow precautions against the dangers that are imagined, and retaliation on those who are suspected. We find, therefore, that the paranoiac,—the symptoms just described are those of paranoia—is reserved, reticent, and recalcitrant; that is to say, he suspects, but he

does not readily express his suspicions; attempts to draw him out and lead him to express them are apt to deepen his suspicion and increase his reserve; and he is recalcitrant to advice. He sees in every suggestion a sinister motive, and is with difficulty persuaded to do things that are, it may be, obviously proper and beneficial. In paranoia the second level of objective thought —ingenuity or cleverness—though it is disordered in such a way as to elaborate delusion, and though it is usually the seat of confusion, yet may retain considerable efficiency. The paranoiac is often clever and ingenious, and exhibits his cleverness and ingenuity in elaborate precautions against the plots that he believes are being contrived against him. He changes his residence furtively and frequently, so as to throw his enemies off his track. He hides himself. He appeals to magistrates and other persons in authority for protection. At length, finding all precautions fruitless, and receiving no protection, he is apt to retaliate either upon someone to whom he attributes his persecution, or upon someone who is, he thinks, in a position to protect him and has failed to do so, or upon anyone in a prominent position, for the purpose of drawing attention to his case.

Such are the manifestations in conduct of a belief in hostile agency when the belief is in an agency that, however hostile, and however widespread, is yet not universal. The paranoiac imagines usually a highly complicated system of persecution by some agency that is to him mysterious, but there is always a part, sometimes a large part, of his circumstances that is outside the system of persecution. Though there are many persons of whom he is suspicious, yet there are always some in whom he has confidence, at any rate

temporary confidence. Though he is reserved, yet by tact and judicious handling his reserve may be invaded. Though he is recalcitrant to advice and persuasion, his recalcitrancy may be overcome. Though he is reticent and with difficulty drawn into revealing his suspicions, he can always be drawn, and is then apt to become voluble about them. But there is a deeper depth. Imagine all these peculiarities exaggerated. Imagine the reserve and reticence exaggerated into complete taciturnity; imagine the suspicion and the belief in hostile agency to become universal; imagine the confidence to be withheld from everyone; imagine the recalcitrancy to increase into what has been described on a previous page as stubbornness; and we have a picture of the malady so styled. The paranoiac is reticent, the stubborn is dead silent. The paranoiac is recalcitrant, the stubborn is mulishly resistive. The paranoiac trusts but few, the stubborn trusts no one. No matter whence or from whom a suggestion comes, he always resents and resists it, and if possible does the opposite. As he speaks but rarely or not at all, it is not easy to investigate the state of his mind and the beliefs that he entertains, but his whole conduct and demeanour indicate that he is convinced of the hostility of everyone around him. There is no evidence that he is capable of imagining the highly complicated system of persecution in which the paranoiac believes. His conduct is much more crude and simple than that of the paranoiac, and it is evident that his mind is much more deeply affected, but it is affected in the same direction. His imaginings, as far as we can penetrate them, are of the same character, but they are on a much lower level. He exhibits no cleverness, no ingenuity. When he retaliates by violence upon those

about him, as he often does, his retaliation has none of the elaboration of the paranoiac. Instead of an assault with fire-arms or other weapons, carefully devised and long considered, it is a blow with the fist; but the root elements of taciturnity, recalcitrance, and retaliation are the same in both cases, and we cannot doubt that the mental disorder in both cases is the same in nature, though different in degree, and consists in rooted belief in the hostility of those around them.

This being so, it would seem that stubbornness is but a more advanced stage of paranoia, and that we might expect paranoia to merge and deepen into stubbornness as the case proceeds, and the invasion of the brain becomes more profound. This, however, does not conform with clinical experience. Stubbornness is an acute malady: paranoia a very chronic one. However long it lasts, and however severe the symptoms, paranoia never, in my experience, merges into stubbornness. Indisputably allied as they are in nature, and due, it cannot be doubted, to greater and less degrees of the very same change in the very same regions of the brain, yet clinically they seem to be quite distinct. Stubbornness is not a very frequent form of insanity, and when it does occur is often fatal, which paranoia never is; but it would be both interesting and important to observe whether the cases of stubbornness that recover do not pass through a stage of paranoia on the way to recovery. It would be odd if they did not. As far as my observation goes, stubbornness is always confused with melancholy, and has never been discriminated or described except in this book, and therefore no observations on its course have been made except by myself, and as the malady is not frequent, the cases I have seen have been but few.

Disorder of the upper middle level of objective thought is common enough. This is the locus of the great majority of delusions, those that affect the relations of the patient to the world in which he lives, and such delusions may be combined in multitudinous ways with disorder of other levels of objective thought and of other faculties, or may be combined only with that defect of the level immediately above them which constitutes them delusions. Distinct from delusion is confusion or mere dullness, defect of ingenuity or cleverness, which often exists *ab initio*, the patient never attaining to the normal standard, and often is a degradation from a normal degree that has been attained, but that has been lost. Insanity in which there is not some lack of cleverness and clearness of thought is rare, and is seen, if at all, only in the case of the "sane lunatic," or clever lunatic, already described. In every other case of insanity the defect or disorder of the highest level of objective thought, which constitutes the insanity, spreads down to a greater or less depth in the level immediately beneath, and produces confusion of thought, or inability to receive and appreciate evidence contradictory of the delusions. In many cases, as in that of paranoia, the confusion extends beyond what is necessary to ignore the evidence against the delusions, and is apparent in other matters, but only in matters connected with the delusions. Deluded persons of all classes are many of them very clever in matters unconnected with their delusions, so much so that it is a standing wonder that they should be so incredibly stupid in matters that do concern their delusions.

As already explained, it is disorder of the highest level of thought—wisdom or prudence—that constitutes insanity. Disorder of mind in any other faculty and

on either level is sane unless and until it is combined with such disorder of the highest level of thought as prevents the subject from knowing and recognising that the disorder is disorder, and we have seen that sane disorders of mind are numerous enough. There are, in fact, several disorders of mind that in my experience are never insane. Most people would, I suppose, admit that giddiness is not necessarily insane, but then most people, alienists as well as others, would, I suppose, not admit that giddiness is disorder of mind. To such people this book is not addressed. Until they are able to distinguish the mental from the physical, anything that is said here will be of no service to them. Agoraphobia is not very rare, and claustrophobia is frequent enough, but I have never seen either of them in an insane person, and there is no reason to suppose that they are akin to insanity. The same may be said of obsession; but it is curious that imperative idea, which is so similar to obsession in its persistent striving to assert itself against the control of the superior level, does sometimes, though in my experience not often, succeed in establishing itself and becoming a delusion. The idea, such as that of a man that he is pregnant, is for long recognised to be absurd and irrational, and is scorned and rejected, but at long last it is accepted, and becomes delusive. Various 'phobias, such as the fear of dirt and of contamination, which lead the subjects of them to perpetual washing and changes of clothing, are sometimes insane, but their irrational character is in other cases quite recognised by the subjects of them, and the same is true sometimes of what appear at first sight to be delusions of poverty. The patient when pressed and confronted with proof will sometimes admit, "I *know* I am not ruined, but I

feel that I am." In other words, he suffers, not from delusion, but from imperative idea, which may or may not subsequently become delusion.

V. SUBJECTIVE THOUGHT

The lowest level of subjective thought, that department of thought in which we estimate our own physical powers and structure, is not very infrequently disordered in such a way as to produce what may be called Somatic delusions, that is to say, delusions with respect to the composition of our own bodies. Such delusions as that the legs are made of glass, that the back of the head has been removed, that the brain has been taken out or otherwise tampered with, that there is a weasel in the stomach, or a tapeworm in the head, are common enough, and are usually isolated disorders, accompanied of course by disorder of the highest level of thought, or they would not be delusions ; accompanied no doubt by disorder of the second level, or evidence of their existence would be required ; but otherwise unaccompanied by mental disorder. In other cases they are but features in a widespread disorder. Under and over-estimation of the physical powers are always parts of a widespread disorder, and are always accompanied by dysphoria and euphoria respectively.

The second level of subjective thought is that which concerns our estimation of our own mental constitution and powers, and here again we must distinguish between sane mistake and insane delusion. It would be quite erroneous to suppose that all the bizarre notions about the constitution of the mind that we find in text-books of psychology are insane delusions. They are merely sane mistakes, and though some of them may be

evidence of disorder of mind, the disorder is within the pale of sanity. It is otherwise, however, with such notions as some persons entertain, that other people are thinking their thoughts, or controlling their thoughts or their wills or their desires or feelings. It is true that there is a considerable body of persons who believe, or profess to believe, that some persons can communicate their thoughts to other persons at a distance from them by other than physical means, but those who entertain this belief are not necessarily insane. They do not, as the insane do, reject positive evidence that tells against their belief: they merely entertain the belief on no or on very insufficient evidence, and are thus less irrational than the insane, though they are more irrational than the believers in witchcraft, for which there was at one time a great deal of evidence of considerable cogency, including many confessions of suspected witches. Under and over-estimation to a morbid degree of the mental powers are, like those of the physical powers, combined with dysphoria and euphoria respectively, and are parts of a widespread disorder.

There is, however, one very common instance of over-estimation, which is not actually insane in degree, though it borders on insanity and sometimes oversteps the line. This is the overweening vanity of adolescence and youth. Young people within a few years on either side of twenty are apt to entertain a confidence in their own mental abilities and judgment which is quite unwarranted by the academic success at school or at college which they may have achieved, and in fact their achievements, even of this small kind, are not usually considerable, and the airs they give themselves and the dogmatism with which they assert their opinions, as if they were of importance, show a strange ignorance of

Lord Bowen's celebrated dictum that we are none of us infallible, not even the youngest of us. This is the normal, or quasi-normal degree of a mental peculiarity that sometimes transcends the normal, and then becomes a familiar type of adolescent insanity.

Disorder of the upper middle level of subjective thought, that is to say, mal-estimation of means, position in life, rank, titles, and so forth, is not compatible with sanity, and therefore never exists as an isolated disorder. It may, however, exist without any other disorder except that of the highest level of thought, which renders its correction impossible; and, as already stated, exaltation of this character is not at all infrequent. On the other hand, abasement on this level is never seen without dysphoria as an accompaniment.

Mal-estimation on the highest level of subjective thought, that is to say, mal-estimation of our own moral character and acts, does in some rare cases exist as an isolated or almost isolated malady, and very puzzling such cases are. There are persons who are born apparently without the rudiment of a moral sense with respect to their own acts, and who never acquire one. They begin to steal as soon as they have pockets to put stolen goods into, and they continue their marauding throughout life. It is not that they are brought up in criminal surroundings and never have a chance to learn the difference between good and evil. They are of gentle birth, and have the same bringing up and education as their brothers and sisters who live honourable and upright lives. Their peculiarity is that they do not recognise the turpitude of their acts. They recognise, indeed, that stealing is frowned upon, and that their thefts, if discovered, will bring them into trouble; and therefore they steal secretly and with

precautions against discovery; but their precautions are often but slight and ineffectual, and when confronted with their crimes they exhibit no shame, and seem to be incapable of understanding that they have done wrong. Punishment they regard as unjust vindictiveness and unmerited injury, and resent it as undeserved. I have said that the defect is almost isolated. It is usually not quite an isolated defect, for the precautions against detection are often so flimsy that it is manifest they must be ineffectual, and that discovery and its consequences must speedily follow; and this shows a defect of wisdom or prudence so great that it raises the question, if indeed it does not settle the question, of insanity in the ordinary sense. Moreover, there are indications of other mental disorders. There is sometimes a malignant vindictiveness against those relatives who have suffered most by their depredations; and who have taken endless trouble and made many sacrifices to keep them out of prison and to save them from the natural consequences of their misdeeds. If there is such a being as an "instinctive criminal" persons who satisfy this description are best entitled to the appellation.

Children who steal are not necessarily of the kind of born criminal just described. Many children steal repeatedly in spite of repeated punishment for stealing, and often are very ingenious in their thefts. They steal, however, without precaution against discovery; they steal when they know that discovery will be speedy and punishment sure; they steal, it appears, from weakness of will to resist desire. They fully know and appreciate the turpitude of their acts. They do not, as the children of the previous class do, regard themselves as innocent victims when they are punished.

They know how wrong it is to steal; but they cannot resist temptation. Unlike the children of the previous class, they always, in my experience, grow out of their thievish proclivities, and grow into normal men and women.

VI. MEMORY

Defect of memory, even when distinctly morbid in degree, is not necessarily insane, although when it is extreme it must impair the judgment, by reason of the impossibility of holding together the two ideas, comparison of which constitutes judgment. Less degrees of defect of memory are quite compatible with sanity. The common senile defect, which begins with difficulty of recalling proper names, then extends to forgetfulness of substantive names, and gradually extends to forgetfulness of recent daily events, together with over-recollection of the events of a time long past, remains quite sane until it becomes very extreme, and in its milder degrees is quite compatible with shrewd business capacity, and not infrequently accompanies it. When the defect becomes extreme, it necessarily impairs the judgment, and is often attended by petulance, querulousness, outbreaks of temper and of childish violence, which show that the limits of sanity are passed, for they arise on very inadequate occasion, and exhibit a conspicuous lack of appreciation of circumstances and of wisdom.

The other main defect of memory, the inability to remember at the right time things that have to be done, is also quite compatible with sanity, for the subject of it usually appreciates and deplores his defect, and seeks medical advice for aid to overcome it. It is true that it may be an early symptom of brain disease which subse-

quently becomes profound, and deprives the patient of sanity, but in its early stage, and as an initial symptom, it is by no means necessarily insane. Its earliest mental concomitants are confusion of mind, dullness, and generally, defect of cleverness and ingenuity; and in the natural progress of the disease these soon become accompanied by such inability to appreciate circumstances and form the ordinary adjustments of prudence, as amounts to insanity.

VII. GENERAL DISORDERS

In the foregoing accounts some one disorder of mind has been taken because it is the most prominent and conspicuous disorder present in the case, and the subordinate disorders, or those that are less conspicuous, with which it is found in combination have been described in connection with it. There are, however, other disorders of mind which spread over the whole mental area, affecting all the mental faculties upon some or all of their levels with such uniformity that it is impossible to select any department, or even any faculty of mind, as more prominently or more conspicuously disordered than any other. These disorders demand separate consideration.

Anoia

One of the most frequent of these disorders is a more or less uniform obliteration or ablation of all the faculties of mind, proceeding from above downwards, and extending in different cases to very various degrees, until, when the limit is reached, conduct and mind are completely abolished, and that state is reached which is known as coma. Coma is not usually regarded as insanity, but of course it is insanity, or it includes

insanity. In spite of the very prominent and conspicuous loss of conduct and mind, coma is not regarded as insanity because it usually comes on precipitately, and we are so preoccupied with the physical basis of the coma that we forget its other relations. But coma does not always come on precipitately, and when it is the culmination of a gradual process that has been going on for months and years, as it is, for instance, in those cases of general paralysis that go on to the end, and are not cut short by inter-current pneumonia or other disease, we see clearly that it is insanity pushed to the extreme. Conduct and mind have been gradually failing, gradually diminishing, gradually departing, for months and years, until they are completely lost; but the final loss is not a new feature in the case, it is merely the long-existing feature pushed to the extreme; and if coma is insanity when it is the culmination of a process that has been going on for months and years, equally is it insanity when it occurs suddenly.

In coma, as usually pictured, there is something more than loss of conduct and unconsciousness. There is besides, at any rate in deep coma, universal paralysis of the voluntary muscles. This universal paralysis is quite apart from any local paralysis that may be due to a local lesion, as for instance unilateral cerebral hæmorrhage, a local paralysis which remains when the general paralysis is cleared away. This universal paralysis is due to the great depth to which the lesion suddenly implicates the central nervous system. When, as in general paralysis, the lesion is very gradual in its reset, the universal paralysis is replaced by universal spastic contraction. There are cases, however, in which the depth of implication is less than this; in which the muscles are neither paralysed nor spastic, and in which

some rudiment of conduct and some glimmering of consciousness still remain. In such cases the patient is not necessarily prostrate. He may be able to sit up, or to stand. He may even be capable of a few voluntary movements. He does not pass his urine and fæces involuntarily or inappropriately. If he is shouted at, we may get some response from him, if only a look or a movement. If pushed along he does not fall, but performs a shuffling walk. Such is the clinical picture of a case of deep stupor. Stupor may be deeper than this, so that the patient does not even walk or stand, or it may be shallower, so that he feeds himself, and performs other simple acts when he is told to do so ; but in any case the characteristic of stupor is simple defect of conduct and mind, usually deep defect, uniformly distributed over all the faculties of mind and all the phases of conduct, and uncomplicated with over-action on any level. The stuporose patient experiences neither desire, pleasure, nor pain, and exercises neither volition nor thought, except on the lowest levels. As recovery takes place, the several levels gradually resume their functions in their order from below upwards, until, when recovery is complete, wisdom resumes its sway, the moral and social desires and feelings are again experienced, and volition comes into full force once more.

In stupor, the defect extends to the very lowest level in all the faculties. Even the crude sexual desire is not felt, even the most trivial volitions are impossible, objects are scarcely perceived, impressions scarcely produce sensations, even the crude pains of bodily injury may be unfelt ; and as has been said, there is scarcely any conduct of any grade. In a far larger number of cases the defect of conduct and mind is not

as deep as this. The great bulk of the inmates of lunatic asylums are persons who are known as "chronic dements." They are persons in whom the highest level of all the mental faculties is lost, and for the most part the second level also is gone. The third level may or may not be invaded, and the lowest level of all is usually intact. Such persons display no social conduct. Their conduct is quite selfish, and consideration for others is no part of their mental equipment. Of wisdom they have none. So incapable are they of directing their conduct in the major affairs of life, that they must be placed under the care of others, and have these things managed for them. They feel neither the pleasures of sympathy nor the pains of remorse, and the moral estimates that others form of them are wholly indifferent to them. On the second level the faculties are almost equally deficient. They are as destitute of the desire to earn their livelihood as they are of capacity to do so. They are as impervious to beauty as they are to disgust. To the charms of wealth, of social standing, of power they are as indifferent as they are to poverty, to the manifestations of dislike and contempt. Often this defect is deep enough to invade the third level, and render them insensible to common dangers, and to the fear and anger that common dangers and crude antagonism evoke in normal persons. Their spirits are never raised or depressed. It may be that the defect invades even the lowest level, so that they become insensible even to the crude pain of bodily injury and their sensations are dulled. Precisely the same defects of the same varying extent may be discerned in those who have not, indeed, lost the uppermost levels, but who have never acquired them. The imbecile and the dement are mentally on a par. What differences they

manifest are due partly to the greater activity in conduct of the young, in whom imbecility is usually seen, and partly to the more irregular extension upward in imbeciles of normal acquirement. The imbecile who is generally dull and amented may surprise us by a disproportionate development of some isolated faculty, such as music or calculation.

Dementia—literally unmindedness, or deprivation or lessening of mind—may, as a form of insanity, be of any degree, from the slight blunting of intelligence and feeling and the slight diminution of conduct that we all experience at the end of a tiring day to the complete obliteration of mind and conduct that we witness in coma and in the deepest depths of stupor. The title dementia is also given to the kind of insanity in which the form dementia is the main symptom, and is limited by the Scotch school to those cases of dementia that are irrecoverable. This confusion of nomenclature is unfortunate, and leads to a great deal of confusion of thought.

In every case of insanity of every sort, kind, and description there is some degree of unminding—some loss or defect of mind—and therefore some degree of the form dementia. As already shown, the one characteristic of insanity that is never absent, and that constitutes insanity, is loss of the highest level of thought, with of course corresponding loss of the highest level of conduct. This defect is in many cases, and especially in acute insanity, so swamped and overborne by excess of activity on a lower level, that the defect is overlooked, but it is always there. When a patient is ramping and raving, stripping himself and tearing up his clothes, hammering at the walls and breaking the furniture, or when he is wringing his hands and lamenting his crimes and sins,

our attention is so much absorbed by these active manifestations that we are apt to overlook and forget the loss of wisdom and prudence, the inability to appreciate circumstances and to guide conduct aright, that are at the bottom of the symptoms and are the fundamental elements in the malady; but these elements are always present, these qualities are always absent, and it is their absence that constitutes the insanity. The more active symptoms are but the consequences of the loss. When the active symptoms subside, they leave the defects outstanding as the most conspicuous features in the disease, but the defects were there all the time. They are not new. They now become apparent by the subsidence of those that masked them. When I have pointed out that these defects of mind and conduct, to which the name of dementia is given, exist in every case of insanity, I have been met, especially by Scotch critics, with the reply that this is absurd, because dementia is irrecoverable, and many cases of insanity recover. They meant by dementia a kind of insanity: I meant by it a form of insanity common to every kind. In order to remove this misunderstanding, I now call the defect of mind and conduct that constitutes insanity by the name of Anoia, a name that has unfortunately been used before in another sense, but that has not been generally adopted in that sense, and that is in fact but little known. In fact I am sure that the majority of my readers will be unfamiliar with it. By anoia I mean, then, that defect of conduct and mind that begins at the top, in the highest level, and may remain limited to a mere shaving off that level, as in the case of the clever lunatic, or may extend downward to any depth until at last it touches the bottom in coma. Whether it invades a person who has reached

the full stature of conduct and mind, and takes some of it away, or whether it is congenitally absent and has never been attained, makes no difference to the form of the insanity. It is still anoia. The name applies to every such case, for the deficiency in each is the same except in degree as a whole, and in the degree to which the different levels are invaded. Thus understood, anoia of some degree is present in every case of insanity, and it is the anoia that constitutes the insanity.

In other words, the real, the important, the crucial feature in every case of insanity is defect. In no case does disease make a real, a fruitful, addition to function. The affection of function is always in the direction of loss, of defect, of diminution. In inflammation, tissue change is increased in activity, it is true, but it is carried on upon a lower level. There is increase of process, but there is diminution of function. In glycosuria there may be increased production of sugar by the liver, but there is no real elevation of the function of this organ, and the general functions of the body are not increased, but diminished. And so it is in active insanity. In mania there is great increase of activity; in melancholia and in exaltation there is great increase of feeling; in delusion there is increase in the ability of mental states to enter into coherent combinations. But none of these states of increased activity indicate real operative increase or elevation of function. On the contrary, they are accompanied by, and they indicate, diminution of function. For with all the vivacity of thought that obtains in mania, there is always an inability to appreciate the circumstances in which the individual is, and his true relations to these circumstances. With all the increased activity

of conduct, the conduct is on a lower level; it is not, and cannot be, adapted to the circumstances, for the power of adapting conduct to circumstances, the highest function of the brain, is defective. With all the increased intensity of feeling, with the depression or the exaltation, there is still the mal-adjustment of this feeling to the circumstances, and there is still the inability to bring the feeling into correspondence with the circumstances. And the important, the vital disorder, is not so much the increase of activity, as the degradation of activity to a lower level; is not so much the excess as the defect; is not so much the mania, or the melancholia, or the exaltation, or the delusion, as the inability to appreciate the mal-adjustment of conduct and thought and feeling to circumstances, and to bring about readjustment. So that, in all cases of insanity, the real and important aberration is not necessarily the most conspicuous feature—the over-action—which may be regarded as adventitious, and to a certain degree as accidental, but the degradation of activity to a lower plane; and it is this degradation that is indicated by the term "anoia."

Allowing that in all forms of insanity this degradation of conduct exists, then the clinical kind of insanity will depend upon whether the defect is simple—that is to say, upon whether the activity of mind and conduct are merely degraded and diminished, and upon the lower plane to which they are reduced no excess of activity takes place, in which case it is simple anoia; or upon the kind and degree of inferior and debased activity that goes on at this lower level. When the debased activity is marked by excess of feeling, we call it melancholia or exaltation, as the case may be; when it is exhibited in excess of low-grade conduct, we call

it mania; when it occurs in the formation of beliefs, we call it delusional insanity. In any case of simple anoia, over-action may occur at the low level to which the nervous organisation is reduced, and then we call it a case of dementia with outbreaks of excitement, or of dementia with delusions, and so forth. Even when the anoia is deep, when the level to which the nervous organisation has been degraded is very low, some over-action upon this lower plane is usual, and then we witness those forms of anoia in which the patient is excessively voracious, in which he eats all kinds of filth and rubbish without distinction; in which he collects stones and sticks and bits of string and other rubbish; in which he tears and destroys his clothing and anything he can get hold of; in which he exhibits for many hours every day, and every day for years together, some simple and inappropriate form of conduct; in which he shouts and screams, or pats his leg, or rubs his clothes together as if in the wash-tub, or rocks himself backwards and forwards in his chair, or repeats the same form of words.

The *degrees* of anoia are practically infinite. They range from the trifling decadence of intelligence, feeling, and conduct that is exhibited by anyone after an enfeebling illness, or at the end of a tiring day, down to the almost total obliteration of consciousness and movement in the latest stage of such a disease as general paralysis, in which the patient lies a mere log, insensible to all that is passing around him, passing his motions and urine as he lies, allowing the flies to walk over his face and into his open mouth without showing the least sign of disturbance, indifferent to the sight and smell of food when placed before him, incompetent even to chew the food placed in his mouth,

and exhibiting only sufficient intelligence to swallow the pulp with which he is fed.

In this long and uniformly diminishing series we may mark off separate grades where we please, and whatever divisions we make will be wholly artificial; but there is a practical convenience in distinguishing between grades of anoia, and the first grade that we may distinguish is that in which the social activities alone, or chiefly, are defective. In this respect all the insane, without exception, are deficient. As the higher social qualities are the last to be acquired, so they are the first to be lost when complete sanity begins to fail. We never find an insane person who is quite polite. Ceremonious they often are in an exaggerated degree, but polite, in the sense of exhibiting those little benevolences which are as oil in the running of the social machine, they never are. Even the sanest of the insane are deficient in courtesy. They may bow you into their room with an exaggerated affectation of ceremony, but they fail to offer you a chair; or, if they go as far as this, they exhibit their want of civility by engrossing the conversation, and in talking exclusively about themselves; in their naïve boastfulness; their engrossment in their own affairs; their indifference to the little ordinary duties of hospitality; in the absence of all effort to entertain. In the next grade of dementia the indifference to social obligations is greater. The subject of it will receive you in his shirt-sleeves, he will go about the streets in his dressing-gown and slippers, he will go to a funeral in a shooting suit. If a woman, she will be indifferent to her personal appearance, be untidy, slovenly, and dirty in her dress, will go about with tangled hair, loose stockings, and shoes down at heel. If a man, he swears

freely before ladies and strangers, and introduces objectionable topics of conversation without discerning any impropriety in so doing; or he may go further, and introduce loose women, perhaps his own mistress, to his wife and daughters, and even bring her to live in the same house, oblivious to the objectionable character of his conduct. He loses reticence, and speaks familiarly of his family affairs, of his income, of his differences with his wife, of his son's misconduct, and his daughter's epilepsy, before strangers, in railway carriages, in hotel smoking-rooms, in his club. If a woman, she will talk with similar want of reticence of her confinements and miscarriages, of her husband's unfaithfulness, or her own amours.

The grades of anoia described above may co-exist with full ability to earn the livelihood and administer the means, but in the next grade these modes of conduct also are affected, and the patient becomes either incapable of appreciating the importance of continuing his regular employment and of regulating his expenditure according to his income; or, while recognising the importance of doing so, incapable of appreciating what his income is, and therefore what his expenditure should be; or deficient in ability to follow his employment. In conjunction with these defects we meet with many forms of excessive action upon a lower level, which will be alluded to in other connections.

The lowest grade of anoia is exhibited by those who have not only wholly lost their ability to administer their means, but who are deficient also in that primitive group of activities by which existence is preserved from day to day and from hour to hour. If their food is not brought to them, they will make

no effort to provide it for themselves. They have not sense enough to come in out of the rain. If the house were on fire they would not know which way to go to get out of it, even if it occurred to them that it was desirable to escape. Conduct is reduced to finding the way from the bedroom to the sitting-room, from the fireside to the meal-table, and back again; or even this modicum of intelligence is lost. Even in this lowest grade of anoia degrees or sub-grades are apparent. The most intelligent of these anoiacs are clean in their personal habits. The next lower grade is when they pass their urine under them, but go to the closet to defæcate. Then this is also lost, and their motions are passed in their clothes. Then they become incapable of dressing and then of undressing themselves; and the last acquirement to be lost is the art of carrying the food to the mouth when it is placed before them. Even in this accomplishment there are degrees; for some can use a knife and fork, some a spoon only, and last of all, this implement is abandoned, and the fact that fingers were made before spoons is practically exemplified, since their use is retained longer.

Thus understood, anoia of some degree is present in every case of insanity, and it is anoia that constitutes insanity.

Mania

In anoia, we concentrate our attention on the defect. It is the loss or absence of a part of conduct and mind that constitutes the form; but defect rarely exists alone. It is usually accompanied and often obscured, either continuously or from time to time, by over-action on a lower level. The removal of the higher

levels, and it is the higher levels that are first and most defective in anoia, removes from the levels beneath them the control to which they were subject by the higher, and permits the lower to act in excess, provided they contain the store of energy necessary for action. In coma, all the levels are placed out of action, and there is no over-action, except perhaps of the purely vegetative functions. Respiration, for instance, may be excessive. When the anoia is deep, but is not so deep as this, and but little energy is left in store, even this little may be expended excessively, and we see that idiots and dements indulge to excess their lower appetites. When, however, abundance of energy is contained in the lower levels of the nervous system, and the control of the higher levels is removed, we witness over-action in great excess; and all such over-action undirected by wisdom or prudence receives the common name of mania. Mania is not a kind of insanity; it is not a disease; it is a form or symptom only, and may exist in many diseases. However enormous and portentous activity may be, even if it reaches the superhuman activity of Napoleon Buonaparte, and wears out ministers, secretaries, amanuenses, and subordinates of all grades, it is never excessive so long as it is informed by wisdom—so long, that is to say, as the highest level of mind is intact. Only when the highest level is out of action, it may be but the thinnest film removed from its surface, can over-action be properly said to exist. The question at once presents itself, Why, if over-action results from loss of control, and the higher levels control the lower, is there not always over-action when the higher levels are destroyed, as in dementia, or in abeyance, as in stupor? The answer is not far to seek. The nervous system is an apparatus for the

storage and expenditure of motion, and each level can expend only up to the amount that is in store. If it is in a state of general repletion, and if then control is suddenly removed, motion will be set free in great excess. If control is removed but gradually, time will be given for readjustment to take place, and for inferior levels to assume the function of inhibition, and in this case the outburst of over-activity will be kept within limits; and if control is removed from levels that have little or no motion in store, little or no motion can escape. However suddenly we draw the cork of a bottle of ginger beer, there will be no overflow if the beer is flat. In stupor, the central nervous system appears to be emptied of its store of motion, and its capacity of restorage to be in abeyance. In quiet dementia the head of pressure is but low, and little escapes because there is little within; but given a great head of pressure, and a sudden removal of control, and a great outburst of excessive activity is certain.

Over-action may take place on any level except the very highest. The description of the "sane lunatic" given on a previous page is a description of moderate over-action upon a high level, due to removal of the control of a still higher level; but instances of much greater over-action—much greater excitement—on the same level are not infrequent. The clever lunatic is a busy man. He is seldom idle, and keeps his time pretty fully occupied; but his industry is methodical. When he is engaged upon a task he keeps at it until it is completed; and he has his intervals of rest and recreation. But the sufferer from what may be termed high-level mania knows no rest. He is eagerly and incessantly active, and his activity knows no continuity and no patience. He is engaged in a dozen pursuits at once,

and he follows them all with the same impatient avidity. He sleeps little; he is down before anyone else in the house; he bolts his meals to get back to work; he writes innumerable letters, he sends innumerable telegrams, he makes innumerable appointments. He is as full of schemes as an egg is full of meat, schemes in his profession or business, schemes for the reconstruction of national and political affairs, schemes of social regeneration, schemes for the welfare of his family and friends, for rebuilding his house and resettling his household affairs—schemes for anything and everything, schemes that may not be without plausibility, but that are vitiated by want of proportion between ends and means, if not by total want of practicability or even of desirableness.

Over-action on a low level shows itself in equal eagerness, activity, and versatility, but the activity is crude, and the aims are immediate. In the place of schemes for future benefit, and action directed, however unskilfully, towards carrying them into effect, no aim can be discovered beyond the immediate intention. There is shouting, but the shouting is without purpose of attracting attention or warning, there is hammering at the door and walls, but without the purpose of escaping; there is tearing of clothing and destruction of furniture, but only with the purpose of expending energy. There is incessant walking, but not with the purpose of arriving anywhere. There is abundant over-action, but it is over-action on a low level, the higher levels being in abeyance. Excitement in conduct must be presumed to correspond with excitement of mind; and no doubt in elaborate over-action on a high level, excitement of mind shows through the excited conduct; but in the crude low-level excitement that has just been

described, excitement of mind is inconspicuous just because so much of mind is in abeyance. The higher levels are altogether out of action, and what excitement there is is on so low a level that, when the higher levels resume their sway, even the memory of it is lost. It is lost because on these higher levels there was no excitement, and therefore there can be in them no memory of excitement.

CHAPTER VI

TYPES OF INSANITY

So far, the classification has extended to the symptom only of insanity. No attempt has been made to consider insanity the disease, or to show of what different diseases insanity consists. This is the task that must now be undertaken, and undertaken with all the trepidity and circumspection that are naturally inspired by the failure of innumerable predecessors.

It was said at the beginning of the last chapter that two conditions are necessary to the validity of a classification; first that the things to be classified must be delimited and separated from all other things, and second that there must be one *fundamentum divisionis* or principle of division, and no more, for each act of dividing. It is now to be added that there is a third condition that must be satisfied by every classification, if it is to be of any value. It must be adapted to its purpose. If a classification satisfies the two conditions mentioned above, it will be a valid classification, but a classification, even though completely valid, may be completely useless for the purpose in hand. A classification of coins according to their value is a valid classification, and for the purpose of a bank cashier, a useful classification; but valid as it is, it is utterly useless to the numismatist. A classification of coins according to their date is a valid classification, and for

the purpose of a numismatist a useful classification, but it is utterly useless to the bank cashier. So the following classification of cases of insanity is a valid classification, and is for the purpose of the asylum manager a useful classification :—

- Able-bodied
  - tractable
    - epileptic.
    - not epileptic.
  - turbulent
    - epileptic.
    - not epileptic.
- Not able-bodied
  - frail
    - employable.
    - not employable.
  - sick
    - of infectious disease.
    - of non-infectious disease.

But valid as this classification is, it is utterly useless to the alienist who desires to organise his knowledge of insanity. To produce a valid classification is not enough. We want a classification that shall be adapted to its purpose ; and for this we must settle for what purpose the classification is desired. Why do we want to classify cases of insanity ? Why do we want generally to classify things ? Mainly for three objects : To aid description ; to relieve the burden on our memories ; and to organise our knowledge. The two former may without much straining be included in the latter. The root of all thought and the root of all knowledge is comparison ; and the aim of comparison is to discern likeness and unlikeness, to group together in thought the things that are alike, and to separate in thought the things that are unlike. In one aspect, all thought is classification ; all knowledge is of classified things.

To classify and to know are, from one aspect, the same ; and as we crave to know, so we crave to classify.

When we speak of a classification of cases of insanity, we usually mean a classification, not for the purpose of putting like cases with like in the wards of an asylum, but for the purpose of thinking together of those that have the most numerous, far-reaching, fundamental, and important similarities, and separating those that have corresponding differences.

Bodily diseases are not difficult to classify. They are classified according to the agent that produces them, or according to the organ that is first and most affected; but madness cannot be thus classified, for the agent that produces it is in most cases unknown, and the organ first and most affected is usually the same. There are, however, bodily diseases which we cannot or do not classify thus. The agent that produces gout is unknown, and so are the agents that produce certain other diseases; and we do not classify gout as a disease of the big toe, though this is the organ that is usually first and most affected. If we refer to our definition of a disease—that it is the whole of the correlated disorders from which the patient suffers—we shall see that what we have in our mind when we speak of diseases and of classifying them is a certain clinical picture that we actually witness, that is to say, always a correlated group of symptoms, to which is usually added disorder of function, known, inferred, or postulated, of some organ, on which disorder all the symptoms depend, and by which they are correlated. The concept of the disease is not complete until we add to these elements a certain course, more or less variable, that it will take, and, when possible, the cause to which it is due. The whole of these elements, or as many of them as we can ascertain, are combined into a single concept which we call a disease. All that is strictly necessary to our concept

of a disease is a group of symptoms which we have reason to believe are correlated together by some underlying disorder, and a specific course. If we can assign an underlying organic disorder, and a cause, all the better. Our concept is the more complete; but a correlated group of symptoms running a certain course is all that we need to constitute our concept of a disease.

Bodily diseases are comparatively easy to classify, because the symptoms by which they are known are all, with one exception, of the same order. With the exception of pain, they are all physical symptoms that can be observed; and facts of one order are not difficult to classify. But the symptoms by which insanity is known are, if we may call mental disorder a symptom, of three different orders, which are not comparable *inter se*. The symptomatology of insanity is threefold —physical, mental, and praxic. It consists, or may consist, of disorders of the body, disorders of mind, and disorders of conduct. And of these, disorders of body are often imperceptible; disorders of mind are never perceptible, and it may be difficult or impossible to discover their exact character; and disorders of conduct, though always present, are often elusive and difficult to seize and to describe in specific terms, and are often overshadowed by the preponderant value of the mental disorder, which clamours insistently for relief. Hence it follows that some cases of insanity, for instance mania, are recognised and described by the disorder of conduct; others, such as melancholia, by the disorder of mind; and yet others, such as the insanities of myxœdema, of cretinism, and of acute specific fevers, by the bodily symptoms; and it is clear that a classification founded upon three principles,

used simultaneously as principles of first division, cannot be a valid classification.

There is yet another difficulty. In some cases of madness there is a definite group of correlated symptoms, the like of which we see again and again in successive cases, which runs a certain course, and satisfies all the conditions that are required to constitute the concept of a disease; but in a large number of cases we meet with a group of symptoms, which, since they are disorders of conduct and of mind, we must suppose to be correlated, and to these may be added disorders of bodily health, as to whose correlation with the others we may be in doubt; but whether they are so correlated or no, the whole group of symptoms is like nothing we have ever seen before, or is like one fairly constituted group in some important aspects, and like another fairly constituted group in other material respects, and perhaps like a third group in some still other material respects. Where are we to place such a case? Two or three diseases have equal claims to accept or to reject it, and if we constitute each such case a separate disease, the accumulation becomes too great for the mind to grasp, and classification is virtually abandoned.

Still, however great the difficulties may be, they must be met. Insanity must be classified, or our knowledge is at a standstill, and the classification, to be a valid classification, must conform to rule; that is to say, its primary groups must be constituted upon one single *fundamentum divisionis* and no more.

As far as I know, two attempts only have been made to classify insanity upon a single principle. The first of these is Sir G. Savage's classification according to

the age at which it occurs, and the other is the classification on the principle of dissolution.

Sir George Savage's classification is a valid classification, and is not badly adapted for a certain purpose, that, namely, of readily referring to its place in the classification those cases that are seen in practice by the physician; but as what is sometimes called a scientific classification, that is to say, an arrangement constituted so as to accord with important, far-reaching, and fundamental resemblances and differences, it will not do; for though the symptoms of insanity are probably always coloured by the age at which the insanity appears, yet some diseases of insanity, such as general paralysis, may occur at any age, and present no material difference at several ages.

To the orderly mind, a classification according to the principle of evolution and dissolution is most attractive, and, were it practicable, would undoubtedly be preferred, but unfortunately its practicability does not extend very far. According to such a classification, insanity would be divided first into cases due to imperfect or defective evolution, and cases due to dissolution; and so far the scheme is practicable. But the division of the insanities due to dissolution presents insurmountable difficulties. It should proceed by dividing insanities due to uniform or general dissolution from those due to local or partial dissolution; but in our experience general dissolution, such as we see in stupor, in dementia, and in general paralysis, begins locally, and not often in the same locality twice running; and the cases of local or partial dissolution form a heterogeneous and unclassifiable group. This principle, therefore, fascinating as it is, must be rejected, except for the primary division. There is no reason, however,

why for the primary division it should not be utilised. It is after this stage that the difficulties begin.

Since what we are now endeavouring to classify are diseases, and since it has already been shown that by a disease we mean a clinical picture, consisting of at least a group of correlated symptoms, it is natural, and it is justifiable, to turn to the clinical pictures and ask whether in them there cannot be found some *fundamentum divisionis* which can be applied to the dissolute class of cases and can serve to divide them into groups. Such a *fundamentum* there is, and although it does not afford a very sharp-cut distinction between two classes, it is easily applied, and it does enable us to divide the dissolute class into two, and the division, though not absolute, is not only easily made in a great number of cases, but is of great practical importance. It is the division into acute insanity and chronic insanity, and I must explain what I mean by these terms.

By acute insanity I mean insanity in which the symptoms are of recent onset, are intense, and are never absent, so that it would be impossible to observe the patient for even a few moments during his waking life without discovering that he is insane. There are many cases in which the symptoms are intense and remain intense for years, but these are excluded by the definition from acute insanity; and there are many cases in which the symptoms are of recent origin and intense, but which we know will last for years, and these are in a sense cases of chronic insanity; but they are for the time cases of acute insanity in the sense in which that term is used here. When the symptoms are no longer of recent onset, the case is no longer one of acute insanity. It then merges into chronicity. To those who object that this is not a valid division,

because it is not a sharp division, I reply that a division may be quite valid though it is not sharp, and though we may not be able to indicate with accuracy where to put the dividing line. The distinction between night and day is quite a valid distinction, though we cannot draw any precise dividing line between them. I refuse to be tied down to any precise number of days as the duration of recency, but if I were compelled to give some indication, I should say that anything less than six months is recent, and anything more than six months is scarcely recent.

By chronic insanities I mean all those that are not acute according to this definition. It is evident, therefore, that the chronic insanities constitute an extremely heterogeneous class, and that many of them have once been acute. It is difficult, and would be scarcely worth while, to divide them on any useful principle, but certain of them must be described. The acute insanities, however, form a practically well-defined class, and one that is of great clinical value. For clinical purposes it matters little, except for prognosis, which cannot always be made with any confidence, whether an acute insanity will be transient, or whether it is the initial stage of a chronic insanity that will endure for years or for life.

It may seem that a classification by dichotomy which results in one small and well-defined class and one large, heterogeneous class, insusceptible of further division, cannot be a very useful classification. It is useful, however, as far as it goes. It gives us one class of practical value which can be studied apart from the other. It selects certain cases having a common quality, and enables us to study them free from the confusion and embarrassment of the remainder. It is analogous to a classification of flowering plants into

orchids and other plants. It is not an exhaustive classification, but it does distinguish orchids from other plants, and enable us to make a separate study of them. So this mode of classifying dissolute insanity enables us to distinguish acute insanity from other insanity, to make a special study of it, to enumerate the features common to all cases of acute insanity, and to subdivide the class into its varieties. Moreover, the two sub-types of chronic insanity that will be described are well-characterised and useful types.

ACUTE INSANITY

Acute or intense insanity is insanity of recent onset, in which the symptoms are intense in that they are exaggerated in degree, and dissolution proceeds rapidly, until conduct becomes crude, and manifestly, often grossly, insane, so insane that its insanity cannot be missed by the most negligent onlooker. Acute insanity is susceptible of dichotomous division first into hyper-acute insanity and insanity that is merely acute. The merely acute insanity is divisible into several varieties according to the feature, mental or praxic, that predominates. They are as follows :—

Acute Insanity

1. Hyper-acute insanity.
2. Acute insanity.
    - (*a*) Excited or maniacal.
    - (*b*) Dysphoric or melancholic.
    - (*c*) Suicidal.
    - (*d*) Resistive or Stubborn.
    - (*e*) Sexual.
    - (*f*) Stuporose.

HYPER-ACUTE INSANITY, OR ACUTE DELIRIOUS MANIA

This is one of the most definite and clearly distinguished clinical varieties, as distinguished from forms, of insanity—one of the few varieties of insanity which runs a very definite course. No other variety of insanity exhibits such extreme and continuous excitement as acute delirious mania. Even in acute insanity the patient has his moments of tranquillity; has snatches, perhaps prolonged periods, of sleep; will occasionally answer questions intelligently; will regulate his conduct with some reference, however distorted, to surrounding circumstances; will sometimes recognise his friends, and will have some regard to the decencies of life; but in acute delirious mania the alienation is more profound. The raving is continuous. It goes on incessantly, day and night, the whole twenty-four hours round. It is quite incoherent and meaningless, a torrent of unintelligible utterance. And as is the vocal movement, so are the other bodily movements. The restless activity is extreme and incessant; the patient roams about with ceaseless restlessness, he is never still, he never lies down, he never sits down, he is always on his feet, always in movement. He neither eats nor sleeps; sometimes he will drink, sometimes not; but in any case he never eats voluntarily, and is with the greatest difficulty induced to do so. The length of time that he goes entirely without sleep is astonishing. Day after day and night after night he keeps up his incessant movement. You cannot engage his attention; he takes no notice when spoken to. He is indifferent whether he is dressed or naked; heat and cold he does not notice; the calls of nature he does not answer;

his bladder becomes full, and over-full, until his urine dribbles away. Withal his temperature is raised: it is seldom much raised, but it is two or three degrees above normal, and this feature alone distinguishes this from almost every other variety of insanity. Such excessive and continuous waste of tissue and of energy cannot endure long without producing exhaustion. After a few days of this extreme restlessness and sleeplessness, the patient is no longer able to remain on his feet; he sinks to the ground, but still he continues to rave in a voice hoarse and wellnigh inaudible from incessant use; still he continues to toss about his weary limbs; and when this stage is reached, the end is not far off. His mouth becomes dry, sordes accumulate on his lips and teeth, his heart's action fails, his pulse flutters, his breathing becomes a succession of sighs; but still he mutters in a hoarse whisper his unceasing babble, until, at the end of seven or eight days he dies of exhaustion. Such is the course of a typical case of acute delirious mania, the "brain fever" of older writers, the most rapid and most terrible variety of insanity.

It affects both men and women, and usually those who are in the prime of life—from twenty-five to forty—and is usually preceded by some prolonged and efficient debilitating occurrence, such as an exhausting illness, deficiency of food, rest, and sleep, anxiety, disappointment, or excessive intellectual labour.

Acute delirious mania is practically always fatal. If a case is so mild as to admit of recovery, it would be one of acute insanity rather than of acute delirious mania. As to treatment, a padded room is essential. In no other surroundings can the restlessness of the patient lead to so little bruising and other injury.

Abundance of food must be given by the stomach tube, and mingled with it should be given brandy, strychnia, and large doses of hypnotics—paraldehyde, sulphonal, and trional being the best. For all that we can do, however, the patient will almost surely die; and in the rare cases in which the bodily health recovers, the patient remains a mental wreck, a hopeless dement for the rest of his days.

ACUTE INSANITY

The boundary between this and the previous variety of insanity is not always well defined, but generally, the whole course and symptoms of acute insanity are less acute, less rapid, less exaggerated and fulminating, than those of acute delirious mania; recovery is not infrequent; and what differentiates them more sharply is that in the latter disease the form of insanity is always that of mania, while acute insanity is of several types.

The causes and antecedents of acute insanity are those of insanity in general. It may occur at any age after sixteen, and in very rare cases before that age, but is most frequent in the most vigorous period of life—from twenty to forty-five.

Acute insanity is rapid, sometimes sudden, in its development. The very first thing to attract attention and to indicate insanity may be a determined attempt at suicide—a leap from a window, a cut throat, or a dose of poison, or it may be some outrageous or violent act directed against other people. But usually there is some warning of what is going to happen. For days, or even weeks, beforehand, the patient sleeps little, dreams much and vividly, eats little, finds himself unable to attend to his business, feels ill, and perhaps seeks medical advice. Headache is rare, but often the

mind is confused, and the patient dreads lest he should be going out of his mind; or he gets restless, talks too much, pays too many visits, writes unnecessary letters, sends unnecessary telegrams, neglects or mismanages his own business, and meddles with that of everyone else.

After a few hours, days, or weeks of these initial symptoms, the disease becomes fully established, and then exhibits several forms distinguished by the following characters:—

(*a*) *Excited or Maniacal*

In the first form the patient is excited—that is to say, his movements are in excess; he talks with rapid fluency and disconnectedly; he utters sometimes a stream of words in which each suggests the next by sound or meaning, but which are not connected into sentences, such as "window, wind, blow, thrashing, smashing," or they may be connected into sentences which are similarly irrelevant to each other, as "open the window, give me a glass, drink your brandy, isn't he handy? what a dandy! fine feathers make fine birds," etc. Together with verbal utterance, other movements are in excess, and are similarly disconnected. The patient roams about the room, he rushes to the door or the window, he picks up every movable object and throws it down again, or throws it about the room, or converts it to some use for which it was never intended. He upsets the water-jug and the chamber-pot, he overturns the furniture, he breaks the windows, he throws the chairs about, he assaults those who endeavour to control him, he tears his clothes off, he or she swears, blasphemes, and talks obscenely; and all this he does, not with any settled or intelligent or

enduring purpose, but aimlessly, erratically, and out of the mere exuberance of his energy.

(*b*) *Depressed or Melancholic*

A second type is the melancholic. In this type the activity is less, and there is a dominant delusion. The patient believes that he is ruined, or that he is damned, or that he has some frightful bodily disease, or that he is morally a hopeless outcast, and to his belief he gives utterance all day long. He is usually still over-active, though his over-activity is less. But he does not sit down, he does not rest; he shuffles about the whole day long, giving vent, not with shouts and outcries, as in the previous type, but in a muttering, plaintive, miserable voice, to his conviction of his own ruin, his unworthiness, his incapacity. He weeps, he moans, he wrings his hands, he tears his hair, he beats his breast; he importunes you for a ray of hope, a glimmer of comfort; but he refuses to be comforted. He repeats the same formula over and over again a thousand times a day: "Oh! my poor soul." "I am so wicked!" "I can't pay you!" "My poor wife and children!" "Oh! dear; oh! dear." "Oh! my God," and so forth. He is less inclined to the impulsive outbreaks that are so common in the previous type, but he is very likely to commit suicide, and he is more persistent and obstinate in his refusal of food, while he is less neglectful of personal cleanliness and less apt to pass his motions and water beneath him.

(*c*) *Suicidal*

Acute insanity of suicidal type often displays as much restlessness and over-activity as is seen in the first type —that of acute mania. In every form of acute insanity

attempts at suicide are common events, but in this form the whole attention and energy are concentrated upon the single purpose of suicide. The sufferer from acute mania will try to jump out of the window, or will take up a knife or a razor and cut himself with it, not, as far as can be judged, with any deliberate intention of suicide, or of anything else, but out of pure restlessness and meddlesomeness, combined with inability to appreciate the nature and quality of his acts. In this, as in every other type of acute insanity, there is sure to be, at some time, refusal of food, but the refusal does not appear to be the expression of any deliberate intention of suicide. But in this third variety the whole power of the mind is absorbed in, and devoted to, the single object of suicide. The mind is far more alert than in the other types; the power of adapting means to ends is retained to a far greater extent; and the end which is sought with inflexible determination, and with the most flexible adaptation of means, is suicide. To effect this end they are continually on the watch. In every object they see a possible means, and they set themselves with much ingenious contrivance to reach it, and possess it. They will promise to eat if they may eat by themselves, hoping thereby to be left alone. They will break glass and crockery to get a cutting instrument; they will ravel out the threads of their clothing to make a cord which they can tie round the throat; they will swallow anything that seems unwholesome; will bite a piece out of a tumbler or a cup, and try to swallow the fragment; will batter the head against the wall or floor, and try by the most unusual as well as by the most obvious means to effect their purpose. If they find suicide impracticable, or while they are waiting for a favourable chance to effect it,

they will occupy the time with efforts to reduce their comfort and give themselves pain, or even mutilate themselves. They will try to gouge their eyes out with their fingers, to tear the cheek with the finger in the mouth, to tear out the testes or to cut off the penis. Prevented from tying a ligature round the neck, they will endeavour to tie it round the leg or the penis. Prevented from knocking their heads against the wall they will take the skin off their knuckles by the same means, and so on.

(*d*) *Stubborn*

A fourth type is the silent, obstinate, resistive. Patients of this type do not speak. When spoken to they do not answer. They make for the door, the window, or the fire, and when restrained will continue for hours the same silent, dogged, determined effort to reach the desired destination. They, too, undress themselves, but they do so, not, as the acute maniac does, from the mere exuberance of their activity, which must find some vent, it matters not what, which, when restrained from taking off the coat, begins to unbutton the waistcoat or trousers. A patient of this type undresses himself with the same blind, dogged obstinacy that he does everything else. He persistently, again and again for hours together, attacks the same button, or tries to remove the same garment in the same way. He, too, refuses food, but he refuses it, not, so far as can be judged, with suicidal intent, but with the same resistiveness with which he stubbornly opposes everything that is done for him—refuses to be dressed and to be undressed, to be sat down or stood up, to go to the closet and to come away from it, to walk about or to stand still.

(*e*) *Sexual*

A fifth type of acute insanity is the sexual. A sexual proclivity is usually perceptible, as is the suicidal proclivity, in every case of acute insanity; but, in the one matter as in the other, there are cases in which the proclivity becomes so pronounced, assumes such dominance, is by so much the most prominent and conspicuous feature, as to constitute a distinct type of the malady. The sexual type is exhibited by women almost exclusively. Few things are more surprising in insanity than the obscenity and filth that are uttered by women, and even by young girls, well bred and carefully brought up, of pure lives, and previously innocent conversation and behaviour. They curse and swear like troopers; they use expressions of obscenity and blasphemy of which a costermonger would be ashamed. Nor is it only in their speech that they display lewdness and indecency. Insane women of this type make shameless overtures to every man to whom they have access. Not the gardener nor the footman; not the waiter in the hotel in which they are taken ill; not the medical man who attends them; not even their own brothers or fathers, are exempt from their libidinous advances. They ogle and leer, they throw themselves into unseemly and indecent attitudes, they expose their breasts and legs, and, when all this is ineffectual, they do not hesitate to ask in plain terms for what they want—to call out of the window to a passer-by to come to bed with them, or even, in plain Saxon, to have intercourse with them. As the melancholic and suicidal varieties of acute insanity are often called acute melancholia, so the sexual type is often called nymphomania; but all are

really varieties of the same malady, in which the one or the other feature, common to all, becomes exaggerated and assumes unusual preponderance.

(*f*) *Stuporose*

This is as nearly a distinct and separate form, as well as variety, of insanity as there is. In pronounced cases it is quite unmistakable, but it is not always pronounced, and an element of stupor may often be distinguished in cases of dementia that would not be called stuporous, and especially in the young, for stupor occurs usually, though not exclusively, in early life. It exhibits the signs of exhaustion of nervous energy, as though the highest regions of the brain had been emptied of motion and had ceased to act; and it is usually preceded by experiences which are calculated to drain these regions of their energy, and especially by a combination of several such drains. If we wished to produce a case of stupor, we should take a young man between the ages of eighteen and twenty-five, subject him to severe and exhausting bodily fatigue, let him at the same time work hard in preparing for an examination, let him work too many hours a day, and have insufficient food, and especially insufficient sleep; and above all, let him masturbate freely, and at the end of a month or two he will become insane, and his insanity will take the form of stupor. If he is so exceptionally strong that these measures fail to break him down, the last effort of resistance can be overcome by subjecting him to some severe shock. Let him be involved in a railway or other accident, or let him even witness one, or let him come suddenly upon a dead body, or see his schoolfellow dragged drowned

out of a river, or let him be assaulted and robbed, or set his house on fire in the night. By such means may stupor be produced even in a strong nature; and a weak nature will not require such an aggregation of causes. Any one of them will suffice sometimes, any two of them or three of them will usually suffice, especially if excessive masturbation be among them, though this last factor is by no means essential to the causation of stupor.

Whatever the causation, the insanity may be stuporose from the outset; but more usually to the exhausting conditions that have been mentioned the further exhaustion of a few days of acute insanity is added, and then the stupor comes on. The characteristic of the stuporose patient is his stillness. He stands with drooping head and hanging arms, with open mouth and staring lack-lustre eyes, with a face void of expression, in an attitude void of vigour, and thus he stands all day. Speak to him, shout at him, fire a pistol behind him, flick your fingers within an inch of his eyes, you evoke no response; he exhibits no reaction. Saliva hangs in long ropes from his open mouth, his face is sweaty and greasy, his pupils large, his tongue flabby, his hands blue, his pulse feeble. Of food placed before him he takes no notice, but if it is put into his mouth he will chew and swallow it. Yet, stupid as he is, and destitute of most ordinary reactions, except in the most extreme cases he does not let his urine dribble, nor does he allow his bowels to act inappropriately. He retains both urine and fæces until he is taken to the closet, and when he is there he passes them. As he passes his days in a state closely allied to profound slumber, so he sleeps well at night.

Such is the appearance and such are the habits of

a well-marked case of stupor. But the condition is not always as well marked as this, and indeed the degrees of stupor are very various. In milder cases the patient moves from place to place of his own accord, though his movements are seldom and sluggish. He may answer when addressed, but the answer is long in coming, is brief, and is uttered in a faint, monotonous voice. He may keep his mouth shut, exhibit palpebral reaction, and even look about him from time to time; in short, he may exhibit a less degree of the same condition; or, in rare cases, the symptoms are not less, but more pronounced. The patient does not stand, does not move under any provocation. He lies like a log; he passes his motions and urine beneath him. He does not even chew his food. His extremities are not only blue, but deathly cold, and the circulation in them is so defective that sometimes sloughs form. His only spontaneous movements are breathing and swallowing.

While spontaneous movement is absent or minimised, the reaction to "passive" or imposed movement presents three well-marked variations. In the first class, every attempt to move the limbs or the body is met with obstinate and intense resistance, which is the same to every variety of movement and in every part of the body. It is as pronounced in the jaw as in the arm or leg; it is as obstinately opposed to flexion as to extension. It is as difficult to make such patients change their attitude from standing to sitting as to make them change from sitting to standing. The same resistance that is opposed to everything else is opposed to the administration of food; and of course this is a serious matter, and influences the prognosis, which is worse than in the other forms.

though not necessarily hopeless. This obstinate resistance to imposed movement, when present in stupor, is always associated with melancholic delusion; it is present in many cases of acute insanity, and then also is usually associated with melancholy.

The second and most frequent variation in the reaction to imposed movement in stupor is the "cataleptic" condition, in which there is no resistance to the imposition of movement, and in which any attitude that we choose to impose upon the patient is retained by him. When the stuporose condition is not very pronounced, the attitude is maintained for but a short time, it may be only a moment or two; but when the stupor is deep, the attitude will be maintained for long. We raise the patient's arm over his head, and there it will remain for several minutes. Dr. Clouston relates a case in which a stuporose patient was got out of bed, the chamber-pot was put into his hands, so that he held it under his penis, and then the attendant went away and forgot him. He remained in this attitude for several hours. In stuporose cases, in which this cataleptic condition exists, the prognosis is usually favourable.

The third variation is that in which there is neither resistance to, nor retention of, an imposed attitude, but a flaccid facility. The limbs can be moved with ease, and fall back after movement into such positions as require the least exertion to maintain. This is the condition to which the term "anergic stupor" has been given by Dr. Hayes Newington.

The mental condition in stupor may be in one of two extreme conditions, or in any intermediate state between them. In simple stupor, of exaggerated degree, consciousness is altogether absent; at least,

we can get no manifestation of consciousness while the state continues, and when it is past, no memory whatever remains of the experiences of the stuporose state. In the minor degrees, consciousness is proportionately diminished. Some sign of consciousness can be elicited, some slight reaction can be obtained; after a question has been many times repeated, some answer will be given; after an order has been many times insisted on, some attempt will be made to carry it out; and when recovery takes place, some glimmer of remembrance will be retained of what occurred during the illness.

The other form of stupor is called melancholia cum stupore, or melancholia attonita, or melancholy stupor, since in it there is always misery, and sometimes the depression is profound. The depression is somewhat different from that of ordinary melancholia, and is more of the nature of panic or horror. The sense of personal unworthiness and incapacity which accompanies dysphoria is, indeed, present, but in addition to this is an overwhelming horror at something that the patient deludedly believes to have occurred, or to be about to occur. Unlike the previous form of stupor, consciousness is not only present, but seems, as it were, to be intensified. The patient is keenly alive to everything that is going on around him, but everything that happens is woven into his dream, and goes to corroborate and intensify it. If he is compelled, for instance, to take food, to dress or to undress, to sit down or to walk, this interference is interpreted by him to be the actual beginning of that terrible torture to which he is to be submitted, and the attendants who so interfere with him are his executioners. Hence his stubborn resistance.

The treatment of stupor may be summed up in two words—feeding and rest. The state is one of exhaustion, and the treatment must be directed to restore the exhausted energy. To this end feeding must be copious. Such patients must have much more than the ordinary full diet which would suffice for a healthy person of the same age, and, in young people at any rate, it should be highly nitrogenised—plenty of eggs and plenty of meat, with a moderate quantity of alcohol. When solid food cannot be administered, of course slops must be given, but essences and extracts are useless. Milk is always valuable, and when food cannot be given in solid form, it should be given, not as liquid, but as thin porridge, that is to say, with plenty of finely divided solids suspended in it. Bread sauce is an excellent food, and may be mixed with pounded meat.

Rest is the complement of feeding. Since energy is exhausted, every demand upon energy must be minimised, and therefore the patient should be kept warm, and usually he should be kept in bed. He must be vigilantly watched to prevent masturbation, which often goes on in a quasi-automatic manner; and sleep, the great restorer of exhausted energy, should be encouraged, and if necessary induced by hypnotics.

The same indications govern our administration of drugs. Cod-liver oil, Easton's syrup, and other preparations of iron, quinine, strychnine, and phosphorus all appear to assist recovery. Baths and friction are useful, but massage is not advisable.

In simple stupor, the prognosis is usually favourable. It occurs commonly in young people, in whom recuperative power is active, digestion good, and sleep easily induced; and, moreover, in this form there is neither

refusal of food nor exhaustion from struggling during its administration. In melancholy stupor the prospect is much less favourable. It may occur at any age; sleep is usually difficult to induce, and the strenuous resistance to feeding and other necessary offices keeps a perpetual drain upon the strength. Hence recovery is in this form less frequent, it is longer delayed, and a much larger proportion of the cases end either in death or in permanent insanity.

In other characters, as well as in those mentioned, melancholic stupor shades off by insensible degrees into other forms of acute insanity, and many cases which would usually be classed as melancholy insanity exhibit the panic and horror that are so prominent in this form of stupor. When, as not seldom happens, the subject of melancholic stupor exhibits sudden outbreaks of impulsive violence, directed either against himself or against others, or similarly impulsive outbreaks of destructiveness, the case approaches in character to ordinary acute insanity; and the affinity of the two forms of insanity is further exhibited in the occasional transition of the one into the other. The stuporose patient loses his apathy, his outbreaks of excitement become more frequent, and he passes, on his way to chronic quiet dementia, through a period of acute maniacal insanity.

Whatever the type of the acute insanity, there are certain features common to them all. All, as we have seen, are potential suicides. In all there is at one time or another refusal of food, alternating, it may be, with wolfish voracity. In all there are sexual proclivities, showing themselves in frequent shameless masturbation, as well as in other ways. In all there is inattention, not only to ordinary tidiness and clean-

liness, but to the calls of nature. They pass their urine and motions under them, either occasionally or habitually, according to the gravity of the case. Their clothes soon become ragged, dirty, stained, and caked with spilt food. In all cases of acute insanity, sleeplessness is a very prominent and very important symptom. It has usually existed for days or weeks before the insanity declares itself, and it is aggravated when this takes place. The length of time for which they will maintain their excessive activity without sleep, or with only an hour or two of sleep per night, is astonishing. They are always constipated, and the tongue is usually foul, and the breath stinking. They have usually lost a great deal of weight before the insanity declares itself. When they are sufficiently rational to give an account of themselves, they are found to be suffering from delusions. In the melancholy type these are the ordinary delusions of melancholia, sometimes combined with delusions of persecutory type. In the excited or maniacal type the delusions are of a very extravagant character. The patient has visited heaven and made the personal acquaintance of the Almighty, or he has attended his own funeral, or he has some other equally extravagant belief. Hallucinations are rarely prominent, and often not present in acute insanity, and when present are usually visual. It is rare for patients with acute insanity to "hear voices," and those who do are usually of the resistive type.

Acute insanity is very variable in course and duration. In a few cases it is very evanescent, and clears up completely and permanently in twenty-four or forty-eight hours; and such cases constitute what has been called mania transitoria. Usually it lasts in full

intensity for from one to four or five weeks, and if the longer term is reached, it then terminates fatally from exhaustion. The earlier improvement begins, the more favourable the chance of recovery; the longer the full intensity of the malady lasts, the graver the prognosis. Four or five weeks of really acute mania will kill the strongest man, and a shorter term, even if not fatal to life, is very apt to leave irreparable damage to the brain and mind. Of the five types described, the resistive is the most unfavourable to life, and the suicidal is the most apt to leave permanent insanity. When recovery takes place, it often takes place suddenly. The patient has a night of long, sound sleep, and wakes up well, or so nearly well that a few days completes the recovery; but this can only happen when the malady has been of sudden onset and short duration. In other cases, improvement is gradual, the excitement subsides, the melancholy clears away, and the patient passes into a state of slight, or it may be of grave, dementia, from which he may gradually emerge, or which may remain permanent for the rest of a long life. In other cases the subsidence of the excitement is simultaneous with fixation and systematisation of the delusions, and the acute insanity merges without break into paranoia. Even when recovery is rapid and appears complete, the patient should not return to the active duties of life for at least a third or half a year, and he will always be liable, on a recurrence of the conditions, to a recurrence of the malady.

The effective treatment of acute insanity may be summed up in two words—food and sleep. In the rare cases in which a patient has been eating and sleeping fairly well up to the time of the outbreak of insanity, the prognosis is extremely unfavourable;

and the more confidently we can attribute the outbreak to deficiency of food and sleep, the more confidently may we expect that the administration of food and the procurement of sleep will be followed by recovery. As the sleeplessness depends very largely upon the inanition, our first care must be to administer abundance of food. The patient must not merely be fed, he must be over-fed. He must have food in super-abundance and excess; he must have twice or three times as much as would suffice for a healthy man of his age and weight. What he needs is not extract of meat and Brand's essence, and Bovril and Valentine's meat juice, and similar concentrates, but bulky, ordinary food—meat and potatoes, bread and butter, rice pudding, and such like viands in great quantity. And here we are met at the outset by two serious difficulties—first, that digestion is very frequently disordered, and, second, that the food is very frequently refused.

The first difficulty we may often disregard. The stomach has perhaps been pampered and humoured for months by discarding first one food and then another that has been thought to disagree with it, and if it is taken firmly in hand and compelled to receive all kinds of bland food, it will do its duty uncomplainingly. A more serious matter is that when food has for months been taken in small quantity only, the stomach has become contracted, and till it has been educated to receive larger quantities, it will resent over-distension by vomiting. In such cases we must be content to feed very frequently, and gradually to increase the amount given at each meal.

The other difficulty is far more serious. Refusal of food, obstinate resistance to the administration of food,

is a common feature of all the types of acute insanity, and unless it is overcome, the patient will certainly die. It must therefore be dealt with promptly and vigorously. The patient must be forcibly fed. There are degrees of persistence of refusal. Some patients will not feed themselves, but if the food is put to the mouth, they will take it with docility, chew and swallow it. Others will take it only if spoon-fed; the rest—and these are the majority—will refuse and resist every attempt to feed them. Various methods of forcible feeding are in use for such cases, but I have no hesitation in condemning all but one. The nasal tube, a small tube of soft rubber introduced into the nostril, has been used very largely, but it is so easy for a suicidal patient, or even a greatly demented patient, to inhale the food thus administered; and so many cases of gangrene of the lung have followed the use of the method; that it ought to be abandoned, and the œsophageal tube used in every case.

Of course, in this case, solid food cannot be given in solid form; but the same food can be given if it is first pounded up in a mortar and made into a thin pulp with milk, and then there is the advantage that the appetite and palate need not be consulted, and food, stimulants, and drugs can be administered together. If a really copious and excessive amount of food is introduced, the difficulty about sleep is already half overcome; but there are few cases, though there are a few, in which food alone is sufficient to procure sleep. In most cases hypnotic drugs have to be employed. Our choice of these has greatly extended of late years. There was a time when opium was the only soporific; then chloral and bromide of potassium were added; now all these are abandoned in the

treatment of acute insanity, and newly discovered drugs are found to be more efficacious and attended by fewer disadvantages.

The question often arises, what is to be done upon the instant to control a patient who has suddenly become acutely insane in his own house, or in an hotel, or elsewhere; who is tearing up his clothes and smashing the furniture, who has worn out his friends and the ex-policeman who has been called in to help in controlling him? In this state of things we have in hyoscin an agent of the utmost value. It is made up for hypodermic use in minute tabloids, and one of these can be dissolved in a cup of tea or a glass of wine, or, if needs must, it can be given hypodermically, and its action is very speedy and very effectual. The usual doses—$\frac{1}{200}$ and $\frac{1}{100}$ of a grain—are of no use in acute insanity, and at least $\frac{1}{50}$ should be given under the skin, or $\frac{1}{30}$ by the mouth. I give $\frac{1}{100}$ hypodermically, and have never seen any ill-effects from its use. Ill-effects, and fatal effects, used sometimes to attend its use when the drug was first introduced, but no case has been reported of late years, and I cannot help thinking that when it has been fatal, either the drug was impure, or it was insufficiently mixed, and larger doses were given than were intended. At any rate, if there is any risk attached to its use now, it is a risk that ought to be run, for the danger of the drug is in any case not so great as the danger of allowing the patient to die of exhaustion; and therefore it should be given. In this way a breathing-time may be obtained, during which the friends are freed from the absorbing task of immediate attendance on the patient, and are at liberty to take the necessary steps to have him removed to an institution. For this course is essential

in every case of acute insanity, except, perhaps, when the patient's friends are very wealthy, and can arrange for at least three attendants and a medical man to reside in the house with him, and even then the conditions for his control and recovery are not so favourable as they would be in any well-conducted institution. It is scarcely justifiable to keep up a full administration of hypnotics merely for the purpose of facilitating the control of a patient, and unless this is done, there will be times when two, and even three, attendants will be insufficient to control an acute maniac. He should be in a place where practically unlimited help can be brought to bear to get him undressed, or dressed, or fed, as the case may be. There is nothing so likely to produce bodily injuries as insufficiency of help in these operations.

There is a practical measure of great value, which is much insisted upon by Dr. Savage in the management of acute insanity so long as the patient is kept at home, and this is to remove the patient at once to the ground floor, bag and baggage, bed and bedding. Then if he jumps out of the window he can do himself but little harm.

Useful as hyoscin is as a calmative and controller of excitement upon emergency, it is not a drug to be used as an hypnotic, nor is it suitable for prolonged administration, for tolerance is soon established, and the dose, to be effectual, has to be increased. When we desire an hypnotic effect, the most efficient drug for ordinary use in acute insanity is sulphonal, a drug that has the great advantage that it not only induces sleep at night, but has a calmative influence upon the patient for the following day. Its disadvantages are various. In the first place, its action is delayed, and it varies much in

the period after administration at which its effects begin to be felt. Sometimes it will act in an hour, sometimes not for two, three, six, or as much as twelve hours. It is therefore manifestly inappropriate when we desire an immediate effect. Trional, upon the other hand, is a drug whose action is far more speedy, almost as effectual, and much less lasting. It has none of the delayed calmative effect that is so characteristic of, and important in, sulphonal. The best effect of both drugs is obtained by a combination of the two. A combination of about ½ trional with ⅔ sulphonal is most valuable. The trional puts the patient to sleep, and the sulphonal keeps him asleep—ten grains of one to fifteen grains of the other, or better, fifteen grains of the one to twenty-five of the other. If this is given the first night, a less dose will suffice for the second, a still smaller for the third, and on the fourth night the patient will usually sleep without drugs. The same hypnotic should not be given for long together. They are much more effectual when changes are rung upon them. In the melancholic form of acute insanity, and when there is cardiac weakness, paraldehyde is a very valuable hypnotic.

Mention has already been made of the disorder of digestion that is so frequent in acute insanity. In any case in which it is ascertainably present, it must be treated. There are cases in which the contents of the stomach undergo putrefactive or fermentative changes which render them unspeakably foul and offensive, and when this is the case, or whenever the breath is very foul, or especially when foul gases are expressed from the œsophageal tube when the end reaches the stomach, benefit will be derived from washing out the stomach at regular intervals.

In all cases of acute insanity, certainly in all which are severe or prolonged, institution treatment is essential. In many cases it is far better for the patient to have the comparative freedom of a padded room than to be perpetually checked and interfered with by attendants.

The first favourable symptoms are the establishment of natural sleep, the voluntary taking of food, subsidence of excitement, and commencing appreciation by the patient of his circumstances. If all these are concurrent with a gain of weight, and occur within the first fortnight, there is reasonable hope of complete recovery. But if sleep is established, food taken, and weight gained, while still the mind does not improve, the prognosis, while improved as to life, is very gloomy as to recovery of reason; and if improvement is delayed beyond the first fortnight, every day's delay is of consequence.

CHRONIC INSANITY

By chronic insanity is meant here insanity that is either not of recent origin or that, if of recent origin, is not intense. It is, of course, true that chronic means in the literal sense of long duration, but in the first place there is no one word which connotes the alternative of long duration or lack of intensity, and in the second, the term chronic insanity has never been appropriated to any particular class, and in bringing it for the first time into use I imagine I am at liberty to give it any signification I please. I therefore consider that the definition I have given is quite justifiable.

Thus defined, chronic insanity may be divided into two important classes or sub-types, and a rabble of

others which need not be considered here. The two sub-types that stand out with clear characterisation are fixed delusion and dementia. The sub-type fixed delusion happens to coincide with the kind of insanity similarly entitled, and is more conveniently described among the kinds, where it will be found. The other clear sub-type, dementia, is also well characterised, and as it does not coincide with any kind, but like the type acute insanity is witnessed in several kinds of insanity, it falls to be described here.

DEMENTIA

Dementia is that type of chronic insanity in which there is no such outstanding predominant feature as fixed delusion or a cyclical course, but the insanity is a general degradation affecting in various degree, and to various depths in the different cases, all the faculties of mind. Although it is a general defect, it is not necessarily a simple defect. It is complicated in most cases with over-action on the lower levels that the defect has not yet reached, as has been explained in the description of anoia. Anoia is a form of insanity, that is to say, a group of symptoms made up of disorder of conduct and mind, that may be present in any kind of insanity—in any of the different diseases of which insanity consists—and that is in fact present in some degree in every such disease. Dementia is that particular kind or disease of insanity in which the symptoms are those of anoia only, and in which no single accompaniment of anoia—no delusion, no excess of feeling, no excitement in conduct, —is so predominant as to obscure the anoia, which now stands out as the predominant symptom.

But though anoia, or simple deficiency of conduct and

mind, is the predominant symptom, it is not necessarily the only symptom. In many cases there are from time to time outbreaks of excitement, in some there may be from time to time fleeting delusions, in others there is continuous excess of some low grade of conduct, as has been described in treating of anoia; but in all the predominant feature is the anoia—the defect of mind and conduct.

As has already been stated, the Scotch school of alienists look upon dementia as an irrecoverable disease, and would deny the name to any case of insanity, however characteristic the symptoms of anoia, if the patient were to recover. I cannot agree that the way in which a disease terminates forms a satisfactory basis for classifying it. Even the school of Kraepelin, though it constitutes the disease of dementia præcox mainly on the basis of the irrecoverability, or as they call it the incurability, of the disease, yet admit that some cases do recover. The admission knocks the bottom out of their classification and leaves them in chaos, but this does not trouble the minds of those who think they have got hold of something new, and have all the enjoyment of playing with a new toy.

The indisputable fact is that though in a great many cases anoia may be the expression of actual structural deterioration of the brain, and in these cases the dementia is irrecoverable, yet in some cases there is little or no structural damage of the brain, and a minority of the cases, a lamentably small minority, do recover. We do not yet know whether the structural deterioration which is found after death in cases in which dementia has been of long standing is the cause or structural basis of the dementia, or whether it is not atrophy resulting from long disuse. However this may

be, a certain number of cases of dementia recover, and in these cases the symptoms of the disease, while it lasted, are indistinguishable from those of other cases that go on for many years and never recover. I do not think that the different termination of a disease in recovery or death constitutes a sufficient basis for regarding the cases that recover as suffering from one kind of disease and those that do not recover as suffering from another. The difference is not made a basis for classification in any other disease, and there seems no good reason for making it a basis of classification in insanity.

Dementia is a sub-type of disease that is presented by several kinds of insanity. We see it in youth, in middle age, and in old age, and at each time of life it has peculiarities that are fairly distinctive; and when the dementia constitutes the whole of the correlated disorders from which the patient suffers, it is properly considered a disease, and reappears under that title among the kinds of insanity hereafter considered. But there are cases, advanced general paralysis for instance, in which the dementia constitutes not the whole, but a part only of the correlated disorders from which the patient suffers, and in such cases the dementia is not the whole disease. The disease is general paralysis, of which one symptom or group of symptoms is insanity of chronic type, the sub-type being dementia.

CHAPTER VII

KINDS OF INSANITY

THE mode that was adopted in the last chapter of classifying the disease insanity, the classification into acute insanity and chronic insanity, is, as far as it goes, a useful classification; but it does not go far, and it is not the only mode of classification. As has already been pointed out, it is a mistake to suppose that there is but one ideally perfect mode of classifying anything, and that all other modes are wrong. Things can be classified in as many ways as they have different qualities to serve as a means of classification, and in fact must or ought to be classified in different ways for different purposes. There may be a best way of classifying for each purpose, but there will be at least as many ways of classifying as there are purposes to be served by the classification. For clinical purposes the classification of insanity into acute and chronic is a very useful and suitable and valid classification, but for the purpose of organising our knowledge it is unsuitable because it results in classes one of which is a heterogeneous mixture of dissimilar cases. For this purpose we must seek another basis of classification. In most books on insanity it will be found rather dogmatically stated that the only true and satisfactory classification of insanity

must be that which has a pathological basis, in other words that in which the *fundamentum divisionis* is the kind of structural change in the brain that underlies the symptoms of insanity and enters into the constitution of the disease of insanity. I cannot find any rational foundation for this doctrine. Even in bodily diseases it is not true that the classification is always founded on the structural change that underlies the symptoms. Many diseases are classified by the agent that produces them. Such are syphilis, tuberculosis, hydatids, and many others. And it is demonstrable that all insanity cannot be classified by the structural change in the brain, because in some cases of insanity there is no such change, as is shown by complete recovery. We may therefore put aside the ideal of a pathological classification as both unnecessary and impracticable; but it does not follow that there is no practicable classification, and some classification is, as we have found, necessary. I do not say that the classification I am about to propose is the only practicable classification. What I have already said shows that it is not; but it is at any rate a valid classification, made in accordance with the accepted canons of classification, and therefore free from cross-classification, which is more than can be said of any of its predecessors.

Taking the principle of Evolution as the first *fundamentum* we get the two main classes already indicated according as evolution is imperfect and has been arrested at an incomplete stage, or according as evolution has been complete and has subsequently been reversed. Thus the primary division is into—

I. Insanity of undevelopment or Involute Insanity.

II. Insanity of dissolution or Dissolute Insanity.

Insanity of undevelopment, in its various degrees of idiocy, imbecility, and feeble-mindedness, is rationally divisible into three kinds according to the reason of the undevelopment. This may be due to:

A. Defect of the developmental impetus communicated by the sperm cell to the germ cell at conception, so that the process of development comes to a premature end from mere lack of vigour.

B. Defect of some chemical product of metabolism, the presence of which is necessary to normal development. Undevelopment due to this cause may be recognised by the presence of many co-ordinated or correlated defects, forming a recognisable group that occurs again and again in different cases. In one case, that of cretinism, the defective chemical has been identified, and is known to be the secretion of the thyroid gland. In other cases, e.g. microcephaly and mongolian idiocy, the defective chemical has not yet been identified, but the presence of a number of correlated defects compels us to conclusively presume that the undevelopment is due to such a deficiency, either absolute or relative.

C. In a third class of cases arrest of development is due to the action upon the brain of some extraneous agent, which may be either of two main kinds:

1. Mechanical violence applied to the head, either in the natural passage of a large head through a narrow passage at birth, or by instrumental delivery, or by a fall or a blow in infancy.

2. The action of a microbe, or of the toxin produced by a microbe, which may be that of syphilis, measles, scarlet fever, small-pox, etc., and may act directly upon the brain, or indirectly through inflammation of the meninges.

DISSOLUTE INSANITY

In every case of insanity we postulate disorder of the brain, and this disorder of brain, taken together with the disorders of conduct, mind, and metabolism that depend on it, constitute the disease of insanity in those cases in which insanity exists alone—in which it includes the whole of the correlated disorders from which the patient suffers. But in many cases the insanity, thus understood, does not include the whole of the correlated disorders from which the patient suffers. In many cases the disorder of brain is itself but a part of a more widespread disorder, affecting also other organs, or the whole of the body, and due, it may be, to disorder of some other organ, such as the thyroid, or to the invasion of a microbe, as in the delirium of specific fever, or to some generally distributed poison, such as that of gout. In these cases, the form of insanity—the disorder of mind and conduct—is a symptom, directly of brain disorder, and indirectly, through the brain disorder, of the disorder of the thyroid, or of the specific fever, or of gout. We must therefore recognise that the disease insanity—the threefold disorder of conduct, mind, and brain—may be an independent disease or a symptomatic disease, according as it does or does not include all the correlated disorders from which the patient suffers; and the first division that we make of the insanity of dissolution is into symptomatic insanity and idiopathic insanity.

In symptomatic insanity, the prominence and importance of the insanity varies much in different cases. When delirium occurs in specific fevers, the bodily symptoms usually preponderate. They precede the delirium by days or weeks, and persist after the delirium

subsides; and throughout the delirium the bodily symptoms take rank of it in importance and prominence. The delirium is but an incident in the course of the disease. The same thing may occur when insanity occurs as a symptom of gout. But sometimes the insanity is for the time being more prominent than the bodily disease, and the bodily disease may even be overlooked. The same may be the case in myxœdema and in other diseases. Sometimes the insanity is the more prominent, and the bodily disease may escape notice unless the observer is on the alert to look out for it: in other cases the bodily disease preponderates, and the insanity may be but a transient and unimportant interlude.

SYMPTOMATIC INSANITY may be logically divided according to the kind of disease of which it is a symptom, and thus falls naturally into the following classes:

A. Insanity symptomatic of what may be termed intrinsic diseases, by which I mean diseases due to errors of metabolism and the faulty action of glandular bodies. Under this head fall the insanity of gout, of myxœdema, of Graves' disease, of uræmia, and so forth.

B. Insanity symptomatic of what may be termed extrinsic diseases, by which I mean diseases due to poisons invading the body from without. These are subdivisible according as the poison is a toxin, produced by a living microbe within the body, or a chemical poison ingested as such.

1. To the first sub-class belongs the insanity or delirium of acute specific fevers, of tuberculosis, probably of pellagra, and so forth.

2. To the second sub-class belongs the insanity produced by alcohol, by opium, by cocaine, and by other drugs.

C. Insanity symptomatic of gross brain disease, by which I mean structural disease that is manifest to the naked eye. This class includes general paralysis, post-hemiplegic insanity, insanity symptomatic of tumour of whatever character in the brain, and insanity due to mechanical injury to the brain from violence.

D. Insanity symptomatic of epilepsy, or rather of the disorder of brain of which epilepsy is a co-ordinate symptom. What this disorder is we do not know. It may perhaps in some cases be an intrinsic poison; it is in some cases mechanical injury, or the result of mechanical injury; but whatever its nature may ultimately be discovered to be, in the present state of our knowledge it must be placed in a separate class.

IDIOPATHIC INSANITY is that which is not at present known to be symptomatic of any bodily disease. It is quite probable that some of the cases, and even some of the classes, that we must now consider idiopathic, may by the progress of our knowledge be ultimately discovered to be symptomatic of the invasion of some toxin. If and when this happens these cases or these classes will be removed from the class of idiopathic insanity to the class of symptomatic insanity; but the fact that they were wrongly classed will not invalidate the scheme of classification, any more than the discovery, that certain organisms at one time believed to be animals are really plants, invalidates the division of organisms into plants and animals. The scheme of classification will still hold good, even though some of its contents may be shifted from one place to another.

Idiopathic insanity is primarily divided into cyclical insanity and non-cyclical insanity. By cyclical insanity is meant insanity that runs a cyclical course, such that the form that it once displays is departed from, and replaced by some other form, or perhaps by an interval of sanity, but at length the original form reappears, to be followed by the same phases in the same order as they followed its first appearance, and the cycle may be repeated again and again. Non-cyclical insanity is, of course, that in which no such cyclical course can be detected.

Cyclical insanity may be divided into several kinds, according to the phases that occur, and to the order in which they occur. When the several phases or forms of insanity are separated by intervals of sanity, the disease is called recurrent insanity, but there are other cases of cyclical insanity in which there are no such interruptions. These are clearly allied very closely to recurrent insanity, but to call them recurrent insanity would be a misnomer: they may appropriately be called circular insanity, but this name is often given to recurrent insanity. All these allied varieties may properly be included under cyclical insanity.

Non-cyclical insanity is primarily divided according as we are or are not able to correlate it with a causal stress, to which it is in part attributed. Some cases of non-cyclical insanity arise apparently spontaneously, independently of any assignable causal stress. The term stress was imported by me about five-and-twenty years ago from the science of engineering into the science of alienism, and was used by me in a certain restricted meaning which is explained in the chapter on causation *supra*. The term has since been used by others in different senses, but is here used in the same sense as

that which I originally gave to it. Other cases of non-cyclical insanity arise in circumstances that we may regard as productive of stress; and these cases we may separate from the others and put in a distinct class.

A. Of the cases of non-cyclical insanity to which we can assign no stress as a contributing cause, there are two main classes, viz. those that exhibit in some fixed and enduring delusion or delusions a predominant feature, and those that exhibit no such predominant feature, but consist in a general degradation of conduct and of mind.

1. The first kind of non-cyclical insanity in which there is no assignable causal stress is distinguished by the predominance of enduring delusion or delusions, which is compatible with a high general level of intelligence. It is divisible, according to the character of the predominating delusion, into three sub-classes.

(*a*) The predominating delusion is of a persecutory plot against the deluded person. This is the characteristic feature of paranoia.

(*b*) The predominating delusion is of the exalted rank or position of the patient. These cases have no name, but are called cases of fixed exalted delusion. The term megalomania might with advantage be restricted to them.

(*c*) The predominating delusion is of some bodily change or infestation, of which examples have been given on a previous page (p. 153). They may be appropriately called cases of somatic delusion.

2. The second kind of non-cyclical insanity in which there is no assignable causal stress exhibits no delusion as a predominant feature, though delusions of some

kind or other may be entertained. The insanity consists in a general degradation, though not necessarily a uniform degradation, of all the faculties of mind and all departments of conduct, and the general and appropriate name is Dementia, of which there are the following sub-classes.

(*a*) The disease begins in an attack of acute insanity, which may be of any type, and may or may not have belonged to the second great class of idiopathic insanity, that, namely, to which a causal stress can be assigned. This is the kind of insanity known as terminal dementia.

(*b*) The second kind of dementia is that which does not follow an attack of acute insanity, but begins slowly, it may be very insidiously, and gradually progresses. Many years ago the appropriate name of Primary Dementia was given to these cases. They would now all be called Dementia Præcox, and would be included with an omnium-gatherum of other cases under this title.

This sub-class is again divisible into two distinct varieties according as it begins in early life or middle life. The latter variety has peculiarities which mark it off from the former.

B. The second main class of non-cyclical idiopathic insanity consists of those cases which occur at a time of stress, and in which the stress may reasonably be assigned as a causal factor. Stresses are of three kinds; the first is a direct stress, the second we may call physiological, since it is an incident in the progress of the life of everyone, and the other we may call reproductive, since it arises out of the function of reproduction.

1. The direct stresses that may be assigned as causes of idiopathic insanity exclude, of course, those which

co-exist with the insanity. In such cases the insanity is symptomatic, and we are here concerned with idiopathic insanity. In idiopathic insanity the stress must have ceased to act, and in this sub-class is the insanity that is left behind by previous stresses that are now absent, such as the insanity that follows acute specific fevers, and that which is left by long continued alcoholic excess.

2. The second sub-class of the second kind of non-cyclical insanity consists of those cases which occur at the time of some physiological stress, and to which we can reasonably assign this stress as a causal agent, seeing that case after case of the same kind occurs in the same connection. Physiological stresses are three.

(*a*) A certain number of cases of insanity or of "nervous breakdown" of the nature of insanity, though less in degree, occur in connection with unduly rapid growth in children, usually about the age of fifteen.

(*b*) The period of adolescence, that is to say, from seventeen to four or five-and-twenty, is a period of stress, and a time of life at which many cases of insanity occur.

(*c*) The third period of physiological stress is the climacteric, the period of involution of the sexual function in women, and occurs between the ages of forty-five and fifty-five.

3. The third sub-class of the second kind of non-cyclical insanity consists of the cases that occur in connection with the stress of reproduction. They also may be divided into three.

(*a*) Insanity during, and presumably due to, pregnancy.

(*b*) Insanity at or soon after childbirth.

(*c*) Insanity during lactation.

Set out as a complete scheme, the classification of insanity the disease, as distinguished from insanity the symptom, and from the type (acute or chronic) that the insanity may assume, is as follows :—

KINDS OF INSANITY

(INSANITY THE DISEASE)

I. Insanity of undevelopment, or Involute Insanity—

- A. Developmental :
  - General.
  - Moral only.
- B. Metabolic :
  - Cretinism.
  - Microcephaly.
  - Mongolism.
- C. Accidental :
  - Toxic.
  - Traumatic.

II. Insanity of Dissolution—

- A. Symptomatic :
  1. Of intrinsic disease.
  2. Of extrinsic disease.
     - (*a*) Toxic.
     - (*b*) Poisonous.
  3. Of gross brain disease.
  4. Of mechanical injury.
  5. Of epilepsy.

B. Idiopathic :
1. Cyclical.
2. Non-cyclical.

A. Without assignable causal stress.

(*a*) With predominating delusion.
α. Of persecution.
β. Of exaltation.
γ. Of bodily change.

(*b*) With no predominating delusion.
α. Beginning in acute insanity
β. Beginning gradually.
(*a*) In early life.
(*b*) In middle life.

B. With assignable causal stress, which is :

(*a*) Pathological.
α. Alcohol.
β. Specific toxin.

(*b*) Physiological.
α. In childhood.
β. In adolescence.
γ. At the climacteric.
δ. In old age.

(*c*) Reproductive.
α. Pregnancy.
β. Childbirth.
γ. Lactation.

This is the classification of the disease of insanity ; but it is to be remembered that this table is to be read and used in connection with the forms of insanity

already described in a previous chapter, and with the type of the insanity as acute or chronic. It is the endeavour to combine the form, the type and the kind, variety, or disease of insanity in a single scheme, and to divide insanity simultaneously on all three principles, that has vitiated and rendered invalid every previous scheme of classification ; but though the three principles cannot be used simultaneously for the purpose of classifying insanity, this is no reason why each disease or variety should not have its own form or forms, and should not be of one or other type. Some varieties, such as paranoia, are of the same form and the same type throughout, and never vary in these respects. General paralysis, on the other hand, may begin as an acute insanity, or may begin gradually and insidiously. Its form may be at first euphoric and exalted, or dysphoric and abased, or merely confused and amnemonic ; and subsequently its type becomes chronic and its form anoiac. In every case the form is easy to observe, the type may be readily ascertained, but the variety may be long in doubt ; the reason being that the form and type are chiefly to be ascertained by observation, while the variety rests upon induction, the data for which are not always to be had. There are varieties of insanity that have but one form : such are paranoia and acute delirium ; and there are forms that are never seen but in one variety : such are stubbornness and somatic delusion, or even in only one sub-variety, such as the delirium of belladonna poisoning ; and, on the other hand, there are forms, such as the combination of dysphoria and abasement, that appear in many varieties, and are not characteristic of any. This combination is one of the many insanities that go by the name of melancholia, and we may see from its distribution over

many varieties how much confusion the name melancholia is responsible for. Mania also is not an inaccurate term as applied to a form or symptom of insanity, and as a symptom may appear as a phase of many varieties, but to regard it as itself a variety is to court confusion. It is repeating the error of the old physicians who regarded cough and dropsy as diseases.

INSANITY OF INVOLUTION

By this is meant those varieties of insanity that result from imperfection in the process of evolution or development. The process of development, instead of going on to produce a brain of full adult development in a body of adult stature, for some reason ceases prematurely, and produces only an infantile or childish brain in a body of normal stature, or it may be that the bulk of body also is deficient, and the result is a childish or infantile brain in the body of a dwarf. It is known, and a good many examples are on record of the reverse mal-development, in which the brain reaches adult development while the body remains childish. Infantilism, as it is called, is manifestly the reverse of imbecility, and as infantilism is believed to be due to defect of that potent and mysterious agency, the secretion of some ductless gland, it might be supposed that imbecility, and its extreme degree idiocy, is due to the excess of the same. There is no evidence that it is not, but it is safer to assume, for it accords better on the whole with the facts, that it is due to mere premature extinction of the process of development.

The zygote is the product of the fusion of a sperm cell with a germ cell. To this compound the germ cell contributes the matter or substance, the sperm cell

contributes the energy that animates the matter. The one is the mass of coals in the grate, the other is the match that sets them alight; or rather, the one is the dough in the kneading trough, the other is the yeast that, minute in quantity as it is in comparison, yet permeates the dough throughout and sets it all fermenting. Once started by the impetus given by the sperm at conception, the zygote continues on its predetermined course of development until adulthood is reached, and even then, the brain continues to develop until late in life. If the dough is insufficiently kneaded, there will be parts of it to which the yeast does not penetrate, and when the bread is baked, these will be recognisable as lumps of "sad" bread embedded in the loaf. It seems as if in some cases parts of the germ similarly escape the energising process set going by the sperm cell, and in these parts development ceases before it is complete. Thus we account for spina bifida, for hare lip, cleft palate, and some other local failures of development. But when the total impetus given by the sperm is lacking in vigour, there will be a general failure of development, and this may show itself in imperfect development of either of the two main branches of development, or in both. Of course, in either case it will be the last part of development that will fail. When a ball is hit with the bat, the distance that it goes will depend on the strength of the impetus it receives from the bat. A powerful impetus will drive it far, a feeble impetus will drive it less far. So with the impetus the germ receives from the sperm. A powerful impetus will drive it to the boundary of the normal; a more powerful impetus will drive it beyond the normal to giantism on the one hand, or genius on the other, according as the body at large or the brain alone receives the chief share of driving

power. In exceptional cases, genius and giantism may go together, as in Charlemagne, who was seven feet high. More often the brain develops at the expense, to some extent, of bulk; and most men of high intelligence have been men of small stature. But when the impetus is deficient, it is the brain that will fail to reach full development, and it may cease to develop after infancy, when the result will be idiocy; or after early childhood, when the result will be imbecility; or after late childhood or adolescence, when the result will be feeble-mindedness in its various degrees. Such cases form the class of genetous idiots and imbeciles of Bucknill and Tuke.

The developmental impetus which the germ receives at conception does more than merely carry on development to completion of structure. It also gives that constitutional vigour to which no more definite name can be given, which enables the product to withstand fatigue and to preserve all its organs in balance and in vigour. At conception the clock of life is wound, and the number of years it shall run is determined by the amount of the winding. Some are so wound that the clock runs down before birth, or shortly after, and the fœtus perishes *in utero* or the child soon after birth, from no definite malady, but from mere insufficiency of "vital power." It is "not viable." In others the clock is wound to go for a hundred years or more, but sooner or later the developmental impetus is exhausted, and then the organism dies, of old age, as we say. I think there is good evidence to show that the developmental impetus, if by this we mean the energy that suffuses the organs of the body and enables them to perform their functions and to preserve the integrity of their structure, never fails quite equally, so that all the organs and tissues grow old together and simul-

taneously fail in the performance of their functions. In one the arteries go first; in another the heart is the first to fail under the stress of life; and in a third the brain fails in its functions while the rest of the body is still vigorous; but this thesis will be more appropriately resumed in a later chapter.

This is the appropriate place to explain the difference between idiocy and imbecility, by a distinction that I first put forward five-and-twenty years ago, but that is only now become accepted in consequence of its embodiment in the Mental Deficiency Act. It had long been agreed that imbecility and idiocy are two degrees, less and greater, of the same defect, but no definite line was drawn between them. The line of division that I proposed was this: that imbeciles are capable of acquiring, and do acquire, those modes of conduct that I have described in the first chapter under the heading of directly self-conservative activities, but are incapable of acquiring those indirectly self-preservative activities by which the livelihood is gained and the means are administered. Idiots are incapable of acquiring even the first and simplest and most elementary modes of conduct. Supposing that there is enough of inherent energy to keep the machine going for a few years, there may yet not be enough to carry on the process of development to its normal conclusion. The whole of what energy there is is exhausted in the effort to keep life going, and none is left available for the increase of life. Idiots of this origin—"developmental idiots" or "genetous idiots," as they are called—give evidence of their defect in other ways. They are always short-lived. For the contest between integration and disintegration, of which every life consists—a contest in which integration at first predominates, at first with increasing and

then with slackening vigour, then for a long while maintains an equal footing, and at length yields with ever diminishing vigour to disintegration—the idiot is so inadequately equipped that the turning point occurs long before his full equipment is attained. The taper of his life burns so feebly that it is only by sedulous care that it can be maintained even for a few years; and before he reaches his teens some of the many maladies, which healthy children live through without difficulty and without detriment, extinguish his little flame. The idiot never develops more intelligence than is possessed by the normal infant. Even at ten or twelve years, if he live so long, he may not be left alone without immediate danger to his life. Even physically, it is long before he emerges from babyhood. He lies helpless in his cradle for years after other children of his age are running about and at boisterous play. In many cases he never attains, in no case does he attain until several years old, the command over his sphincters and the intelligence to pass his excrements appropriately; and the ability to prehend his food and carry it to his mouth is similarly delayed, or similarly unattained.

Idiots are always short-lived, though they not infrequently reach adult age. They are always lacking in general and sustained vigour of movement, and as the simplicity and want of development of their conduct expresses the simplicity of structure and want of development of their brains, so, we may well suppose, does the feebleness of their conduct and movement generally indicate a want of vigour in their cerebral processes. The same want of vigour characterises the action of all their organs and tissues. They are feebly compacted and, as it were, only half finished. All their functions

are debilitated and easily deranged. Consequently they have little power of withstanding the action of adverse agents, and early fall a prey to disease.

In imbeciles the vigour of development is greater, often much greater. Their brains are arrested in development in childhood, but their bodies may be vigorous, and they may live to old age. Imbecile conduct has been described on a previous page (169) and the description need not be repeated here.

Why the union of sperm and germ should result in a zygote lacking in developmental vigour is not easy to determine, and is for the most part matter of speculation, but a few causes may be assigned with some degree of probability.

I have seen a good many cases that have convinced me that children conceived near the limit of the age of reproduction in either parent are apt to be imbecile, if not idiotic. Weismannites will declare that this is *a priori* impossible, but *a priori* impossibilities must go down before clinical experience. There seems some reason to suppose that great intemperance on the part of either parent may be a cause of imbecility in the offspring, but there is no proof of this. On *a priori* grounds it seems likely that the reproductive cells become enfeebled after long and exhausting illness of those who contain them; but facts in support of this view are wanting.

In many cases, probably in most cases, of involute insanity, development does not expire from mere want of impetus, but is cut short prematurely by some interference of a quasi-accidental character.

A. The first of these is deficiency of some glandular secretion, the presence of which in sufficient quantity is necessary to normal development. The peculiarity of

this defect is that its incidence leads to a number of correlated changes in different parts of the body, to a peculiar physiognomy, in which all the cases resemble one another so closely that they might pass for brothers and sisters of each other. There are three such correlative changes, in only one of which, cretinism, has the substance whose deficiency causes the change been identified.

In cretinism the stature is stunted, the features are bloated, the belly large, the limbs thick and clumsy, the skin coarse, thick, and pale, the hair scanty, short, and brittle, and the whole aspect so characteristic that, once seen, it is easily recognised. The condition is due to deficiency of the secretion of the thyroid.

The second kind of correlated change that exhibits idiocy is microcephaly, the most characteristic feature of which is the extreme smallness of the cranium, indicated by the name, a defect which is the more conspicuous since it is not shared by the face, which is of normal size except the forehead. The hair is unusually coarse and thick, the stature diminutive, the nose aquiline, the eyes are rather large, the movements are lively, and usually very mimetic. They imitate the attitudes and gestures of those around them ; and they are subject to outbreaks of rage on slight provocation. The secretion to whose defect these peculiarities are due has not yet been identified—perhaps because it has not been sought for. When it is sought and found, microcephaly will be as amenable to treatment as cretinism now is.

The third of the sets of correlated changes is seen in what the late Dr. Langdon Down termed mongoliar idiocy, minor degrees of which are far from rare. In this form also the stature is low. The *facies* is peculiar, and easily recognised by the small, oblique, widely

separated palpebral openings, the rounded ears, the depressed nose, and the large and fissured tongue. In addition the fingers are stumpy. Like the microcephalics they are imitative, though to a less degree, and for idiots they are unusually teachable. Since the same group of characters is seen again and again in case after case, we are warranted in correlating them, and attributing them to a common cause, which is, it cannot well be doubted, the want, or perhaps the excess, of some chemical product of metabolism.

B. The second cause of premature arrest, as distinguished from premature cessation, of development may be termed accidental, in that it takes its origin outside the body, and is of the nature of an interference from without. The earliest in point of time is an intra-uterine infection, and the classical example is syphilis. It seems probable that small-pox, which is known to occur *in utero*, and perhaps other specific fevers, may have the same effect, but evidence is wanting. That congenital syphilis may cause youthful general paralysis is now a commonplace, and a certain small proportion of idiots and imbeciles present the stigmata of syphilis. In such cases we assume, perhaps on insufficient grounds, that the non-development of the brain is due to the syphilitic poison. Idiocy and imbecility not very infrequently appear to date from an attack of some acute specific fever—measles, scarlatina, whooping cough, or perhaps typhoid—in childhood. Allowance must be made for the difficulty of determining with precision when a gradual process like the development of the brain ceases to progress. When noisy machinery suddenly stops we can time the stoppage to a moment, but a slow, silent, gradual process like cerebral development is less accurately timeable; and we must remember,

too, the insatiable craving of the human mind to find an explanation and a cause for every event. When it is found that a child's mind has ceased to develop, search will naturally be made in its history for anything that can plausibly be considered a cause, and an attack of specific fever will naturally be fixed upon. Innumerable children do suffer from such attacks without any interference with the ultimate development of their brains, and therefore we must be cautious in admitting such illnesses as causes of the insanity of involution; when, however, the fever is attended by meningitis, we need not be sceptical. Meningitis is undoubtedly a sufficient cause of damage to the cerebral convolutions.

Mechanical injury also is certainly an efficient cause, and is the cause in many cases. Prolonged parturition, with the pressure on the yielding bones of the head that it involves, sometimes produces such structural damage to the brain that it never recovers; and instrumental delivery undoubtedly produces local injury in some cases, resulting in non-development of the motor area on one side, and consequent paralysis, with imperfect development of the limbs, upon the opposite side. Cases of congenital hemiplegia, with stunted growth of the affected limbs, paresis, and very often with choreiform movements of the affected side, spreading, it may be, to the rest of the body, are very common, and are always associated with corresponding imperfection in intelligence, amounting to imbecility and sometimes to idiocy. Some of these cases can be assigned with certainty to injury to the head during birth, while in others the non-development of the convolutions seems to be due to arterial obstruction in early life.

The condition just described is frequently associated

with epilepsy, and often epilepsy without such gross structural damage begins in early life, and is then associated with mental defect. It is common to speak of the idiocy or imbecility associated with epilepsy as epileptic, and if all that is meant is a convenient clinical description, the term may be allowed; but if by "epileptic idiocy" be meant idiocy dependent on epilepsy as a cause, the appellation is unwarranted, for we do not know whether the mental defect is due to the epilepsy, or whether, as seems much more likely, both are manifestations of the same organic defect in the brain.

CHAPTER VIII

INSANITY OF DISSOLUTION

SYMPTOMATIC INSANITY

DISSOLUTE insanity, or insanity the result of dissolution of a completely evolved nervous system, we have found to be of two main orders—Symptomatic insanity, or that in which the disease from which the patient suffers is not solely disorder of conduct, mind, and brain, but is a wider disorder, of which these three disorders may be regarded as symptoms; and Idiopathic insanity, in which the disorder is, as far as we know, limited to disorder of conduct, mind, and brain, and to such other disorder, as of metabolism, as is consequential to the disorder of brain that produces the insanity. It is the diseases of the first order, that of Symptomatic insanity, that are now to be described.

Symptomatic insanity we have found to be of four main kinds, according as the disease of which the insanity is a symptom is what I have called an intrinsic disease, an extrinsic disease, gross brain disease, or epilepsy.

INSANITY SYMPTOMATIC OF INTRINSIC DISEASES

By intrinsic diseases I mean diseases of faulty metabolism, either general, as in gout, or local, as in failure of the thyroid.

Insanity of gout.—Gout is common: insanity of

gout is rare. Still rarer is it for insanity to accompany an acute attack of podagra. On the contrary, it sometimes happens that an attack of insanity suddenly disappears at the very time that gout appears in the toe, and this is the foundation of our belief that the insanity was due to the action on the brain of the poison, whatever it is, which we suppose is diverted from the brain to the toe; and thus we account for the simultaneous disappearance of the insanity and appearance of the podagra. The reverse change, subsidence of the podagra and simultaneous occurrence of insanity, has not, as far as I know, been observed. Without being insane, gouty people are said to be unusually irritable and irascible when an attack of gout is impending, and to resume their normal equanimity when the poison becomes localised in the toe or elsewhere, and produces its characteristic inflammation. As a sufferer from gout myself, I am able to say that this prodromal change of temper is not universal, but the belief in it could scarcely have become such a commonplace as it is if there were not good ground for it. We should naturally expect from this notorious sequence that gouty insanity which is relieved by an attack of gout would be of the same character, but exaggerated; but experience does not bear out this anticipation. In the few cases that have been observed, the insanity was of the form of great depression.

Disease of the thyroid body produces two different diseases, myxœdema and Graves' disease, both of which may have insanity as a symptom.

The insanity of myxœdema is anoia. The patient subsides into great sluggishness of mind and conduct. Thought is slow and simple, memory is impaired, speech and all movements are very deliberate. This

placid sluggish condition is sometimes varied by fretfulness and irritability, going on sometimes to actual mania, with delusions, usually of suspicion, and hallucinations. Myxœdema is greatly improved by thyroid feeding, and the insanity improves along with the bodily symptoms; but both usually relapse if the thyroid feeding is discontinued.

Graves' disease is common enough, but it rarely presents insanity as a symptom, and as insanity is no protection against Graves' disease, nor Graves' disease against insanity, it is certain that in the long run the two will be found associated in the same case. They may then be of independent origin, and if so it would of course be erroneous to speak of the insanity as symptomatic of the Graves' disease. We should not be justified in regarding the insanity concomitant with Graves' disease as symptomatic of this disease unless either the two undergo concomitant occurrence, recovery or fluctuations, or unless the same form of insanity is found in a considerable number of cases associated with Graves' disease. It can scarcely be said that up to the present either of these conditions has been satisfied.

INSANITY SYMPTOMATIC OF EXTRINSIC DISEASES

By an extrinsic disease I mean, as already explained, a disease that is not a gross disease and that is due to the invasion or ingestion of a toxic agent from without the body. Of such agents there are two kinds: living microbes and chemical poisons.

INSANITY SYMPTOMATIC OF SPECIFIC MICROBIC DISEASES

Of these there are two main classes, the acute specific fevers and the chronic specific diseases. Any of these

may, it seems, present insanity as a symptom in some part or other of their course.

The list of acute specific fevers is a long one, including, besides those indigenous to this and other European countries, a considerable number of others that are peculiar to the tropical climate. Dealing here with those only with which English experience makes us familiar, we may take them together, since their features are for the most part common.

Insanity may appear as a symptom of specific fever at three periods in the course of the fever: at the invasion, at the height, and as a sequel.

That insanity may occur as a symptom of the invasion of a specific fever, such as small-pox or typhoid, does not seem even yet to be generally known, in spite of the number of times that I have called attention to it in the last twenty-five years. At least I find little or no reference to the fact in the most recent text-books of insanity. Yet it is a very important possibility to bear in mind, for if it is not recognised, a patient in the incubation or invasion stage of typhoid fever may be sent to a lunatic asylum, and there not only receive treatment inappropriate to typhoid fever, an event which has actually occurred, but also may be the focus of an epidemic of fever in the asylum. The form of insanity that occurs at the invasion stage of a specific fever is always, I believe, acute excitement on a low level—mania, as this is called. It may be preceded by a few days of malaise, or it may be quite the first symptom that is noticed.

Insanity at the height of the fever, that is to say, when the temperature has been high for some days, and the patient is, as a rule, very exhausted, is called delirium. The mind is much confused; there is what is

sometimes called disorientation, that is to say, the patient does not realise where he is, or recognise familiar persons and things; there are often hallucinations, mostly of vision; and there are agitated movements, which, since the patient is extremely exhausted, are not violent, but are limited to picking at the bed-clothes, and similar small movements. If the patient were physically stronger, no doubt he would gabble and rave; as it is his utterance is reduced by weakness to a mutter, and "muttering delirium" or "busy delirium" are the terms usually applied to his insanity. If he is strong enough he tries to get out of bed, but he is not often strong enough to succeed, and if he does succeed he usually falls and lies on the floor. Cases have been known, however, in which patients in the delirium of fever have gone about the house, and even out of doors, in their night-clothes, and have wandered some distance. When I first pointed out that the delirium of fever is insanity, the assertion met with a good deal of ridicule, but I do not know that anyone disputes it now.

There is one acute specific fever of which the symptomatic insanity is the most conspicuous and most important symptom, and which is therefore not included among specific fevers in any book on that subject, and is included in insanity in every book on this subject. This is the fever known as acute delirium or acute delirious mania, which has been described as a type of insanity. In this case, as in the case of stupor, the type is coincident with the kind.

Post-febrile insanity is not at all rare, especially after influenza, but post-febrile insanity is not symptomatic insanity, for when it appears the fever is over and gone, and the insanity is no more symptomatic of the fever that is past than valvular disease of the heart

is a symptom of the acute rheumatism that has passed away and left the valvular disease behind it. The heart disease is now raised from the status of a symptomatic disease to an independent primary disease, and so is the insanity that is left behind by a fever. Post-febrile insanity will therefore be considered *infra* among idiopathic insanities. It will be noted that this classification corresponds strictly with clinical methods, for we think of pre-febrile insanity and of febrile insanity in connection with the fevers of which they are symptomatic, and treat them accordingly for the fever, in fever hospitals or in their own homes; but in dealing with post-febrile insanity, we take note of the fever as causative, and then dismiss it from our minds, and treat the patient, often in an asylum, on the basis that he suffers from idiopathic insanity.

INSANITY SYMPTOMATIC OF CHRONIC MICROBIC DISEASE

This group includes the insanity symptomatic of syphilis (except general paralysis) and of tuberculosis, which are the chief chronic invasions seen in this country, and in addition of sleeping sickness, of malaria, and as it now appears of pellagra, and doubtless of other chronic infections. General paralysis is excluded from this group and placed in the next because, although it is due to syphilis, the insanity is symptomatic of gross brain disease. For the same reason the insanity that may attend cerebral hydatid is similarly placed. If anyone is aggrieved by this arrangement, it is open to him to shift general paralysis from the position in which I have placed it into this group, and I don't know that any particular harm will be done. For the same reason the insanity, if any, that is symptomatic of tubercula-

tumour of the brain is classed among those due to gross lesions, to which it belongs clinically. It seems to me that there is a clear difference between the insanity symptomatic of the poisoning of the brain by a toxin, and the insanity symptomatic of a gross lesion, even though the toxin and the gross lesion may both be due to the same kind of microbe.

INSANITY SYMPTOMATIC OF TUBERCULOSIS

Not every insanity occurring in persons who are also tubercular is symptomatic of tuberculosis. Phthisis is so frequent among the insane that there is little danger of this fortuitous concomitance being overlooked; but alienists are not always on their guard to distinguish causal correlation from fortuitous concomitance. For instance, every case of insanity that occurs in a woman about the climacteric age is called climacteric insanity, which it may not be, and often is not.

Phthisis is common among the insane, but apart from this there is a variety of insanity often associated with phthisis, and assuming much the same form in the phthisical patients who become insane. The insanity often precedes the physical signs of phthisis, and it is quite possible to predict the onset of phthisis from the form that the insanity assumes, together with the general bodily condition. The form of the insanity is always that of sub-acute insanity with depression, and delusions of suspicion. The common form that the suspicion takes is that of being poisoned. The patient refuses food, and when the case is investigated, it is found that the refusal is based upon suspicion that the food is poisoned. The patient is feeble, languid, idle, and in addition is irritable, morose, and suspicious to an insane degree. All that is done for her (it is, I think,

more frequent in the female) is misinterpreted and attributed to evil motives and machinations. The physical signs of phthisis are often not present in the lungs at first, but there are loss of weight, feeble circulation, coldness of the extremities, chilblains, deficiency of sleep, from the beginning; and when the physical signs do appear, they usually progress rapidly. In many cases, however, the course of the disease is protracted. The prognosis is bad, but patients occasionally recover from the insanity.

INSANITY SYMPTOMATIC OF SYPHILIS

Syphilis and insanity are connected in many ways, which have been enumerated very completely by Sir G. Savage, but here we are concerned with that insanity only which is symptomatic of syphilis, excluding general paralysis and the insanity that results from cerebral gumma, which, as gross diseases of the brain, fall in a subsequent class. It was Sir Jonathan Hutchinson who first pointed out that syphilis is a specific fever, differing from the acute specific fevers only in the prolongation of its stages; and this general similarity may be supplemented by the further similarity that in the eruptive stage of syphilis, as in the eruptive stage of acute specific fevers, the brain may be so poisoned by the toxin produced by the microbe that insanity results. Such insanity differs from the delirium of acute specific fevers in the absence of the great bodily prostration that they produce. In the eruptive stage of syphilis the patient is not necessarily so weak as to be confined to bed, and his insanity, if he is insane, is correspondingly of more vigorous character. Like the delirium of acute specific fever, however, it is an acute insanity of excited form,

and accompanied by hallucination. It may have any of the features and lead to any of the terminations of excited acute insanity.

INSANITY SYMPTOMATIC OF THOSE EXTRINSIC DISEASES THAT ARE DUE TO CHEMICAL POISONS

Insanity symptomatic of alcoholic poisoning.—The chief of these poisons is alcohol, and alcohol produces insanity in several ways and of several kinds, according to the quantity taken, to the length of time over which it has been taken, and to the character of the person by whom it has been taken. When once it is recognised that drunkenness is insanity, a proposition that was received with incredulous amazement when I first made it five-and-twenty years ago, the experimental insanity that is produced by drinking alcohol throws a flood of light upon the incidence of insanity generally. From it we learn, in the first place, how wide are the variations in liability to become insane, or, to put it another way, how various are the degrees of resistance to insanity under the same stress in different persons. Some persons become uproariously drunk after taking two or three ounces of spirit, others never become drunk, however much they may take. There are men, and women too, who drink from a bottle to a bottle and a half, say from thirty to forty-five ounces, of whiskey a day without any immediate effect upon conduct or mind, or with such slight effect as can be recognised only by those who are intimately acquainted with them, and so can recognise small shades of variation. In the second place, we learn how much the form of the insanity depends on the character of the person who becomes insane. The same amount of the same form of alcohol administered to several members of a party will perhaps

make them all drunk, but the insanity of drunkenness will show itself in each one in a form different from that of the others, as set forth on a previous page, on which the various effects of different quantities on the same person are also described. From these different effects of the same quantity of the same agent on different persons we may justifiably infer the material identity of the different forms of acute insanity. Whether this shall exhibit itself as depression (acute melancholia), or excitement (acute mania), or stubbornness (acute melancholia), or stupor, or some other form is a matter of quasi-accident, depending in part on the nature and character of the person who becomes insane, and in part on other conditions of which we are ignorant. Certain it is that the same person may exhibit, in different attacks, or on different occasions, acute insanity of different forms, showing first, how easily one form replaces another; and second, that the character of the person affected is not the only factor in changing the form of the insanity.

Alcohol is responsible for two very different kinds of acute insanity. The first is the insanity of ordinary drunkenness, the second is delirium tremens, which has been shown by Dr. Francis Hare to be due to the sudden withdrawal of the whole or a great part of the customary daily quantum of alcohol of those who are accustomed to take regularly a large quantity. Delirium tremens is a very well characterised form of acute insanity, of short duration and favourable issue, which it is unnecessary to describe here, since a description will be found in the ordinary text-books of general medicine. All that is necessary to add here is that an attack of delirium tremens can be cut short with certainty at an early stage by the administration of the customary dose of

alcohol; and that an attack can infallibly be produced in anyone who has for some time been accustomed to take large doses of alcohol, by cutting off, or materially diminishing, the customary quantity.

Alcohol is responsible also for at least two types of chronic insanity, but as these are not due to the presence of the poison in the brain, but are effects of its previous action, persisting long after all the alcohol has been cleared out of the body, they are not Symptomatic insanity, but are Idiopathic, and fall to be described later on. This division corresponds with a clinical severance, for we do not think of together, nor treat in the same way, the acute insanity produced by the presence of the poison in the brain and the chronic insanity due to the damage that alcohol has inflicted in the past.

CHAPTER IX

SYMPTOMATIC INSANITY CONTINUED

GENERAL PARALYSIS

THERE is no variety of insanity more distinct or more important than this. It is so distinct that some years ago a very able writer on insanity divided this malady into two varieties only—ordinary insanity and general paralysis. Its importance lies in its frequency, in its progressive and incurable character, and in the frequent difficulty of its diagnosis.

In the main, general paralysis is a disease of middle life and of the male sex. It seems to affect by preference vigorous, energetic, successful men, who have lived full, active, busy lives in cities ; who are married ; who have indulged freely in eating and drinking, and in sexuality ; and in whom an hereditary disposition to insanity is absent. While this is the character of the majority of persons who become the victims of general paralysis, the malady is not strictly limited to such persons. It does occur also in those who have an insane inheritance, and about 10 per cent. of general paralytics are thus characterised. It does occur also in women, about 19 per cent. of the occurring cases affecting this sex ; and in rare cases it occurs in early life, in children in the early teens, and then it is invariably found to be associated with hereditary syphilis. So singular and invariable an association in these early cases led to

strict inquiry with respect to the antecedents of general paralytics of mature age, and it was then found that in a very large proportion of these also syphilis was antecedent to the disease. It was found that in 80 per cent. there was conclusive proof of syphilis, either in the history or in stigmata existing in the body. In the remaining 20 per cent. no history or sign of syphilis could be found, but then it is found that, with respect to other lesions which are unquestionably syphilitic, but which occur long after the infection, there is a residue of 20 per cent. in which no history of syphilis and no other stigmata of syphilis exist. We are therefore driven to the conclusion that syphilis is a very constant if not an invariable antecedent of general paralysis, and certainly the most important factor in the causation of the disease.

It is certainly not the sole factor, however. Only a very small proportion of the persons who are syphilitic become general paralytics; and in almost all cases of general paralysis we find that the patient has recently passed through a period of mental or other stress, which has seemed to determine the onset of the disease. He has had great anxiety in his business or in his family; he has indulged too freely in alcohol; he has had influenza; he has had a blow on the head; or he has suffered from some other form of stress; and it seems that it is this provocative occasion, acting upon a person already syphilised, that determines the disease. It is to be remembered that general paralysis is closely allied to tabes; that tabes sometimes culminates and terminates in general paralysis; that true tabetic symptoms occur in general paralysis; and that the affections of the oculo-motor apparatus in the two diseases are closely allied. Hence we have additional reason for expecting

that the causes that produce the one will be closely similar to those that produce the other.

General paralysis may begin quite suddenly, with a fit, or with an outbreak of acute insanity of which no warning has been given; but usually, after the disease has declared itself, it is remembered that for days, weeks, or perhaps even months, the patient had been failing in certain assignable ways. It is rare, however, for these warnings to be sufficiently pronounced and sufficiently definite to enable us to predict, or even to suspect, what is coming. When it is not sudden, the onset of the disease is usually rapid.

The prodromes may be divided into four groups, and are, in the order of their frequency, moral, intellectual, sensory, and motor.

The most frequent of the early changes of general paralysis is a change and a degradation of the moral tone of the individual. His character changes. Always a busy, energetic man, prone to take risks, to keep late hours, to live freely, all these characteristics become accentuated. His energy becomes overpowering; he undertakes more than he can get through, and his affairs become more and more involved and entangled; he speculates more rashly; he goes about more; he takes long journeys upon slight inducement; he drinks more; he is less particular about his associates and companions; he goes among loose women; he talks too much, and chatters among strangers about his private affairs; he becomes effusive; he gives presents without sufficient justification; he brags. He is like a man always a little under the influence of drink; and, as he does drink a good deal, his peculiarities are attributed to drink alone. When this phase of conduct is but slightly marked, it may be considered as a prodrome

of the disease, but when it is exaggerated, it constitutes the first stage of the malady in one of its forms.

The prodromes on the intellectual side, in addition to those included in the above description, consist of a want of mental efficiency, more or less marked, and existing for a longer or shorter time before the outbreak of the disease. The patient becomes stupid. He cannot concentrate his attention; he forgets things; he makes mistakes; he is confused in his mind, and it is apparent that he is less capable in business and less able to transact all the affairs of life than he was. When these symptoms are but slight, they are looked on as prodromes. When pronounced, they constitute the demented form of the disease.

Neither the pupillary abnormalities nor the articulatory troubles, however slight in degree, are counted among the prodromes of general paralysis. If they exist at all, we regard the disease as established; but then the pupillary changes are not seen until they are looked for, and they are not looked for until some more prominent symptom suggests general paralysis. The articulatory defect, again, is never a very early symptom. Often the patient has been consigned to an asylum for months before the defect of articulation shows itself, and it never appears before the mental symptoms. But before the definite outbreak of the disease there may be transient motor troubles. A limb may become weak, or an eyelid may droop, or there may be transient aphasia or transient strabismus, which, with a history of syphilis, may give rise to a suspicion of gumma. The handwriting sometimes becomes sprawling or shaky, but it does not, in this early stage, show the characteristic changes that will be presently described. In those cases in which the morbid change first attacks the cord,

ataxy of the gait may be properly looked upon as a prodrome of general paralysis; but until the insanity declares itself, there is nothing to distinguish such cases from ordinary tabes. In rare cases there may, in the early stage, be a transient ataxy of gait, comparable with the transient aphasia; or there may be attacks of giddiness, fainting, or purposeless vomiting. It will be seen from this description that although, when the disease declares itself, we can recognise that such motor symptoms as these were its earliest manifestations, yet, until the malady is otherwise recognisable, there is nothing in them to point to an oncoming general paralysis, or to lead us to anticipate its occurrence.

On the sensory side, the warnings, if warnings they can be called, are similarly transient, similarly isolated, and usually similarly sudden. When a patient is brought to us with definite general paralysis, we may learn that during the previous twelve or eighteen months he has been treated for a sudden deafness of one ear, or blindness of one eye, or for neuralgia, or severe headache, or for local numbness or anæsthesia; but it is not possible at the time these symptoms occur, to predict that they will be followed by general paralysis.

The onset of the disease may be sudden, and is usually rapid. Often it is possible to assign the very day upon which the malady declared itself, either by a fit of some kind, or by an outbreak of acute mania. Often the symptoms, which have been described as moral or intellectual prodromes, become rapidly exaggerated in intensity until, in the course of a week or so, the apprehension that the patient may be going out of his mind becomes a fact only too patent. In any case, the definite invasion of the disease is usually an attack of acute insanity, and in the majority of cases the acute

insanity is of the maniacal type. In a minority of cases the acute insanity of the onset is melancholic or resistive. It is scarcely ever suicidal. It is usually very acute, and marked by aggression and violence. Sometimes it is so acute as to be taken for acute delirious mania. It lasts for a few days, or more often for several weeks, and then subsides into a sub-acute insanity which exhibits one of the following types :—

1. The maniacal or classical type.
2. The melancholic type.
3. The demented type.
4. The fulminating type.
5. The circular type.
6. The spinal or tabetic type.

1. The maniacal or classical type of general paralysis is the most distinctive and most striking of all forms of insanity. In no other form do we witness such exaggerated hyperbolical exaltation. The patient owns millions and millions ; he is thousands of years old ; he has hundreds of wives, thousands of children ; he has such titles as were never heard of ; he is the greatest inventor, artist, poet, warrior, statesman, pitch-and-toss player, the world has ever seen. He is lavishly benevolent ; he will give cheques for millions, written on dirty bits of newspaper, to all bystanders. He talks incessantly, save when he is writing ; and he writes incessantly, save when he is talking. He corresponds, still on margins of newspapers, or dirty scraps picked up in the road, with all the crowned heads of Europe and all the celebrated people he can think of. His writing is characteristic. It is sprawling and shaky ; it is unrecognisable as his ordinary handwriting. He omits letters ; he fails to finish his words ; he omits syllables, and often

whole words. He runs the words together in writing just as he does in speech, and often he repeats the same word or syllable twice or oftener.

In this stage he sleeps little, he is up early and late, he is full of eager, busy, futile activity. In whatever is going on he must take part, and principal part. If anything is being discussed, he lays down the law; if anything is being done, he takes the command. He appropriates everything he has a mind to, and when his pockets are turned out, they are found to contain as miscellaneous a collection as a magpie's nest—other people's pipes, handkerchiefs, and pencils, one or two playing-cards, bits of string, bits of bread, sticks, stones, dead leaves, and bits of paper innumerable.

At the same time, with all his grandeur and majesty, he is singularly weak of will and easily influenced. In his own house he is obedient to his own servants, if they are at once authoritative and judicious. He does what he is told. He is full of preposterous schemes, but he is diverted from their pursuit with the utmost ease; and even if left alone, he does not pursue any one of them for more than a few moments together. He is subject to outbursts of temper, rising often to fury, but they are short-lived and easy to control. Sent to an asylum, he accepts the situation without murmur and without question. He does not resent his removal from home; he sees nothing worthy of protest or remark in the control to which he is subjected.

In this excited and grandiose condition he remains for a few months, becoming gradually calmer and more demented, until at the end of a variable time, usually about a year after the onset of the disease, he has a fit, and then the course of the disease follows the order that will be presently described.

2. The demented type.—In common with other insane persons, all general paralytics are anoiac in every stage of their malady; but what is meant by the demented type of general paralysis is a form of the disease in which the dementia is simple, and is unaccompanied by the active symptoms so characteristic of the other forms. In the second stage of the disease—that is to say, after the first fit—the more active symptoms subside in every type of the disease, and the case approaches to one of simple dementia; but in the type now under consideration the symptoms are never very active. The patient is from the first heavy, stupid, lethargic, inactive; whatever activity there is in the mind is of the same cast as in the classical type, and the patient often surprises us by evincing out of his dullness some extravagant delusion; and just as in the other types the period of simple dementia sets in with the fits, so in this type fits occur early in the course of the malady and are frequent during its progress. This is the form that general paralysis usually takes when it begins with a fit. As might be expected, the course of the disease is more rapid than in the classical type.

3. The melancholic type.—General paralysis usually begins with an attack of acute insanity, and, as already stated, the acute insanity of the commencement is sometimes melancholic or resistive in type. When this is so, the tinge of melancholia usually remains throughout the progress of the disease. Not infrequently a case that has begun with acute mania becomes subsequently melancholic. The patient then presents the physical signs of general paralysis together with the ordinary mental symptoms of melancholia. But the melancholic symptoms are not quite ordinary; they are often combined with an element of grandiosity in excess

of what is seen in ordinary melancholia. The ordinary melancholic believes that his bowels are obstructed, and that he has had no motion for a month ; the melancholy general paralytic has had no motion for thirty years. The ordinary melancholic has a ton weight resting on his body ; the melancholy general paralytic is crushed under the weight of the whole earth. The melancholia of general paralysis may be ordinary dysphoric abasement or may be of the resistive type. It may be associated with stupor, and it may be attended with suicidal attempts, though these latter are not common in general paralysis. In the melancholic form there are not the remissions and periods of improvements that take place in the classical form, or if they occur, they are much less pronounced.

4. General paralysis of the fulminating type is a terrible malady. Whereas the other types of the disease begin with acute insanity, this type begins with the acutest form of insanity—acute delirious mania. Whereas the other types pass through the various stages in the course of two or three years ere they terminate in death from exhaustion, the fulminating cases run their course in six months, in four or three months, or even less. The symptoms are those of the classical form, but they are much more acute, and the course of the disease is very much more rapid.

5. The circular type of general paralysis is rare. It begins in the ordinary way with an outbreak of subacute, culminating in acute, insanity, with the exaltation, braggadocio, extravagance, and immorality of the classical form. After a few months, the acute symptoms subside, as they usually do in the classical form ; but instead of the relapse that takes place in the other types of general paralysis, the patient continues to improve

until he is practically well, and it is thought that the diagnosis was wrong, and that the case was not one of general paralysis at all. After a few months of sanity, the patient begins to be depressed, and gradually sinks into profound melancholia, for which he is again sent to an asylum, and from which he again recovers and returns to active life. Then, after an interval, occurs a new outbreak of acute mania, and the circle is complete. The circle may be renewed more than once before the physical signs exhibit themselves, and the case then follows the usual course of the classical type of general paralysis.

6. The spinal type.—General paralysis always involves the spinal cord sooner or later; spinal paralyses are present during life, and spinal-cord degeneration is found after death. In the ordinary types, the brain is affected first and most; and symptoms due to disease of the spinal cord appear late in the course of the disease, when the patient is already a wreck, and consequently do not attract much attention. But there are cases in which the spinal cord is first attacked, and the malady begins as tabes or as spastic paraplegia, upon which the mental and other symptoms of general paralysis are subsequently grafted. The brain and spinal cord form one continuous organ, and a morbid process in one easily spreads to the other. The wonder is that tabes and general paralysis are not more often associated.

In addition to the six forms described, general paralysis exhibits certain peculiarities when it occurs in women and in the young.

The disease is less frequent in women than in men, in the proportion of less than one to five. The symptoms in women are less aggravated, less pronounced. All

the manifestations are milder. The type is usually the demented, but unlike the demented type in men, the course of the malady is prolonged. It is more " chronic " in character than it is in men. It usually sets in earlier in life—nearer thirty than forty,—and the physical symptoms are less pronounced. The tremor, the articulatory defect, the involvement of pupils, appear later and are less pronounced, and fits are less frequent.

In children also, the symptoms and the course of the disease are sub-acute, and the general character of the malady is similar to that in women. It is always associated with hereditary syphilis.

Physical Signs.—These are of extreme importance, for until they are recognised the diagnosis cannot be made. The earliest are the pupillary changes. Next come defects in articulation ; then the manual movements, and especially the handwriting, are affected ; and lastly the gait deteriorates. This is the usual course, but, as already noted, there are cases in which tabetic symptoms precede the mental changes by months or even years.

The pupils are usually unequal, and often deviate from circularity and become oval or irregular in outline, and they fail to react to light, or in accommodation, or both. In ninety-nine cases out of a hundred, when unresponsive pupils co-exist with any form of mental disorder, the case is one of general paralysis. As far as my experience goes, the pupillary symptoms are not only the earliest of the physical signs, but they are never absent in commencing general paralysis. Hence their extreme importance.

The articulatory defect comes later, and is highly characteristic. It is exactly the same as that of a drunken man. The speech is " thick." The words are

clipped and run together. The patient often speaks with extreme deliberation, so as to overcome the defect, of which he is conscious; but if he speaks at all quickly, the words are blurred and fused together, and syllables are omitted. The labials and dentals are first affected; and when the disease is further advanced, the voice itself becomes involved and assumes a very characteristic peculiarity. It becomes monotonous. Cadence is lost; and in addition there is often a peculiar bleat, which can always be recognised after it has once been heard.

The face is remarkably expressionless. It looks puffy, and the normal lines and folds fill up and disappear. The cheeks and *alæ nasi* are often shiny with grease, and when the patient speaks, there is tremor, not only of the lips and of the tongue, but of the muscles of the cheeks as well.

The peculiarities of the handwriting have already been described. Other movements of the hands are often defective. The patient has difficulty with his buttons, and cannot pick up a pin from a plate or other smooth surface.

The gait does not become defective until the later stages of the disease, and then the defect is not very definite. It is not ataxic; it is not a reel; it is a general inefficiency which is scarcely describable otherwise. The patient walks slowly, turns with difficulty, and is apt to fall; but there is no localised or differential paralysis. It is a generally diffused weakness and incompetency.

The knee-jerks are usually exaggerated in the early stage of the malady. Subsequently they may disappear and reappear, and may be different in the two sides.

Stages and Fits.—General paralysis is a progressive disease, and it is usually described as marked off into three stages, the first extending from the outbreak of the disease until the first fit; the second from the first fit till the patient becomes bedridden; and the third the bedridden stage. It is not always possible to mark these distinctions, nor are they very important. But the occurrence of the fits is a very important incident in the progress of the malady.

As already stated, the disease may begin with a fit; and whether it does so or no, fits, or sudden exacerbations allied to fits, invariably occur in the course of the disease, usually beginning about midway in its duration. In different cases the fits are very different in character, but in the same case the fits usually are closely alike. In the classical type of the disease, the fit is a universal convulsion, indistinguishable from those of epilepsy. It begins less suddenly, it is true, than epileptic paroxysms usually begin, but in other features it is the same. The head and eyes deviate to one side, the spasm becomes universal, may be accompanied by evacuation of the bowels and bladder, and is followed by a period of coma. Fits of this kind may succeed one another rapidly, so that the patient passes into the *status epilepticus*, which is far more common in general paralysis than in idiopathic epilepsy; and in this condition a certain proportion of general paralytics die.

Very commonly the fit is not of this definite character. Often it is "apoplectiform," but, in this case again, it rarely has the very rapid onset of hæmorrhagic apoplexy. The patient becomes duller and duller, more and more stupid, until in the course of an hour, or two or three hours, he is comatose. The coma is not usually deep—rarely so deep as to be stertorous—and often it is found

to be combined with rigid deviation of head and eyes to one side, so that it partakes of the nature of epilepsy.

In very many cases, the character of the fit is less definite than this. There is no convulsion, nor is there actual coma, but the patient becomes for a few hours unusually dull, lethargic, and stupid. He lies about; he does not answer, or he answers slowly and at random; he cannot be got to take his food; he seems dazed; he is muscularly weak and incapable of exertion; and when this condition passes off, he is found to have undergone the deterioration which, as will be presently noticed, invariably follows the fits of general paralysis. These attacks are sometimes called "congestive"—it is hard to say why.

At the stage of the disease at which fits are customary, there sometimes occur causeless attacks of bilious vomiting, or of profuse diarrhœa, which are sometimes followed by fits, and sometimes seem to take the place of fits, or to be a variety of them. In yet other cases, the fit is replaced by a local paralysis, or by a general loss of power, which, by its sudden or rapid onset and its gradual recovery, exhibits its community of nature with the more easily recognised fit.

It is sometimes said that fits do not occur in all cases of general paralysis, and if by a fit is meant an epileptoid or apoplectiform seizure, this is true; but I have never seen a case of general paralysis in which periodical crises of some kind have not occurred; and if we include, as I think we should, all periodical crises of every kind under the term "fit," then I think there is no case of general paralysis in which fits do not occur.

Whatever the nature of the crisis or fit, it has a very marked effect upon the condition of the patient. When he emerges from it, he is found to be greatly deteriorated.

His delusions are, perhaps, less prominent, but this is because he is too stupid to entertain them. He is much weaker in body, and he is much more demented in mind. As the days and weeks pass by, he gradually improves. He climbs the hill again; he recovers a great part of his mental and bodily aptitude, but invariably, before he has completely regained the ground that he lost by the fit, he has another fit; and when he emerges from this, he is found to be on a lower level of capacity, both bodily and mental, than he was after the previous fit. Again he climbs the hill. Again, after the lapse of weeks, or it may even be months, he regains a great deal of his lost ground, but he never regains it all. Invariably, before he has attained to the condition that he reached after the first fit, a third occurs, which reduces him to a still lower depth, and so the malady progresses, each fit leaving behind it a greater wreck, from which recovery is less complete.

This effect of the fits upon the course of the disease is an instance of the periodicity which is discernible more or less distinctly in the course of every case of general paralysis. General paralysis has been called progressive paralysis, but its course is never continuously progressive. While its general course is steadily downward if sufficient intervals are taken, yet, when minutely examined, it is found that this downward progress is not continuous, but is always remittent, a rapid or sudden decline being followed by gradual improvement, and this alternation being continued throughout the disease. This character is discernible from the very first. The outbreak of the malady is, as we have seen, sudden or very rapid, and is followed by a gradual recovery, which may be so complete that the patient is able to return to his business, and to resume his place

in the world for several months; and this is called a complete remission. But when careful observation is made, it is found that the remission is not complete, but that it conforms to the rule by which the recovery from every crisis culminates in a state, which is never so near a return to the normal as the pre-critical state. In these "complete remissions" it is found that the character of the patient is a good deal deteriorated, and that his intelligence is less keen. He goes back to his work and his family, it is true, but he can no longer do his work capably, and his family remarks a decided change in his disposition. Thus the circular type of general paralysis is no departure from the type of the malady, but merely an exaggeration of a feature which all cases present in some degree.

With each recurrence of the crisis, the patient becomes more and more demented, and more and more paralytic. At length he becomes incapable even of sitting up, and is confined entirely to bed; and at the same time lapses of the control of his bladder and bowels, which have been occasional since the crises began, now become habitual. The patient ceases to have the character of an intelligent being. He lies in bed in the extreme stage of dementia, his arms crossed, his legs drawn up, all his limbs gradually becoming more and more rigidly contracted. He passes his urine and motions under him. He is incapable of conveying food to his mouth or of brushing away the flies that crawl over his face and into his open mouth. It is with the greatest difficulty that he is saved from getting bed-sores, and at length he dies, either in a fit, or in coma, or from diarrhœa, or pneumonia, or some other disease of exhaustion. This bedridden condition is called the third stage of the disease.

The general bodily condition presents characteristic peculiarities in the three stages of the disease. In the first, the maniacal stage, the patient is usually remarkably "fit." He is in fine "condition." He is muscularly strong, and he is wanting in superfluous fat. His condition is much as if he had been well trained for some athletic contest. In the second stage, as he becomes stupid he gets fat. The lines on his face fill out and are obliterated, and his face becomes more greasy, pulpy-looking, and expressionless. In the last stage, he emaciates, and the emaciation is often extreme.

A very remarkable and very unfortunate nutritive anomaly, that may take place at any time after the first stage of general paralysis, is a change in the structure of the bones, by which they become unusually, and in some cases surprisingly, brittle. This change is so great in some cases that a rib can be easily broken with a thumb and finger, and as general paralytics become very helpless, and often at the same time very restless and apt to fall about, the brittleness of the bones becomes a source of great danger. A certain number of general paralytics die every year from pneumonia following fractured ribs, or from shock and exhaustion following fracture of other bones.

Diagnosis.—When once the physical signs are decided, there is no difficulty whatever in diagnosing general paralysis. The defect of articulation is pathognomonic, and the pupillary signs, when conjoined with mental disorder of any kind, are equally so. But before the physical signs are established, the difficulty of deciding whether a case is or is not one of general paralysis may be very great—may, indeed, be insuperable. Cases not seldom occur in which a diagnosis is for the time impossible, and we must wait the

further development of the disease before giving an opinion.

Generally, any rapid or sudden outbreak of insanity, of any form, in a middle-aged man, in whose family there is no history of insanity, should put us on our guard, and lead us to suspect general paralysis. Even a definite family history of insanity does not exclude general paralysis, but it is much more frequent in men with a sound family constitution. General paralysis sometimes begins with a fit, and the fits are very varied in character; hence any cerebral crisis, for which no adequate cause can be found, should raise a suspicion of general paralysis when it occurs in middle age.

Acute mania with grandiose delusions and the scattering of cheques for millions, even when occurring in a man of middle age and a fast liver, does not always mean general paralysis. It may be simple acute insanity and may recover. But if any of the physical signs of general paralysis are present, the diagnosis is no longer in doubt.

Dr. Savage lays stress upon the gain of weight in the melancholy type of general paralysis, as against the loss of weight or the continued meagreness of the ordinary melancholic. This gain of weight is a very important sign if the pupillary and articulatory defects are absent, but usually, by the time the patient has entered upon the fattening stage, these motor defects are already conspicuous.

The greatest difficulty in the diagnosis of general paralysis is in deciding, in a doubtful case with a history of alcoholic excess, whether the disease is general paralysis or alcoholic insanity. The difficulty is the greater, since general paralytics often take to drink in the early stage of the malady, and often have

habitually indulged too freely; and it is the greater since alcohol itself produces motor disorder allied to that of general paralysis. The main reliance must be placed on the pupillary changes. These are not present in alcoholic insanity, but they may be absent also in the early stage of general paralysis. The history of morning vomiting is important. There are only two conditions with which regular morning vomiting is associated—pregnancy and alcoholism. But we must be careful to ascertain that the vomiting is regular, and is not a sporadic crisis. The general paralytic sleeps well, though his sleep is short; the alcoholic patient sleeps badly, and is apt to suffer from terrifying dreams. The memory does not present in general paralysis the characteristic defect in recent matters that is so conspicuous in alcoholism. The defect of gait and the tremor of hands in the two maladies may be closely alike, and in alcoholism the articulation may be defective, but the defect is not of the same character.

We have now in the Wasserman reaction, in the estimation of leucocytosis in the cerebro-spinal fluid, and in the estimation of the globulin in this fluid, tests of the presence of syphilis that are of the utmost value; and since general paralysis is a syphilitic disease, the determination that syphilis is present in a doubtful case of mental disease goes far to corroborate a diagnosis of general paralysis; but it is important to insist that even if all three tests yield a positive result, the proof of general paralysis is not conclusive. Syphilis is a very common disease. It is estimated that at least 16 per cent. of the population of this country are infected with it. Mental disease of other kinds than general paralysis is by no means rare; and the doctrine of chances shows

that there must be a small number of cases in which both maladies coexist in the same case independently, and without any causal nexus. While, therefore, proof of syphilis goes far to confirm a diagnosis of general paralysis in a case otherwise doubtful, it is not conclusive proof of general paralysis. I have seen cases in which syphilis coexisted with mental disease without being the cause of the mental disease, and such cases cannot be very rare.

Prognosis.—General paralysis is always fatal, and usually is rapidly incapacitating. Cases are not very uncommon, however, in which, after the acute attack of insanity which marks the onset of the disease, the patient recovers sufficiently to return to his family and his business for three, six, or twelve months, or even longer. Sooner or later, however, the malady recurs, and although it always runs a remittent course, it is very rare for a second remission to be so complete as to allow of a return home. The average course of the disease is about three years, but it is often less than this, and occasionally it is prolonged for four or five years. The circular type is that of longest duration. I have left this paragraph as it stood in the first edition, but I should not now express my opinion so unconditionally. I have seen cases of general paralysis that have lost all signs of the malady, and have remained well for years, until I lost sight of them; and I have seen other cases that have lasted in a state of anoia, not very deep, for ten and fifteen years.

Treatment.—There is at present no curative treatment of general paralysis. Seeing how intimately it is associated with syphilis, it is natural that antisyphilitic remedies should have been extensively tried, but they have never been found of the least use.

Removal to an institution is always necessary. In no class of cases do we witness outbreaks of such frantic violence as in general paralysis, and, as they take place without any warning, and in cases that have previously been quiet and tractable, it is necessary that the patient should be in a place where a sufficient staff is available at a moment's notice to deal with him in his outbreak. For the rest, treatment must be of symptoms, and it is important to remember that general paralytics are very amenable to the action of drugs, and that their allowance of tobacco should be very limited, for it is very apt to prostrate them. Sulphonal is the best calmative of excitement, and paraldehyde the best hypnotic; but the former easily produces a great effect upon the gait by its paretic effect on the muscles. Trephining has been tried, to diminish an imaginary intra-cranial pressure, but without any beneficial effect; and the same may be said of paracentesis of the spinal canal. Blistering of the scalp and setons have been tried, but with no appreciable beneficial effect. In the second stage of the disease the patient becomes extremely voracious, and is apt to choke himself if allowed to feed himself. His food must be cut up, and no implement larger than a teaspoon allowed, and if necessary he must be fed. The brittleness of the bones is a source of great anxiety; and every care must be taken to prevent the patient falling about, or getting into quarrels with other patients. In the final stage, the prevention of bedsores must be managed *secundem artem*, and the *status epilepticus* treated in the usual way with rectal injections of chloral.

Since the first edition of this book was published, the *triponema pallidum* has been found in the brains of general paralytics, and by the discovery some of the

mystery that enveloped the pathology of general paralysis has been dispersed. Since it has been recognised that general paralysis and tabes are manifestations of syphilis, the great difficulty has been to account, not so much for the appearance of these diseases as for their non-appearance for so many years. They occur neither in the primary, in the secondary, nor in the tertiary stages of syphilis. They are post-tertiary in their occurrence, and the remedy, iodide of potassium, that is so effectual in tertiary syphilis, has no effect at all on these diseases, which have therefore been called para-syphilitic, and have been conjectured to be due, not directly to the *triponema*, but to some toxin produced by it. Why tabo-paralysis is so late an occurrence in syphilis is still unexplained. It might be conjectured that the brain and cord were too remote and inaccessible to the *triponemæ* were it not that gumma of the brain and cerebral nerves is not infrequent in the tertiary stage of syphilis; but some inaccessibility, there certainly is in these organs, for the impotence of mercury and the iodides to relieve tabo-paralysis certainly does seem to depend upon the difficulty they have in penetrating to the seat of the micro-organism. This being so, it would appear that a remedy directly applied to the seat of the disease might be expected to be more efficacious; and we have now in our hands, in salvarsan and neo-salvarsan, microbicides far more effectual than the iodides. Attempts have therefore been made to treat tabes by direct injections of salvarsan and neo-salvarsan into the spinal theca, and general paralysis both by such injections and by injections, through trephine holes in the skull, into the membranes of the brain and the cerebral substance. This mode of treatment is at present in an early stage,

and the cases in which it has been tried are comparatively few; but of them few have been thus treated without some improvement, and in some the improvement has been great, so much that patients with exorbitant and extravagant delusions have so far recovered that they have returned to business and transacted it capably. There is no doubt that it is in this manner that the treatment of general paralysis will be conducted in future.

The *Pathological Anatomy* of general paralysis is very characteristic. There is, it is true, no single change which may not be found in other maladies, but there is no other malady in which the same combination of changes is found.

The skull is usually thick and heavy; the dura mater, too, is usually thickened and adherent to the skull. Sometimes a meningeal hæmorrhage, or the remains of such a hæmorrhage, in the shape of cyst or membrane, is found between the dura and the arachnoid. The brain is manifestly shrunken, and in consequence the sub-dural and sub-arachnoid fluid is copious, so that the arachnoid and pia have a thickened, semi-opaque, jelly-like appearance. When the membrane is stripped off, it is found to be strongly adherent along the summits of the convolutions of the frontal lobe, so that in these positions a portion of the brain substance is torn off along with the membrane, and a streak is left in the middle of the gyrus, in which the brain appears as if it had been nibbled by a mouse.

The brain is shrunken in all its dimensions; the gyri are thin and the sulci wide, this change being most conspicuous in the frontal lobe, and diminishing backwards. The ventricles are large, and the basal

ganglia small, and foci of softening are common in various parts of the brain. Histologically, the nerve elements are diminished and the connective tissue is increased, but, as is evident from the general atrophy, the former process is greatly in excess of the latter. Both cells and nerve fibres suffer, and suffer together, and the morbid change has the characters, in as far as they are distinct, of primary rather than of secondary degeneration. The cells lose the definition of their outline, and not only of their external contour, but of their internal organisation also. The Nissl bodies break up (chromatolysis), the nucleus becomes indistinct, its outline is lost, and at length it disappears. The cell loses its shape, and approaches more and more to the shape of a sphere, by an apparent retraction of the substance that is prolonged into the fibres, and by the bulging of the contour between the origin of the fibres. At first increased in size, in later stages it shrinks, breaks up and disappears, leaving a pigmented detritus which is subsequently absorbed. The processes partake in the destruction of the cells. As the cell-body alters in form, the processes, from being manifest prolongations of the substance of the cell, appear as if stuck into it, or to project from it like the root of a turnip. The finer ramifications disappear, the main processes shrink, dwindle, break up first into lengths and then into granules, which are absorbed and disappear. The same process affects the association and other fibres.

The connective-tissue element in the brain shows great relative increase, owing to the disappearance of so much of the nerve tissue proper. Whether it is upon the whole increased in bulk is doubtful, but certain of its constituents are undoubtedly larger,

more prominent, and relatively, if not absolutely, more numerous. The glia takes the stain more deeply than in the normal brain, and as the cells are smaller and wider apart, from the absorption of so many, it constitutes, in any one section, a much larger proportion of the field. The glia cells appear to be more numerous, they are more deeply stained, they are larger, and their visible processes are more numerous and more pronounced. Where the nerve cells are most affected, the spider cells are very numerous, and exhibit a large and well-marked process passing to the wall of the nearest vessel, where it ends in a plate of nucleated protoplasm. A number of other processes surround and envelop the degenerating nerve cell. As the nerve cell disappears, the body of the spider cell shrinks, and what remains of it at last is a network of fibrils.

The blood vessels are numerous, large, tortuous, and dilated at intervals along their course. Their coats are thickened, the endothelial nuclei are increased in number, and around the vessel are groups of extravasated leucocytes mingled with hæmatoidin crystals. The wall of the vessel exhibits hyaline or fatty change, the perivascular lymph spaces are large, and contain masses of lymph-corpuscles here and there.

In the pia-arachnoid the vessels are unusually numerous and prominent, and the whole of the connective tissue apparently increased in amount, and permeated throughout with exudation and with nuclei.

In a large proportion of cases changes are found in the spinal cord similar to those in the brain. The theca is similarly thickened and adherent, with evidence of blood extravasation within it, and occasionally

grey degeneration of the columns is discernible by the naked eye. Microscopically, the changes are the same as are found in the brain, and are most marked in the posterior columns, less in the lateral, and least in the anterior.

CHAPTER X

SYMPTOMATIC INSANITY CONTINUED

INSANITY OF GROSS BRAIN DISEASE
TRAUMATIC INSANITY
INSANITY OF EPILEPSY

INSANITY OF GROSS BRAIN DISEASE

MENINGITIS and tumour of the brain do not often exhibit active insanity as a symptom, but meningitis if diffused, and intra-cranial tumour when rapidly increasing, or when very large, always give rise to coma, and coma is, of course, insanity. When coma comes on slowly, there is a precomatose hebetude, slowness in answering and in making other adjustments, loss of power to think, with general mental dullness and general defect of conduct, that amount, or may amount, to insanity, though it is not usually so styled, nor even so thought of. In a few cases, however, when the tumour is situated in the anterior lobes, an unusual place for tumour, the insanity is of an active kind, and is what anyone would recognise as insanity. One case has been published in which tumour of the anterior lobes produced symptoms so closely resembling general paralysis as to be mistaken for this disease.

TRAUMATIC INSANITY

Insanity that can be definitely traced to injury to the head and to no other assignable cause is rare, but

cases are occasionally seen. It is indeed frequent for an attack of insanity, especially in the young, to be assigned by the relatives of the patient or by the patient himself to a blow or a fall on the head, but this arises from the craving of the human mind to find and assign a cause for every event; and when critically examined, the traumatic origin of the insanity rarely appears even plausibly likely. The superabundant activity of children and young people perpetually leads to accidents, and in them falls and other accidents in which the head is struck are frequent enough, and are pretty often severe enough to lead to temporary unconsciousness; but the very frequency of such accidents compared with the relative rarity of insanity shows that they are not a necessary cause; and every practitioner of experience must have met with cases in which the head has been severely struck and prolonged unconsciousness has followed, without any appreciable damage to the sanity of the patient; and when the blow on the head is not followed by any sign of insanity until after the lapse of years, we may safely dismiss any casual agency in the blow.

It is otherwise when insanity follows, as it sometimes does, immediately upon a serious injury to the brain. There are now many cases on record of penetrating and lacerating wounds of the brain, even bullet wounds, which have been followed by recovery as far as bodily health is concerned; and some of these have left surprisingly little effect upon the sanity. It seems, indeed, probable that in many persons a portion, it may be a considerable portion, of the cerebral convolutions is never brought into use, and may be lost without appreciable defect. It is difficult otherwise to account for the enormous differences of mental capacity in persons

whose brains are approximately equal in weight. In other cases, however, severe injury to the brain is followed by defect and disorder of mind of various kinds and degrees, and in some of these cases there is insanity. Since the injury to the brain may be of very various degree and in very various locality, there are no symptoms characteristic of traumatic insanity except that, unlike other kinds of insanity, it is usually accompanied by headache.

INSANITY OF EPILEPSY

Insanity is associated with epilepsy in many ways. We have seen that idiocy is often associated with epilepsy, and is often said to be due to it when the epilepsy begins in very early life. But we have no warrant for concluding that the idiocy is the result of the epilepsy, which is itself but a symptom of some grave irregularity in the mode of working of the nerve elements. It is more likely that the same defect in the constitution of the nervous system, which displays itself in idiocy, has in epilepsy another of its manifestations. And similarly, when it is said that long-continued epilepsy at length brings about insanity, we are arguing *post hoc, ergo propter hoc*, without sufficient warrant. Long-repeated epilepsy indicates a long-continued morbid condition of nerve tissue, and increasing frequency of fits indicates increase of this morbid condition, whatever it may be; and the insanity that at length occurs may well be due to the same advance of this morbid change that underlies the progress of the epilepsy. So that, closely as epilepsy and insanity are often associated, it is no more justifiable to regard the epilepsy as the cause of the insanity, than to regard the insanity as the cause of the epilepsy in those numerous

cases in which epileptic convulsions occur in the final stage of insanity. All that we are justified in saying is that insanity and epilepsy are very closely associated.

Epileptics may be permanently insane, or their insanity may occur only in connection with their fits. The permanently insane epileptics are those whose epilepsy has begun in early life, and who have never been mentally sound, or those who, after lifelong epilepsy, have become demented. In the former, the epileptic idiots and imbeciles, the depth or severity of the imbecility or idiocy bears a general relation, not so much to the severity of the fits, as to their frequency; and not so much to the frequency of the fits, as to the earliness in life at which they began. The earlier the epilepsy begins, and the more frequent the fits, the deeper the idiocy. Epilepsy (by which we now mean, not only the periodic convulsions, but the tissue change which underlies it) which does not make its appearance until puberty or later in life, does not, of course, affect the mental development until it appears, and the later it appears, the more complete the development of brain and mind before they begin to be interfered with.

The epileptic idiot is not different from other idiots in any important respect except the fits, but the epileptic imbecile differs much from other imbeciles. He is usually more robust in body. He is taller, bigger, more muscular, more energetic than other imbeciles; he is often more intelligent, and he is usually more industrious. Like most other imbeciles, he is heavy, clumsy slow, and awkward in his movements; and withal he is irritable, passionate, and quarrelsome. Epileptics are a turbulent, excitable race, prone to quarrelling and violence.

The epileptic dement is usually very demented. His

forehead and nose are often scarred from the results of his falls; his aspect is heavy and dull; his movements are slow, clumsy, and ineffectual. Like other epileptics, he is liable to outbreaks of impulsive violence.

Other forms of chronic insanity—fixed delusion, persecutory delusion, mania, melancholia—are not often seen in epileptics as a permanent condition in the intervals of the paroxysms. The form of the insanity is simple defect or deprivation, is what I have called anoia.

In connection with the fits, insanity may declare itself before the paroxysm or after it—pre-paroxysmal or post-paroxysmal insanity. It has been described also as replacing the fit, as an outbreak of rage or acute mania taking place at the time the fit is due, and unaccompanied by any fit. It is probable that this outbreak is usually either pre-paroxysmal or post-paroxysmal, the fit having been slight and unnoticed; but it seems as if a periodical outbreak does sometimes occur, at a time and of a character that is regarded as pre-paroxysmal, an outbreak which rises to a climax and passes away without the actual occurrence of a fit.

Pre-paroxysmal Insanity.—Epileptic fits often occur with electric suddenness, and with no preceding or premonitory symptoms to warn us of what is about to happen; but usually there is a warning, and the warnings are of two kinds. The first kind of warning is the aura, which is a part of the fit itself, and which need not be described here, as it is fully dealt with in works on general medicine. It lasts but a few moments and is soon superseded by, and lost in, the other occurrences of the fit. The second kind of warning is of much longer duration. It consists of a general alteration of disposition, always in the same sense in the

same case, which enables those who are familiar with the patient to foretell the advent of a fit for several hours, and often for several days, before its onset. He becomes more and more irritable, captious, ill-tempered, and apt to violence; or he becomes sullen, morose, silent, and very dangerous, breaking out into frantic rage if interfered with; or he gets more and more stupid, heavy, dull, and lethargic, until he may sit motionless for the greater part of the day, and be scarcely rousable to take his meals; or he is gay, excitable, talkative, and buoyant. But whatever the condition, it is one foreign to his usual and normal state, and it gradually becomes more and more pronounced up to the time when the fit occurs. Or, as has already been noted, it may culminate without any observable fit, in some outbreak of violence which is characterised by suddenness, and especially by extreme, savage, reckless ferocity. Every few months the country is startled by some crime of horrible violence, in which the victim is not merely killed, but the attack is pursued and continued after life is extinct, until the body is mutilated almost out of the semblance of humanity. The head is smashed and battered into a pulp, or the body and limbs are hacked and hewed with blind and revolting fury. When the matter is investigated, it is found that either there was no provocation at all, or that what provocation was given was utterly and grotesquely out of proportion to the terrible vengeance inflicted. Then, upon still further investigation, it is found either that the criminal is a confirmed epileptic, or more commonly that he has "suffered with his head"; that he has been "very strange in his manner at times"; that other members of his family have been epileptic; that he has been subject to fainting fits; that he has done odd and un-

accountable things; and, in short, that he has given evidence by which we can conclude that he has suffered from epilepsy, and that the crime that he has committed was done towards the end of the pre-paroxysmal stage of epilepsy. In such cases there is not usually any actual fit. The maniacal violence seems to take the place of the fit and to bring the occurrence under the description of *epilepsie larvée* of French writers.

Post-paroxysmal Insanity.—When the alteration of conduct and demeanour of the pre-paroxysmal stage is prolonged and is well marked; when there is a prolonged warning that a fit is coming on; when the modification of character gradually and continuously increases up to the time of the fit; then, when the fit does occur, it entirely clears all such symptoms away, and the patient emerges from it in his normal condition —a condition which may not be one of wholly sound mind, but which is normal to him. The time immediately after the paroxysm is the time at which he is at his best. His intellect is then clearest, his temper least objectionable, his conduct most orderly. Moreover, in the pre-paroxysmal state, in which he is in some degree alienated, he is yet as fully conscious as he is at other times. Post-paroxysmal insanity is the reverse of all this. The patient as a rule preserves his usual conduct and demeanour up to the very moment of the fit. There is usually no warning at all in the strict sense, though there may be an aura. The fit is often very slight—indeed, elaborate automatism is not common after severe fits. After a fit, which may be indicated merely by a momentary pallor, or an instant of deviation of the eyes and head, or a slight sinking at the knees, or some similarly trivial manifestation, the patient enters upon a period of action, which is distinguished by

certain striking peculiarities. In the first place, of whatever acts he then does, he retains not the slightest trace of recollection afterwards; and hence it is assumed that when he does them he is wholly unconscious, an hypothesis which gains corroboration from the nature of the act. This is usually an habitual act. It is something which the patient is in the habit of doing, and which he can do with a minimum of deliberation and attention; or, rather, it is the caricature of some such habitual act—a caricature which is often nullified or vitiated by want of appreciation of the circumstances under which it is done. For instance, one of the most frequent of these automatic acts is that of undressing; and the patient will start to undress himself wherever he may happen to be—in the street, in a railway train, at a dinner-party, anywhere. Or he will make water, but instead of proceeding to a urinal, he will micturate in a corner of the room or out of the window, or he will use his hat or his beer-jug for a chamber-pot. Or he will wind up his watch, but will stick the key in anywhere it will go, or will use for a key any small object that comes to his hand, or he will go on winding until he breaks the works. Usually, whatever act a patient does after one fit, that same act he will repeat after every fit, but this is subject to a very important modification—viz., that if he find any implement in his hand or handy, he will be very apt to put that implement to its common use, or to some caricature of its common use. If he happen to be holding a pen, he will make marks on the surface before him. If he happen to be holding a gun or pistol, he may load and fire it. If he happen to be holding a knife, he may cut something with it. Thus it happened that a woman was cutting bread and butter for her children's tea when

she had a fit, and in the subsequent automatism she cut the arm of one of her children, so that it died; and in a similar way other quasi-crimes have been committed. Usually the period of automatism after the fit lasts for a few minutes only, but in instances not very rare it is prolonged for hours; and there are cases in which, after a fit, the patient lives, as it were, a new life, lasting for days, weeks, and even months. It is quite a usual occurrence for a patient in post-epileptic automatism to show some appreciation of surrounding circumstances. I have seen one in this condition walk for several hundred yards, getting over a stile and a gate, and deviating from his course when shouted at. But there are cases, recorded upon unimpeachable authority, in which the patient has taken a ticket, has travelled a long distance, put up at hotels, bought, sold, and transacted other business; and at length, after days or weeks, has woke up to a recollection of all his former life up to the moment of the fit, after which his mind was an utter blank as to every experience that he had undergone. The case then merges into one of double or alternate consciousness.

In treatment, epileptic insanity requires nothing in addition to the treatment of epilepsy and of insanity. For the first, the main reliance is upon the careful regulation of meat in the diet, and the prolonged administration of as large doses of bromides as the patient is able to endure. In the dangerous outbreaks, the administration of hyoscin will be found very effectual, and the *status epilepticus* demands treatment *secundem artem* by rectal injection of chloral hydrate.

CHAPTER XI

IDIOPATHIC INSANITY

CYCLICAL INSANITY—FIXED DELUSION—DEMENTIA

IDIOPATHIC insanity has been divided first into that which is cyclical and that which is not.

CYCLICAL INSANITY

Insanity, like every other organic process, exhibits periodicity. In every case of insanity that is at all prolonged, a certain rhythm of exacerbation and subsidence can be detected. Epilepsy, and the insanity associated with it, are conspicuous instances of periodicity, more or less regular. In general paralysis, the alternation of periods of excitement and of calm is usually a conspicuous feature of the disease. In dysphoria, the depression is most intense in the small hours of the morning. In mania, the excitement is often greatest in the early hours of the night; and more or less of periodicity of the most various length of cycle can be detected in all cases of insanity. There are certain cases in which different forms of insanity follow one another in regular series, which is repeated again and again, and to this variety of insanity the names *folie circulaire*, circular insanity, and *folie à double forme* have been given. It is usually described as a period of depression, or melancholia, followed by

a period of excitement approaching, or attaining to, acute mania, from which recovery takes place, to be followed in time by melancholia again, and the cycle is then repeated. The events do not always follow this order, however. Sometimes the excitement precedes the period of depression. Often the period of recovery is not one of complete recovery, but one of mild dementia, and the degree of dementia may be so considerable as to necessitate the permanent detention of the patient in an institution. Then the case becomes one of ordinary dementia, with the periodical outbreaks of excitement which are so common in dementia, and with periods of depression of only slight degree sandwiched between them. In many cases the patient recognises the nature of his malady, and, when he feels it coming on, he voluntarily seeks the protection of an institution, from which he returns, when the attack is over, to resume the business of life. The most difficult and unhappy cases are those in which the degree of the excitement is just insufficient to allow of the certification of the patient, and he remains at large in a state of sub-acute mania, dissipating his property and bringing scandal upon his name, until the period of depression sets in, to plunge him into agonies of remorse.

There is a variety of circular insanity in which the period of depression is replaced by a period of stupor, usually of the resistive type, and to this variety the name of Katatonia has been given.

The symptoms of cyclical insanity at any given time are the symptoms of the particular form of insanity that the patient then exhibits, and the treatment corresponds. The prognosis is very unhopeful. The interval of lucidity or of sanity does not usually become shorter, but the recovery therein becomes less and less

complete, until a definite state of dementia takes its place in the cycle.

The period of the cycle varies much in different cases. In many of the chronic inmates of asylums a periodicity of a few weeks can be recognised in the outbreaks of excitement; but in what would be called *folie circulaire* the intervals may be equal or unequal, the rule being for the period of tranquillity and comparative mental health to be considerably longer than those of depression and excitement, which are approximately equal, and may be one, two, or three months or more in duration.

INSANITY OF FIXED DELUSION

The three kinds of insanity that are next to be described constitute a natural group, for they have certain features in which they resemble each other and differ from all other kinds of insanity. They all belong to that larger class of idiopathic insanity to which no provoking cause can be assigned, and they are distinguished from the other sub-group of this class by presenting, in a fixed or enduring delusion, a predominant outstanding feature to which all the rest of the insanity can be referred. By a fixed delusion is meant, as its name implies, a delusion that endures in much the same form for years; that is never absent from the mind of the patient except when his attention is temporarily distracted from it, that instantly resumes its dominance when the attention is set free, and that even when the patient is attending to other things is not quite absent from his mind, but is merely relegated temporarily to a subordinate position. Of such delusions there are three main kinds, which characterise respectively the three diseases in this sub-group.

PARANOIA

In the first of these, the delusions are called systematised, not a very happy term, but one that is fixed in use.

By a systematised delusion is meant a delusion which, to use the language of modern psychology, constitutes an "apperceptive system." It is an organised body of (false) knowledge, and it differs from other delusions in the fact that it colours the whole life of the patient; it regulates his daily conduct; it provides him with an explanation of all his experiences that are otherwise inexplicable; it is his theory of the cosmos.

For instance, his delusion is that he is influenced by telephones. Whatever he does, and whatever happens to him that is in the least out of the ordinary course, is due to the telephones. He sees a pretty flower, and, forgetful of the regulations in that case made and provided, he plucks it; then he remembers the rule against picking flowers. It was the telephone that made him pick it. Intent upon the beauty of some floral gem, he trips over a grass verge; it was the telephone that made him trip. He sits down to write, but finds his mind confused; telephones again. He plays whist, and revokes; the telephone made him do so. He plays billiards and loses; the telephone kept his balls out of the pockets and put his adversary's in. His nose begins to bleed; the telephones did it. He gets annoyed and throws his book across the room; the telephone prompted him, or possessed him and threw the book for him. He sees two strangers meet and chat on the opposite side of the street; the telephone is talking to them about him, or they are talking to him through the telephone, or the telephone is mixed up with them in some mysterious way.

The precise character of the systematised delusion is very widely different in different cases, but in all there are several features in common. Through every systematised delusion there runs the thread of persecution, which connects them all together in a single well-characterised group. Every systematised delusion is a delusion of persecution. The influence, whatever it be, that acts upon the patient, is always an influence adverse to him. Secondly, the delusion is a fixed delusion; it endures without material change, often without appreciable change, for years and years. Thirdly, it is associated more closely and more conspicuously than any other form of delusion with confusion of thought. Fourthly, more often than any other delusions it is associated with hallucination.

The *character* of the delusion is very various, though, as has been said, the idea of persecution runs through them all. The persecutor may be a specific individual, and in that case may have a real existence or be wholly imaginary. In a certain case, e.g., the patient was annoyed by a man whom he had never seen, but whose presence he felt, whose name was Girardot, and who haunted the lanes and fields about the patient's residence, armed with an apparatus of mirrors and lenses by which he was enabled to see at all times what the patient was doing, and to locate him so accurately that he could pour upon him without fail a stream of electricity, which produced baleful effects. Not infrequently the persecutor is identified as the superintendent of the asylum, or the governor of the gaol, in which the patient has been detained, and who still, by his emissaries, torments the patient, years after the latter has been transferred to other care. They haunt the neighbourhood; they are under the floor, in the

cellars; they are in rooms above, or on the roof; they are in adjoining rooms; every mishap, every inconvenience, every disappointment that happens to the patient is ordered by them. Or the persecutors are not specifically identified, but pervade the community. The people in the streets talk to each other about him; they look at him in meaning ways; if they smile or laugh, it is in contempt or derision of him; if he catches scraps of their conversation, this also has reference to him. He sees two men meet who are total strangers to him; they shake hands, they smile, and ask each other how they do; the shake of the hands is a Masonic grip by which each recognises that the other is in the plot; the smile is an expression of triumph that they have succeeded in their nefarious design against him; the question and answer, while seemingly innocent, really refer in some way to him, and means that he is a blasphemer, a murderer, an adulterer, or what not. In some cases the delusion is of bodily disfigurement; for instance, the nose is too large, is so large as to attract attention, and the universal topic of conversation, wherever the patient appears, is the size of his nose.

Very often the delusion is of being followed about and watched, it may be by the police, but more often by unofficial watchers. Sometimes the vigilant enemy is a single specific individual, sometimes two or more, sometimes a number of unspecified individuals.

Perhaps the commonest of all the forms of persecutory delusion is that of being acted upon by some unseen influence; and usually the latest conspicuous discovery in physics is pressed into the service, and becomes the prosecuting agent. In the early part of the last century, paranoiacs were persecuted by steam-engines; later, the telegraph was the means of their

persecution; then, as successive discoveries were made, electricity, hypnotism, mesmerism, animal magnetism, telephones, the Röntgen rays, and wireless telegraphy were made responsible for their sufferings. The majority still ascribe their persecution to electricity, and the "electrics" constitute the largest class of paranoiacs. But they are assiduous readers of the newspapers, for they see in the daily prints references to themselves in the items of news and in the leading articles; and whenever a new physical discovery is announced, it is appropriated by them as a means of persecution, and the more obscure it is in its nature, the less they are able to understand of the new process, the more it commends itself to them as a persecuting agent. This seems to be the ground upon which electricity is so often selected. Sometimes, however, nothing sufficiently mysterious exists among the known natural agents, and then a new agent is invented to account for the sufferings. Dr. Conolly Norman gives an instance of a patient who ascribed his persecution to a "typhone," and of another whose thoughts were "read by a hypophone and translated into logarithms." A patient complained to me that he was persecuted by "infernal traces mystery"; another was annoyed by "injury stuff like smoke"; and another by microscopical glasses.

While it is not very uncommon for the centre of the persecution to be some bodily peculiarity—the large nose or the deformed mouth, which attracts the attention of bystanders, and sets them talking about it, and nudging each other as the patient goes about the streets—it is more common for the mysterious influence to be exerted upon the mind. Other people read their thoughts, or think their thoughts, or put thoughts into

their minds, or deprive them of the power of thinking, or say or do things through them which they would not say or do of themselves.

Delusions of persecution are always associated with confusion of mind. No doubt with all delusions there is more or less confusion, or the delusion would not continue; but in no case is the confusion of mind so conspicuous and complete as it is in cases of paranoia. The delusion is in no case so clearly defined, so sharply cut, so definite in expression, as it is in the delusions, for instance, of abasement and of exaltation. The confusion is often conspicuous in the very statement of the delusion itself, as in the case of the man who was persecuted by "infernal traces mystery," or when a man is referred to in terms which he cannot repeat, by persons whom he has never seen, under circumstances that he cannot identify; but if the delusion itself appears to be definite, as when the persecution is the utterance of specific expressions by a specified person, a little conversation, a little questioning of the patient, will nearly always elicit a statement which is a mere farrago of nonsense, an unintelligible jumble of words.

Hallucinations are more constant and more prominent in paranoia than in any other variety of insanity. They may be referred to any of the senses, and are by far most frequently auditory, and least often olfactory. Visual hallucinations rank next in frequency to auditory, gustatory come next, but are rare, and the olfactory and those of common sensation rarest of all.

Auditory hallucinations are the most frequent of all, and are of serious import in three ways. In the first place, the "voices" are often minatory, abusive, and objurgatory, and when this is the case they may lead

the patient to retaliate with violence upon some innocent bystander or passer-by to whom he attributes them. In the second place, the "voices" are often mandatory and imperative, or persuasive and urgent. They command or they incite the patient to do things, and the acts thus proposed to him are often objectionable, criminal, or even murderous in character. They are usually resisted and repelled, but if they continue, as they usually do, for a long time, the resolution of the unfortunate patient at last breaks down, and he commits the act to which he has so long been urged. In the third place, the existence of auditory hallucinations gives a very unfavourable colour to the prognosis of any case in which they are well established. This is true, however, in increased degree, of other forms of hallucination. Auditory hallucinations are occasionally heard on one side only. Sometimes the voice is always the same, sometimes two or more voices are heard, and in some cases they argue with one another, and in that case one may abuse and the other defend the patient. The sufferer usually recognises completely at first the unreal character of the voice, and that it is not produced by any external agent; and afterwards, even although he may attribute the voice to bystanders, there is evidently some quality by which he distinguishes it from the voices of real people, for he always speaks of it as "the voice" and "the voices." Deafness is, of course, no bar to the occurrence of auditory hallucinations.

Visual hallucinations are much rarer, upon the whole, than auditory, though they are much commoner as epileptic auræ, which stand on quite a different footing from the hallucinations of paranoia. These are usually quite elaborate, and may consist of faces or figures—

those of delirium tremens have often been described—or sometimes they consist of words or sentences, luminous or not, standing out as if printed upon the surface of whatever the patient is looking at. In such cases the words are usually of the same character as the "voices" in auditory hallucination—that is to say, they are blasphemous or objurgatory or obscene.

Evil tastes and smells are sometimes, but rarely, complained of. The taste is always disagreeable, usually metallic, and the smell offensive. One patient complained to me that he "smelt blood."

How far the frequent sexual delusions of the paranoiac are dependent upon hallucinatory common sensation it is impossible to say, but if they are so dependent, hallucinations of this class would be among the most frequent, for nothing is more common than for female paranoiacs to complain of being raped and outraged in complex and horrible ways, and for male paranoiacs to complain of sodomy and various sexual tamperings being practised upon them.

The *conduct* of the paranoiac is dominated by his delusion. In this is the marked and conspicuous difference between paranoia and mere fixed delusion. In the latter, the patient goes about his work like an ordinary mortal, and refers to his delusion at intervals only, between which there is nothing to distinguish his conduct from that of a sane person. But the delusions of the paranoiac dominate his whole life. They are with him every hour and every minute of the day. They keep him from his work, they interfere with whatever he tries to do. However he is occupied, he feels the electric shocks, he hears the voices abusing him or conspiring against him, he is conscious of the vapours pouring upon him, and under these circumstances he

cannot work, he cannot maintain any steady employment. If we watch him, we see him twitch, start, and jump, as the shocks affect him, or we notice his expectant attitude; we see him absorbed in contemplation of his visions, or we hear him answer and expostulate with his hallucinatory voices. Another thing that prevents him from pursuing his business is the necessity of avoiding his persecutors. To this end, he eschews going out in the daytime; he cannot remain long in one residence; he frequently and suddenly changes his lodging; if he is well-to-do, he travels from country to country to escape from the annoyances, hoping in each to find more efficient police, able to give him protection. But the most important character of the conduct in persecutory delusion is the tendency to violence and to homicide that so often exists. The continuance of the persecution, the futility of all measures taken against it, the refusal of the authorities to interfere, the general neglect of, and disbelief in, his trouble, at last generate a degree of exasperation which prompts, it may be to violence, it may be to murder. When the persecutor is identified with any specific person, the violence is, naturally, directed against that person; but when, as so often happens, no accessible person or no specific individual is identified as the persecutor, then the violence may be directed against anyone, and is usually directed against some person in a prominent position, the avowed motive being "to draw attention to the case." In some cases the hallucinatory voices prompt the patient to commit some deed of violence; he resists for weeks or months, but at last, in a fit of exasperation, his resistance gives way, and he does what he is told. In rare cases, the violence thus instigated may be directed against himself; but, intolerable

as the life of the paranoiac is made by his persecution, he very rarely finds refuge in suicide.

The bodily state of the paranoiac offers nothing remarkable. There is no doubt that they do suffer torments from abnormal sensations of various kinds, but we can never discover any justification for these sensations in an altered bodily process.

The whole frame of mind of the paranoiac usually differs from that of the melancholic. The melancholic often complains of persecution, and pities himself with deep commiseration, but he is not resentful. Often he regards his persecution as deserved, and when he does not, he tries to escape, but never to retaliate. The paranoiac is almost always resentful, and is inclined to retaliate and avenge himself. Formerly I thought the paranoiac was never self-condemnatory, but I have now seen cases in which delusions of persecution by means of a plot, delusions unquestionably paranoiac in character, have been associated with abasement, with conviction of personal unworthiness and sin.

Paranoia is sometimes a sequel to an attack of acute insanity, but often it is an original malady, arising gradually and becoming gradually intensified for months or years before it is recognised. Usually a family history of insanity can be traced, but this is far from invariable. It is an incurable and irrecoverable malady. As age advances, the prominence of the delusion subsides, and in rare cases the patient can be trusted to resume his place among his fellow-men, but such cases are very few indeed. The broad general rule is that paranoia is irrecoverable. Curative treatment there is none. When we find syphilis among the antecedents of the disease, the syphilis should be treated, but we must not expect the treatment to affect the insanity.

The need of restraint in an institution is more imperative in paranoia than in any other form of insanity, and the rule is stringent that no paranoiac should be allowed at large. If he is so allowed, his perpetration of a murder is merely a matter of time, and is certain to take place if time be allowed. Scarcely a week, and never a month, passes in which the newspapers do not report a murder committed by a person suffering from this form of insanity and one who obviously ought to have been placed in an asylum years before.

MEGALOMANIA. SOMATIC DELUSION

These two kinds of insanity may be taken together They are both idiopathic insanities that occur without assignable cause, and both are distinguished by the predominating feature of a fixed delusion. In megalomania the delusion is a delusion of exaltation, in somatic delusion it is a belief in some alteration or infestation of the patient's body. There are, it is true, patients who entertain delusions that their minds are altered and acted upon by others, but these, as far as my experience goes, are paranoiacs. To this variety of insanity belong practically all the kings, queens, emperors, and millionaires who are not general paralytics, and to this also belong the people who have weasels, wolves, or crabs in the stomach, glass legs, no backs to their heads, whose brains have been taken out, and who suffer from other changes of the personality.

The distinguishing feature of the insanity is that the delusion has practically no effect upon conduct. The kings and emperors are content to pass their lives in the most menial occupations, scrubbing floors and carrying coals; the queens and duchesses work con-

tentedly in the laundry; the millionaires see nothing inconsistent with their wealth in holding a horse for a copper, or begging for a bit of tobacco. What incapacity they have for more intelligent employment—and the incapacity is often considerable—they owe to their dementia, and not to their delusion. The delusion is not often prominent. It does not absorb much of the attention of the patient. He does not obtrude it, and make himself a nuisance by worrying about it in season and out of season, as the paranoiac does. He is often rather reticent about it, and has to be questioned and cross-examined before he will confess to it; but once started on the subject, he is usually difficult to stop. In any case, not only does it not influence his conduct, but it does not much affect the rest of his mind. The king and the millionaire do not appear particularly elated by the knowledge of their exalted position or their wealth. The man whose legs are of glass, or whose stomach is tenanted by an unbidden guest, does not worry about his crural fragility or his parasite. The delusion forms a small and unimportant part of his mental life, and he pursues the tenour of his way without regarding it. A large number of the inmates of lunatic asylums exhibit this variety of insanity.

The bodily state exhibits nothing characteristic. The malady is chronic, unchanging, and irrecoverable. The patients remain in the same state of dementia and delusion for the rest of their lives; liable, like other dements, to outbreaks of excitement from time to time; subject to the common ailments of humanity, of one of which, in the fulness of time, they die.

DEMENTIA

Dementia, the type of insanity, is always of the form anoia. Dementia, the disease, is always of the type dementia. It would be better, no doubt, if we could give a third name to the type, and keep the name dementia for the disease. The application of the same name to the disease and the type is confusing, but there need be no confusion if we remember that when the type constitutes the whole of the correlated disorder from which the patient suffers, the type is co-extensive with the disease; but when, as in general paralysis, the type dementia is only part of the correlated disorder, it is a type only, and the disease is more than the insanity.

There are many cases, however, in which dementia constitutes a disease of itself and is correlated with no other disorder, and in these cases the dementia is a kind of insanity.

Clinically we may classify cases of dementia according to the way they begin. A certain number of cases of acute insanity recover, and recover to all appearance completely, and as far as we know permanently. The remainder do not recover. The acuteness, that is to say, the intensity, of the symptoms abates; the active symptoms disappear, more or less completely, and leave the anoia, which has existed throughout the acute stage, as the only outstanding feature of the malady. The case then becomes clinically a case of dementia. In my opinion almost every case of acute insanity that recovers passes through a stage of dementia between the subsidence of the acute symptoms and complete restoration to sanity. As a rule, we are so relieved and so thankful

when the actual symptoms subside and signs of recovery appear that we cease to observe, or cease to interpret our observations correctly. We neglect to notice the anoia that the patient now exhibits, an anoia that may be but mild, and that is of course transitory, and we neglect to notice it because our attention is fixed upon the patient's improvement. We are so intent upon noticing the absence of the symptoms that are gone that we neglect to notice those that are present. Some cases of acute insanity are so transient that the stage of dementia, if it exists, lasts a few hours only and escapes notice on that account. In other cases the stage is prolonged, and we may be for some time in doubt whether it will clear up or not. In many cases it does not clear up, and the patient remains for the rest of his life, which may be long, permanently demented. When the dementia thus follows an attack of acute insanity of any form it is called terminal dementia.

But dementia does not always follow or begin in an attack of acute insanity. It sometimes comes on gradually, and is then known as primary dementia. I am not sure that it is much more justifiable to take as a basis of classification the way a disease begins than to take the way it ends. The former has this advantage over the latter, however, that we usually know, or can find out, how the disease has begun, but we can never be sure during its progress how it is going to end. If, therefore, we adopt the termination as our basis of classification, we cannot be quite sure that we have diagnosed the disease correctly, or given it its proper title of dementia præcox, or what not, until the patient appears on the post-mortem table. This is inconvenient clinically, and I am not sure that the advantage gained by the use of a comparatively new title, unquestionably

fashionable as it is, compensates altogether for the clinical inconvenience. For my part, when I am asked by the friends of my patients the familiar question, "What do you call it, doctor?" I feel reluctant to say, "Wait until he is dead; I cannot tell you until then."

Primary dementia may come on at any time of life. It is frequent in the young, rare in middle life, and not very infrequent in old age. It is called primary, or it may be so called—the name is become unfashionable—because it begins as anoia, continues as anoia, and ends as anoia; that is to say, the enfeeblement and degradation of conduct and mind predominate over more active and positive symptoms, though more positive symptoms are seldom absent. Since primary dementia does not begin in an attack of acute insanity, it comes on gradually; and as it comes on, so it proceeds. In other words, it is a progressive disease, and in this respect it differs from terminal dementia. Dementia that is consequent on an attack of acute insanity may fluctuate and alter for some months, but after some months the patient settles down into a permanent condition in which he remains with little change for the rest of his life. Primary dementia on the contrary is a progressive disease. It is not regularly progressive; it need not be rapidly progressive; for intervals it is apparently stationary; but on the whole, its course is not a level course, but tends downwards, at first more rapidly, afterwards more slowly.

Although, as has been said, primary dementia exhibits few active and positive symptoms, and what active or positive symptoms there are are subordinate features in the case, and are but unimportant incidents in the clinical picture, yet often, it may be said usually, the

anoia is not quite simple, but is complicated by over-action on some lower level. In the faculty of Desire, the sexual desire is often unduly and disagreeably prominent. In young dements, at any rate in young male dements, masturbation is a constant feature. This does not necessarily mean that desire is augmented; it means that self-control is diminished. Desire on the lower middle level is often disordered. The patient is not determinedly suicidal, but he is apt to do impulsively acts of a suicidal character—to throw himself out of window, for instance. On the upper middle level he is altogether deficient, the desire as well as the ability to earn his living and administer his means being absent; and of course the social desires are the first to go.

Will is often disordered in the direction of impulsiveness; sometimes in the direction of increased hesitation, sometimes in the direction of facility.

Self-estimation is usually exaggerated, especially in the early stage and in young people. This is the exaggeration of a normal phase that most young people pass through. When they first begin to feel their feet and realise that they have powers of their own, they overestimate their own importance and their own abilities; and in the primary dementia of young people this overestimate is often still more exaggerated. The opposite condition of self-depreciation is not infrequent, however, and when it exists is accompanied by dysphoria.

In the faculty of objective thought, delusion is not very unusual, and the delusion is often that of suspicion and persecution which so often goes with exaggerated self-importance. The highest level of thought is of course abolished, and on the lowest level hallucinations testify to the great depth that the destructive process has attained.

Feeling, both subjective and objective, shares in the general deterioration. Early in the case there may be euphoria or dysphoria, but at a later stage these are replaced by apathy and indifference. Emotion may at first be excessive on slight provocation, but at length can be evoked with difficulty or not at all.

The primary dement sometimes recovers, and but little trace is left of the disease, but more often it progresses to a certain considerable depth, at which it remains during the lifetime of the patient.

PRIMARY DEMENTIA IN MIDDLE LIFE

Primary dementia in the middle-aged is not a frequent malady, and when cases do present themselves they are often very puzzling. A man in vigorous health and in full business employment finds his capacity failing; he becomes stupid; he loses his grip over his affairs; he forgets important appointments and other matters; he becomes slovenly in dress and address; his letters are rambling, and omit the subject they are meant to refer to; but he has no delusions, his conduct is not bizarre or outrageous. He is merely stupid and incompetent. This is the way that one form of general paralysis begins, and such an alteration in a man of middle age raises a suspicion of general paralysis; but no confirmation of this suspicion is obtained from physical signs, nor from the subsequent progress of the case. The man becomes more stupid. He is obliged to retire from business, and he settles down at home, cared for by his women folk like a child, prematurely and primarily demented.

Primary dementia of middle life is not the kind of insanity characteristic of that time of life, and therefore

is described here as a type, modified by age. Senile dementia, however, is the insanity characteristic of that time of life, and is therefore described as the insanity of old age with the other kinds of insanity characteristic of times of life.

CHAPTER XII

IDIOPATHIC INSANITY CONTINUED

INSANITY FOR WHICH THERE IS AN ASSIGNABLE CAUSAL STRESS

IDIOPATHIC insanity for which a cause can be plausibly assigned is of three kinds, according to the nature of the stress that has operated as a cause. For reasons already stated I do not include in this class insanity that is part of a coexisting bodily disease. Such insanity is symptomatic, and has already been described. In the present class I include those cases only with which no existing bodily disease is correlated. The insanity may, however, have originated in a bodily disease that is past and gone, and is then analogous to the valvular disease of the heart that is left as a substantive disease after the rheumatism that produced it is past and gone. Or it may be that the insanity is like the adherent pericardium that is due to a pericarditis that is past and gone. At no time during the existence of the pericarditis was the pericardium adherent; the adherent pericardium is a sequel to the previous disease. And similarly, it may be that at no time in the course of influenza was the patient insane, but yet the influenza may leave the insanity behind as a sequel.

Insanity due to such direct stresses as the poison of influenza constitutes the first sub-class of those with

which this chapter is concerned. The second sub-class consists of those in which the causal stress that we assign is incidental to the time of life to which the patient has attained, and in the third sub-class the stress is that incidental to the production of offspring, and is confined to the female sex.

IDIOPATHIC INSANITY DUE TO DIRECT STRESS

The chief of these stresses is the long-continued use of alcohol. The poison of alcohol produces by its direct action acute insanity, as has already been described. The long-continued use of alcohol so damages, or may damage, the structure of the brain as to produce chronic insanity, which remains even though the use of alcohol is discontinued. It may be, of course, that a person who is accustomed to exceed in alcohol may present a combination of both types, part of his insanity being due to the alcohol now circulating in his brain, and part to the permanent damage done by previous doses. In such a case, if the alcohol is discontinued, the insanity is always mitigated by the disappearance of that part which is due to the actual presence of alcohol in the brain, and what insanity is left is that which is due to permanent damage. Of this permanent insanity there are two kinds.

In the first kind there is a general degradation of most or all of the faculties of mind, but especially a moral degradation. The habitual drunkard almost inevitably sinks in the social scale. His habits at table become disgusting. His conduct generally deteriorates until his family become ashamed of him and shrink from allowing him to associate with their friends. He seeks companions far below him in social position. He

becomes a liar and a sponge, indifferent to the means by which he gets his drink, so that he gets it. A man or woman of good birth and social position frequents low pot-houses and boozes with low companions. He becomes a byword and a reproach. With this degradation of conduct and mind—he does not recognise his own degradation, and is therefore insane—go usually certain physical symptoms. On first rising in the morning he retches violently; his eyes become watery, his hands tremulous, and sometimes, but not often, he resembles Bardolph in his bottle nose.

The second kind of chronic alcoholic insanity exhibits some of the moral degradation of the first, but these symptoms are swamped and overcome by others—by suspicion, delusion, a peculiar disorder of memory, hallucinations, and various sensory disturbances and motor defects.

Suspicion is usually a prominent feature in alcoholic insanity. The patient believes that his food is poisoned, that his wife is unfaithful, that his children are conspiring against him, that he is to be tortured and destroyed; and, combined as this attitude of mind is with hallucination, it is apt to be confused with paranoia, which it often closely resembles. It is important to discriminate between the two, for the insanity of alcohol is far more improvable than paranoia, and the prognosis therefore much better, and the treatment is different. The diagnosis is not usually difficult, the defect of memory and the motor disturbance of alcoholic insanity being sufficient, apart from the history, to establish the difference.

The delusions are often those of pure suspicion and persecution, such as have been instanced; but there is often a strain of vainglory and boastfulness running

through them in addition. The patient believes himself to be rich, to be a great personage, but at the same time people are conspiring to rob him of his money or his rank. He has not the confident security of the ordinary megalomaniac, the general paralytic, or the man with fixed delusion.

The disorder of memory is usually a prominent feature in alcoholic insanity. There is usually marked defect, and the defect is the same in character as the defect in old age—that is to say, the memory of long-past events is tenacious and faithful, but the current events of daily life are swept out of the memory as soon as they have happened. The patient receives a visit from his wife, who spends an hour with him, and ten minutes after she has gone he has forgotten all about the visit, and vows that she has not been near him. He worries because he has not written a letter, which he has written and delivered to be posted a dozen times or more. He has very little notion of the lapse of time, and if he does remember a recent event, he cannot tell whether it occurred to-day or yesterday, or a week or a month ago. Together with this defect, there is a peculiar delusion of memory which is not so pronounced or so frequent in any other variety of insanity. The patient remembers vividly and in detail events which have never occurred at all. He will describe visits that he thinks he has paid, will repeat conversations that he believes he has taken part in, scenes that he thinks that he has witnessed, none of which have ever taken place at all. It sometimes happens that the imaginary events which he describes, and fully believes that he has witnessed, are assaults upon himself or others, and he then becomes a dangerous person.

Hallucinations occur more constantly in alcoholic

insanity than in any other variety of insanity except paranoia. They are usually aural, sometimes visual, and not infrequently affect the sense of smell or taste. They are always unpleasant and disconcerting, and usually work in with and corroborate the delusions of suspicion. The evil taste or smell that he experiences confirms his opinion of poison in his food. The voices that he hears, the texts that he sees written upon the walls, corroborate the suspicion of persecution to which he is subject.

Of the motor disturbances, which are rarely absent in alcoholic insanity, the chief is tremor, which is usually pronounced. It occurs first and most in the hands, but it subsequently affects the lips and articulatory organs generally. It is present both in rest and during voluntary movement, but is more pronounced in the latter. Following on tremor of the hands comes a peculiar gait, which is neither a reel nor ataxy, but a kind of stringhalt; and the patient wavers in his walk so that his course is not a straight line but an irregular zig-zag. Cramp in the calf of the leg is often frequent and severe in alcoholic insanity, and occasionally convulsions occur in its course. Slight irregularity of the pupils is not uncommon in alcoholic insanity, as in many other morbid states, and the reactions are apt to be sluggish, but they are never absent.

Alcoholic insanity often simulates paranoia, from which it may be distinguished as already described. Its symptoms are often closely similar to those of general paralysis, and there are cases in which the diagnosis cannot be made, and we have to wait for the course of the case to clear up the difficulty. The history is not to be depended upon, for drunkards very often deny their habit, and general paralytics have often been

intemperate. The tremor is closely alike in the two cases. In the early stage of general paralysis it is never so marked as it sometimes is in the early stage of alcoholic insanity; but sometimes in the latter there is little or no tremor. If the peculiar mnemonic delusions of alcoholism are present, their presence is almost decisive, but the delusions of general paralysis often approach them in character. The chief reliance must be placed upon the pupillary reactions. It has been said that these reactions are sometimes lost in alcoholic insanity, but this is not my experience. If either the reaction to light or that to accommodation is lost, or is seriously defective, then I believe that general paralysis may be diagnosed without hesitation. The difficulty is that in the early stage of general paralysis there is sometimes no such sufficient defect in these reactions as to enable us to make a diagnosis, which must then remain in doubt. The importance of clearing up the matter as soon as possible is very great, for general paralysis is almost certainly fatal, while alcoholic insanity is very improvable, and is compatible with considerable duration of life.

Since the various reactions characteristic of syphilis have been discovered, it has been usual to accept a positive reaction as conclusive evidence of general paralysis in a doubtful case. This practice is fallacious. Drunkards are not immune from syphilis, and it may well be that a person who is both syphilitic and a drunkard may suffer from alcoholic insanity but not from general paralysis. Every syphilitic does not become a general paralytic, and this is true whether he is a drunkard or not.

In the treatment of alcoholic insanity, the first thing to be done is to deprive the patient of his alcohol, and

this can only be done by sending him to an institution. It is quite futile to attempt to treat such cases in their own homes, for there they will always find means to obtain their poison. It does not matter what vigilance is exercised, they will endeavour to corrupt their nurses or servants, and they will succeed at last. They are sure to have a secret store bestowed somewhere about the house to which they will get access at times. The only possible chance of completely depriving them is to place them in a lunatic asylum. The first week of their deprivation will be a terrible time for them. They will suffer agonies of depression and misery, will become perhaps riotously maniacal, and will give endless trouble by their false accusations and general perversity. The alcohol need not be absolutely withheld, and by withdrawing it suddenly we may produce an attack of delirium tremens. Sleep is often better obtained if a dose of whiskey in hot milk is given at night; and when the misery becomes very great, the same remedy will give relief. So long as the patient is in the institution, we have him under absolute control, and we need not fear the result of an occasional dose of stimulant. He probably suffers from gastritis, more or less, and this must be treated, especially as it is important in this, as in acute insanity, to feed copiously. Iron and bitter tonics will be found useful, but the chief reliance is to be placed upon deprivation of alcohol, copious feeding, regular hours, and fresh air. In these circumstances the improvement that takes place is often surprising. The patient in a few months becomes so well that it is very difficult to detain him in an institution; and yet, if he is discharged, he will certainly return to his drinking habits and relapse.

SEQUELAR INSANITY

The second direct stress that leaves insanity behind it as a sequel is the poison of specific fever. We have already seen that this is probably an effect in some cases of acute specific fevers occurring in childhood. They appear to arrest the development of the brain, and the child does not advance, or does not much advance, in mental capacity after the attack. In adults an attack of specific fever may be followed by insanity, and though such an event is rare, it does sometimes happen after smallpox, typhoid fever, and perhaps other acute specific diseases. The fever which leaves this result behind it with the greatest frequency is influenza, perhaps because the occurring cases of influenza are far more numerous than those of any other specific fever. Post-influenzal insanity has no constant form or type. It is sometimes acute, sometimes chronic. In the acute type it is usually melancholic, in the chronic it is usually dementia, but I have seen a case with delusions of persecution, indistinguishable from paranoia, follow upon influenza.

INSANITY OF TIMES OF LIFE

The next stress that may be assigned as a cause of insanity is that incident to the time of life at which the patient has arrived. How this may be supposed to act as a stress has already been considered under the causes of insanity. Certain it is that insanity does occur definitely in connection with the time of life at which the patient is, and is often of such constant form and type that we must suppose that the connection is causal.

INSANITY OF CHILDHOOD

In the previous edition of this book I followed authority in saying that insanity, apart from idiocy and less extreme forms of congenital weak-mindedness, is very rare in childhood. Wider experience leads me to give a different opinion. I have now seen many cases of insanity in childhood, cases in which there was no reason to suspect that the insanity was congenital. The cases I have seen have been in two classes, in one of which the insanity comes on about the age from six to eight, and in the other about fifteen.

Children, both boys and girls, well born and well brought up by careful mothers in moral surroundings, sometimes become, about the age of six to eight, incorrigible thieves. They are usually intelligent, and sometimes precociously clever. It is not that they do not understand the moral lessons conveyed to them, but that they are unable to profit by them. They usually deny their thefts, even when the evidence against them is overwhelming; and the mark of this kind of thief is that punishment has no deterrent effect upon them whatever. "I have beaten him," one mother said to me, "until I am tired." They do not usually take much care to escape detection, and they will steal under circumstances in which detection is certain and punishment speedy. They will steal even if the cane is uplifted over them, ready to strike the moment they have completed the theft. Such children occasionally grow up into criminals—stupid, vindictive criminals—who lie and steal, and are guilty of impostures that do not benefit them, of frauds that bear the character of fraud upon their face, criminals who will take more trouble to get a precarious and insufficient living by dishonesty

than it would cost them to earn an honest living by an honourable life. But such cases are very exceptional. The great majority of such children grow out of their dishonesty and develop into honest and honourable men and women.

The second class of children become insane at a later age, usually at about fifteen, and in them the insanity is always in my experience associated with excessively rapid growth. They shoot up in height and they fill out in bulk with extreme rapidity, and children who are thus growing should always be watched with vigilance and their studies interrupted until they have done growing. The form that disorder of conduct takes in these cases is a peculiar one. I have not seen it in girls, but in boys it takes the form of ordering from tradesmen goods that they cannot pay for and have no intention of paying for. One will order a motor-car, another will stay at expensive hotels, live on a royal scale, and depart without paying his bill. A third ordered a magnificent gold watch, and instructed the tradesman of whom he purchased it to place upon it a laudatory inscription stating that it was presented to the boy by his admiring school-fellows. The phase passes away in a few months when bodily growth comes to an end, and the energy drafted off for this purpose is again at the service of the brain.

ADOLESCENT INSANITY

Adolescence is, for reasons stated in a previous chapter, a time of life at which insanity is frequent—perhaps more frequent than at any other. By adolescence I mean from about eighteen to about twenty-five. Any insanity occurring at this time of life is coloured by the mental peculiarities that prevail at this time of life,

but there is no insanity that is peculiar to adolescence. The kinds of insanity most often seen at this early time of life are acute insanity and primary dementia. The stuporose form of acute insanity is rarely seen at any other age.

CLIMACTERIC INSANITY

Not every case of insanity that occurs at the time of the menopause is climacteric insanity. Women at the climacteric are not exempt from the causes that may produce insanity at other times of life, except of course to those incident to child-bearing; and when they become insane from these other causes their insanity is not climacteric insanity. True climacteric insanity has certain specific features by which it may be recognised. It begins as an acute or sub-acute insanity, becoming acute, of gradual onset, and always of melancholic type, associated with suspicion and terror, and with attempts at suicide. The patient is very apt to have delusions of suspicion, as distinguished from delusions of persecution. She thinks her food is poisoned, that something dreadful is going to happen, or has happened; that she has lost all her money, and perhaps been robbed of it. Sometimes the delusions have a sexual colouring. An old maid thinks she has been seduced, she has been unchaste, she is engaged to this man or that, to whom perhaps she has never spoken. There is nothing special in the treatment. The prognosis is not unfavourable, but the duration of the disease is likely to be longer than in the insanities connected with child-bearing. In these we expect recovery to take place, if at all, within a year, and often within six months In the insanity of the climacteric it is unwise to expect recovery under eighteen months or two years.

SENILE INSANITY

Dementia is one of the terminations of life. In the vast majority of cases life is cut short by accident, or by the quasi-accident of bodily disease; but when it goes on until it ceases from pure exhaustion of the quantum of energy that it received at conception, it may pass through dementia on its way to the end. Some degree of dementia, some diminution of the vividness of feeling, of the capacity of thought, of the range and variety of conduct, is the natural and inevitable accompaniment of the decay of the bodily power in old age; and it often happens that the decay of the highest regions of the brain outstrips that of the body, so that the dementia sets in earlier, is more pronounced in degree, and is more irregular in its manifestations than is usual and normal in old age, and is out of proportion to the decay of the bodily capacity. The condition then presented is the clinical condition of senile dementia.

In senile dementia the most conspicuous feature is defect of memory; the most conspicuous fault is the outbreak of ill-temper. The defect of memory is peculiar, and is characterised by the evanescence of the memory of passing experiences while the memories of long-past experiences are not only retained, but are increased in their prominence, in their intensity, and in the frequence with which they are present in consciousness. The first approaches of senility, which are perceptible between forty and fifty, are marked, as has been said, by an inability to recall newly acquired names, whether of persons or of things, and generally by a want of nimbleness in the use of substantives. As age advances, experiences produce impressions that are less and less enduring, and, in the dementia of old age, become so

transient that events are not remembered from hour to hour, and often not from minute to minute. A senile dement will declare that he has not seen for months a person who spoke to him, and whom he recognised and answered, five minutes before he makes the declaration; and no matter how important or impressive the event, its memory is equally evanescent. While he thus forgets with abnormal celerity and completeness current events, he retains with punctual fidelity the memories of experiences that he underwent in youth, and is able to give accurate descriptions of events that happened fifty or sixty or more years ago. Nor is this all; the memories of long-past experiences are not only faithful, often surprisingly and unusually faithful and detailed, but they thrust themselves forward and occupy a much larger share of consciousness than is usual. People in middle life, and normal people in old age, are occupied mainly with the current experiences of their daily life; and the reminiscences of childhood are before the mind but seldom, and for short periods. But in many cases the senile dement lives his childhood over again. He is perpetually maundering about things that happened before his hearers were born, about the events of his school life and his early love affairs, and not very infrequently these memories of bygone experiences take such hold upon him that he actually mistakes the people about him for the companions of his early life. He addresses his grandchildren by the names of his schoolfellows, and takes his daughter for his first sweetheart.

Together with this peculiar defect of memory there is usually in senile dementia an irritability of temper, a petulance and impatience, which reproduce the peculiarities of a spoilt child. If they want a thing,

they must have it on the instant; they cannot wait until it is prepared or until it is fetched; they must have it now, this moment; and if it is not forthcoming they fly into a rage, they stamp, they shout, they swear, and they often offer such feeble violence as they are capable of. Like the child, too, they are easily coaxed into a good humour again; their ill-temper is transient, and its occasion soon forgotten. Another characteristic is the wearisome iteration with which they will repeat the same thing, their defect of memory rendering them oblivious to the frequency of the repetition. Indeed, the repetition of the same story at short intervals to the same person is as common an indication of the advent of senility as is the difficulty of dealing with substantives that has already been mentioned.

INSANITIES OF REPRODUCTION

Insanity of Pregnancy

It is remarkable that although all women are so liable during pregnancy to emotional disturbances, unprovoked "hysterical" laughing and weeping, "longings," caprices of all kinds, and other mental disturbance, yet disturbance to the point of actual insanity is rare in pregnancy. When it does occur, it occurs either about the third month, as an exaggeration of the longings and caprices that normally appear then, or about the sixth month, or later, it comes on gradually as the fœtus grows. The latter variety is the more frequent and the more severe, the first variety sometimes recovering in the later months of pregnancy, while the latter never recovers until after delivery.

The form of the insanity of pregnancy is an acute

or sub-acute insanity of melancholic type, with suicidal inclination. The delusions are often coloured by the condition of the patient, who imagines that she herself or her husband has been unfaithful, or has other delusions in which the husband is concerned, as that she has ruined him.

As already said, when the insanity comes on about the third month after the pregnancy, it may recover before delivery; but when it comes on in the later stages, it never recovers till the child is born. In a minority of cases the birth of the child, whether prematurely or at term, is followed by rapid recovery; in other cases the insanity continues without change; and in yet a third class it undergoes an exacerbation a few days after labour, as if puerperal insanity were added to that of pregnancy. Hence the rule is not to bring on premature labour in the hope of terminating the insanity by that means, but the rule ought by no means to be slavishly adhered to in all cases. In some cases, and especially when the insanity is very acute and severe, it is justifiable, and is followed by speedy recovery.

The treatment of the insanity of pregnancy is that of acute insanity of melancholic type, but with this difference—that since whatever drugs are given to the woman are given to the child in her womb also, the administration of drugs is to be cautious, and is to be minimised. As in other varieties of insanity connected with reproduction, the prognosis is not unfavourable. About three-fourths of the cases recover.

PUERPERAL INSANITY

The puerperium is a common occasion of insanity in women, insanity occurring in about a quarter per

cent. of all confinements, and being responsible for about seven per cent. of all cases of insanity in women. It is most common in primiparæ and within the first week after labour, it is less common in the second week, and after that time it is rare; but insanity occurring within six weeks of labour is called still puerperal, and partakes of the character of puerperal insanity. Should insanity occur after this period, it is the insanity of lactation.

Puerperal insanity is always an acute insanity, and may be of any of the types of that malady that have been described, or of some intermediate grade between two or more of them, but usually it is maniacal-melancholic in character. In addition to the description that has already been given of acute insanity, there are certain characters special to the puerperal variety. The impulsive violence so often seen in acute insanity is, in puerperal insanity, usually directed against the infant, which should be immediately removed to a place of safety. Often, but by no means always, there is a septic element in the disease. The lochia become offensive, the uterus is tender, the temperature is raised, the pulse rapid and weak, the lips are dry and the tongue foul. In such cases the uterus must be examined, and, if necessary, cleaned out, and the usual sanitary precautions taken. In other respects the treatment is that already prescribed for acute insanity.

The treatment is usually successful, perhaps because the patients are always got under treatment early. It is usually necessary to remove the patient to an institution, and here she commonly recovers. The recovery is often interrupted by relapses, sometimes serious, though usually slight, and for this reason, and because the relapse is likely to be much more serious at home

than in an institution, and especially because, even when recovered, the patient ought not for several months to resume marital relations, the stay at the institution ought to be prolonged. The subjects of puerperal insanity often recover with apparent completeness in three months; but they should rarely be allowed to go home before the child is six months old. A rough practical rule is not to discharge the patient until menstruation is re-established; but this will not always work, although the re-establishment of menstruation is often the sign of complete recovery, and a considerable mental improvement occurring at the same time is of excellent augury. But when no improvement accompanies the occurrence of a menstrual period, the prognosis is bad.

Puerperal insanity is remarkable as being the only form of insanity, except acute delirious mania, in which the temperature is raised except from accidental causes.

INSANITY OF LACTATION

This is an insanity of starvation, of exhaustion. It occurs mainly in the later months of suckling, and among women who suckle their babies freely and long, work hard, and are perhaps, in addition, insufficiently fed; and is rare among the well to-do. Agreeably to its causation, it is an acute insanity of melancholic type (which see), and is very amenable to treatment. Fully three-fourths of the cases recover.

PART III

THE LEGAL RELATIONS OF INSANITY

CHAPTER XIII

THE LEGAL RELATIONS OF INSANITY

INSANITY differs from all other diseases in this respect, that the patient may retain all his physical ability, but yet is incapacitated by his disease from being a normal constituent of a social body. The disease always affects his social relations, and diminishes his usefulness as a social unit, and it may make him noxious to the social body to which he belongs—noxious either passively by rendering him a burden on it for his support, or actively by reason that the disorder of his conduct is dangerous to the lives, or harmful to the property, or outrageous to the feelings of his fellows. In addition to this incapacity to take his place as a normal and useful social unit, he usually presents also an incapacity to manage his own life profitably. The disorder of his conduct is of such a nature that it menaces not only the lives, well-being, or comfort of others, but also menaces his own life, either directly, or through the loss or perversion of his means of livelihood. For these reasons, firstly for its own welfare, and secondly for the welfare of the lunatic himself, society has always, and rightly, concerned itself about the treatment of the lunatic in a way that it has never, until very lately, concerned itself about the treatment of those whose illness does not directly affect their conduct.

The first duty and the first necessity of society is to

protect itself; and the element in insanity that first attracted the notice of society was the noxiousness of the lunatic to itself. Early legislation for lunatics was therefore directed exclusively to safeguarding society by locking them up. If the lunatic was not noxious to society he was left alone, and there was scarcely a village in this kingdom that had not its harmless idiot, who was the butt of the children and the recipient of charity from their elders. With the immense development of sympathy and charity that has distinguished the last hundred years above any other period in the history of the human race, a new view is taken of the duty of society to the lunatic, and he is now taken out of the body of society and locked up in an asylum not only when he is noxious to society, but when, and because, he cannot sufficiently safeguard himself from the common ills of life.

Whether to safeguard itself, or whether to safeguard the lunatic, society, through the medium of the law, has provided that he shall be placed and kept under control, and in order that this placing and keeping under control shall be restricted to lunatics and not be improperly applied to sane persons, the law requires certain formalities, which will presently be explained, to be observed. Statute law, however, is necessarily too rigid to adapt itself perfectly to the infinite variability of human affairs, and there are on the one hand certain cases for which it does not provide, and on the other certain cases for which it provides needlessly.

The formalities required for placing a lunatic legally under control necessarily take time; and there are cases in which time cannot be afforded. If a lunatic is at large with arms in his hands and threatening or actually taking the lives of his fellow-citizens, urgent

necessity supersedes the statute law, and the common law, the organised common sense of many generations, authorises us to deal with him in the best way we can, even if we have to shoot him to stop his depredations. Short of shooting him, we may maim him or tie him down, or do anything that seems on the spur of the moment the most effectual and judicious thing to do.

On the other hand, there are many cases for which the law provides needlessly. In strict law it would be necessary for every patient in a nursing home who is delirious from fever, or from the effect of an anæsthetic, to be promptly certified as insane, which he is; but this is never done unless the delirium is very prolonged and becomes the dominant feature in the case. Similarly, there are many general paralytics in whom, towards the end of their malady, the bodily incapacity is by far the most prominent and important feature, and the mental incapacity subsides into relative insignificance. There is no sort of necessity for keeping them under legal control, for they are already sufficiently under control by their bodily incapacity. There are other reasons why it may be inexpedient to place or keep under legal control a lunatic to whom the law in strictness applies. It by no means follows that a person who is legally certifiable as a lunatic ought to be certified, and fortunately the lunacy law is administered by a commission of enlightened men who recognise that what is legally requisite is not always expedient, and who will not enforce the strict provisions of the law if they are satisfied that it is better for the patient that they should not be enforced.

Again, a patient may be insane without being certifiably insane—that is to say, although, by prolonged observation of his conduct, we may be convinced that

his mind is disordered, and that he is no longer fully responsible for his acts, yet we may be unable to describe in words any specific "fact indicating insanity observed at the time of examination," and so to place him under control. Such persons are extremely difficult to deal with; and though they often eventually become certifiable, they contrive, before this stage is reached, to run through large sums of money, often to ruin themselves, and often to commit criminal acts.

But supposing a patient to be certifiably insane, the first questions that have to be decided are whether he may properly be allowed to remain uncertified, whether he should be placed in private care, or whether he should be sent to an institution. These are questions that depend partly upon the nature and degree of the malady, and partly upon the age, wealth, and other circumstances of the patient.

The character of the malady is the most important consideration. It may be stated categorically that every case of acute insanity should be at once placed in an institution, to whatever type the acute insanity conforms, and to whatever variety of insanity it may happen to belong. Every patient with acute insanity is a potential suicide, and suicidal patients can only be prevented from effecting their purpose by asylum treatment. It is only in an institution specially constructed for the purpose that the habit of incessant supervision is maintained, and that the appliances for heating and lighting and ventilation, the staircases, water-closets, bedsteads, and other arrangements are specially constructed with a view to minimise the opportunities for suicide. Moreover, patients who are acutely insane need the presence of a medical attendant always within call, for contingencies requiring instant medical treat-

ment are of frequent occurrence ; and it is obvious that this condition can be secured in an institution only.

For a somewhat similar reason, general paralytics invariably require to be detained in an institution. They are subject, throughout the whole of the first, and often the second stage also, to sudden outbreaks of violence, to deal with which the continued presence of an adequate staff of attendants is necessary, and this abundance of attendants is only obtainable in an institution.

Lastly, all paranoiacs ought to be detained in institutions. All such patients are potential homicides, and scarcely a month passes without the commission of a murder by a patient of this description, who had given abundant evidence beforehand that he ought to be under efficient control.

Patients of these three classes ought always to be treated in institutions, but they are not the only patients for whom institution treatment is necessary. All patients who need much control ought to be in institutions, for only in them can much control be exercised. Patients who are very noisy, or who are very restless, or who are sexually excited, cannot be properly managed in private care.

On the other hand, there are patients who ought not to be sent to institutions if this course can be avoided. Young girls or young lads should be kept out of institutions as long as possible, for the fact of their having been placed under care may tell very seriously against them in future life; quiet dements can very well be treated at home or in private care ; and persons whose insanity is recent, is of a mild and sub-acute form, ought usually to have a trial in appropriate surroundings outside an asylum, before recourse is had to this extreme measure.

The means of the patient form a very important factor in determining whether he shall be sent to an asylum or no. In the case of a poor person, no other alternative is possible, since, apart from the expense of supervision, the mere abstention from work reduces them to a condition of dependence; while wealthy men, who can afford plenty of attendants and an isolated house with large grounds, can very well be treated in their own homes. There are multitudes of patients in pauper asylums who, if they possessed adequate means, might be at large; and there are multitudes of persons at large who, if they were not fortunately in possession of means, would have to seek the shelter of an asylum. It is a very common occurrence for a person to have sufficient intelligence to administer his means capably if he happens to possess any, and yet to have insufficient intelligence to earn his livelihood. If he has means, he may very well live at large, but if he has none, he must be cared for in an institution.

If it is determined that treatment in an institution is unavoidable, or is desirable, the question will often arise whether he should be placed there under a reception order, or whether he should go of his own free will as a voluntary boarder. There are but few cases in which the latter alternative is really the best, though it is often practicable, and sometimes the only practicable course. In such cases the patient must not only be willing to place himself under care, but he must be competent to form a judgment as to the expediency of doing so, and he must be to such an extent of sound mind that, even if it were desirable, it is not possible to make a certificate of lunacy with regard to him. He must be uncertifiable.

Neurologists, who are frequently consulted about

cases of insanity, though it is a subject of which they have no special knowledge, almost invariably advise that the patient should travel, and are particularly fond of recommending a sea voyage. Travelling is, however, almost always detrimental in the early stages of insanity; and a sea voyage is probably the very worst course that could be adopted. As already stated, all cases of acute insanity are potential suicides, and on board ship the opportunity and temptation to suicide are constantly present and constantly obtruded, and effective supervision is almost impossible.

There are four occasions on which a medical practitioner may be brought into contact with the law in dealing with insane persons:—

1. In the placing of an insane person under control.
2. In the keeping of an insane person under control.
3. In connection with the validity of wills and contracts.
4. In connection with responsibility for criminal acts.

The legal formalities necessary for depriving an insane person of the management of himself and his affairs, and for detaining him under care and treatment, differ much in different countries, and in each country in different cases. The procedure is different in England and Wales, in Scotland, and in Ireland.

PLACING UNDER CONTROL

IN ENGLAND AND WALES

The procedure varies in the following circumstances:—

I. According as the patient is a mentally defective person or a lunatic. According to the Lunacy Act, 1890, a lunatic is equivalent to a person of unsound mind; hence the law draws a distinction between a

person who is mentally defective and a person whose mind is unsound. More than this, by the Lunacy Act, 1890, it is enacted that a lunatic means an idiot; but by the Mental Deficiency Act an idiot is one class of mentally defective persons. The practical effect of this double enactment is that an idiot can be placed under control under either Act, but this privilege does not extend to his brother who is an imbecile. The intention of the Government in bringing in the Mental Deficiency Bill was to codify the old law as well as to add to it the new, and the first Bill was drafted accordingly. This Bill had to be dropped, and the subsequent Bill, which is now the Mental Deficiency Act, leaves the old Lunacy Law in force, and is in many respects, of which the enactment with regard to idiots is one, incongruous with the old law. The Mental Deficiency Act applies to those persons only who satisfy the definitions in the Act of the several degrees of mental deficiency, leaving all other classes of the insane under the old law; and instead of one, there are now two central bodies who supervise the working of the Acts relating to the insane. The Commissioners in Lunacy continue their old functions, and the Board of Control, of which the Commissioners are members, administer the law with respect to those who satisfy the definitions of defectives. The arrangement is clumsy, and cannot be permanent, but no doubt it will be years before it can be altered, and in the meantime I must give an account of it as it is.

The following classes of persons are mentally defective within the meaning of the Mental Deficiency Act, 1913:—

(*a*) Idiots; that is to say, persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers;

(*b*) Imbeciles; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so;

(*c*) Feeble-minded persons; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others, or, in the case of children, that they by reason of such defectiveness appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools;

(*d*) Moral imbeciles; that is to say, persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect.

A mentally defective person who comes under any of these definitions may be placed in an institution or under guardianship

(*a*) at the instance of his parent or guardian, if he is an idiot or an imbecile, or at the instance of his parent if, though not an idiot or imbecile, he is under the age of 21; or

(*b*) if in addition to being a defective he is a person

(i) who is found neglected, abandoned, or without visible means of support, or cruelly treated;

(ii) who is found guilty of any criminal offence, or who is ordered or found liable to be ordered to be sent to a certified industrial school;

(iii) who is undergoing imprisonment (except imprisonment under civil process) or penal servitude, or is undergoing detention in a place of detention by order of a court, or in a reformatory or industrial school, or in an inebriate reformatory, or who is detained in an institution for lunatics or a criminal lunatic asylum; or

(iv) who is an habitual drunkard within the meaning of the Inebriates Acts, 1879 to 1900; or

(v) in whose case a certain notice has been given by the local education authority; or

(vi) who is in receipt of poor relief at the time of giving birth to an illegitimate child or when pregnant of such child.

The parent or guardian of a defective who is an idiot or an imbecile, and the parent of a defective who is not an idiot or an imbecile but is under 21, may place the defective in an institution or under guardianship. Two medical certificates are necessary, one of which must be signed by the medical practitioner approved for the purpose by the local authority. In the case of an idiot or an imbecile these are all that is necessary, but in the case of a feeble-minded person or a moral imbecile there must be in addition the signature to both certificates of a judicial authority and a statement by the parent or guardian.

If the defective has been found guilty of a criminal offence, he may be dealt with under an order of the court or of the Secretary of State, but if he has not been convicted and if there is no parent or guardian, or if for any reason the parent or guardian does not act, then

any relative or friend of the defective or any officer of the local authority may obtain an order by a petition to a judicial authority.

The petition must be accompanied by two medical certificates, one of which must be by the approved medical practitioner, and must be accompanied also by a statutory declaration made by the petitioner and at least one other person, stating

(*a*) That the defective is a defective within the meaning of the Act, and to which class of defectives he belongs;

(*b*) That the defective is subject to be dealt with under the Act, and the circumstances that make him so subject; and

(*c*) whether or not a petition under the Act or under the Lunacy Acts has previously been presented, with the date and result; and

(*d*) If the petition is accompanied by a certificate that a medical certificate is impracticable, the reasons that render it impracticable.

It will be seen by comparing these provisions with those set out below as required by the Lunacy Acts, that the differences are that under the Mental Defectives Act the petition must be accompanied by a statutory declaration, and one of the medical certifiers must be approved by the local authority, but neither need be the regular medical attendant of the defective. Under the Lunacy Acts there is no statutory declaration, there are no approved medical certifiers, and as we shall presently see, one medical certificate must be made, if possible, by the regular medical attendant of the patient.

II. When the patient does not come under the description of an idiot or imbecile from birth or from an early age, but has become insane in later life, procedure varies according to the following circumstances:—

1. If the patient is wandering at large, he may be arrested by the police and taken before a justice.

2. If the patient is not wandering at large, but either is not under proper care and control, or is cruelly treated or neglected by the relative or other person having charge of him, then it is the duty of the police and the parish authorities to give information on oath to a justice, who will then take the necessary legal proceedings.

3. In the ordinary case, in which the patient is living at home with his friends, the procedure differs according as he is or is not a pauper, by which is meant according as his means allow of his being treated as a "private" patient and of his support being paid for, or as his malady must be treated at the public expense. It does not mean that he must be a pauper at the time of his certification as a lunatic, but that he becomes one by being certified at the expense of his parish.

If he is in this sense a pauper, the affair is managed by the relieving officer, and the only duty of the medical practitioner is to make a certificate, which is in the same form whether the patient is a pauper or a private patient.

If, however, the patient does not satisfy any of the foregoing descriptions, but is a private patient, not wandering at large and not cruelly treated or neglected, then there are three ways of placing him under control, viz. :—

The Judicial Reception Order,
The Urgency Order, and
The Inquisition.

The first is the ordinary and normal procedure. In order to procure a judicial reception order, a petition must be presented by the nearest relative of the patient to a magistrate specially appointed under the Lunacy Act, 1890; and the petition must be accompanied by a statement, also made by a relative, and by the certificates of two medical practitioners made independently of each other—that is to say, the certificates must be on separate sheets of paper, and the examination made for the purpose of certifying must be made "separately from any other practitioner."

The requirements of the certificates are simple and easily satisfied, but it is seldom that they do not contain some gross defect that could have been avoided by a little ordinary care. The majority of certifying practitioners do not even trouble to refer to all the marginal notes and to see that all are satisfied, nor do they read through the certificate when made, to delete redundant words, and see that it reads grammatically and logically from beginning to end.

In making a certificate, its purpose must be constantly borne in mind. It is to satisfy the mind of the magistrate, a third person, who has never seen and knows nothing of the patient, that the patient is insane and a proper person to be detained under care and treatment as an insane person. Students usually make a certificate as if it needed to contain a diagnosis, or as if it were a clinical description of the case, and accordingly they put among the "facts indicating insanity" their observations on the knee jerks and the pupillary reflexes, and the age and complexion of the patient. If they would only pay attention to the terms of the document, and remember that what is required of them are "facts indicating insanity observed by myself at

the time of examination," they would be saved from many absurdities. A medical certificate of lunacy has by statute the force of a statement made upon oath, and therefore should be drawn with the same punctilious care as an affidavit. The essentials of a good certificate are three :—

1. *It should be sufficient*—that is to say, the facts stated as indications of insanity should be such as to carry to the mind of the magistrate, who has never seen the patient and knows nothing of him, a conviction that the patient is insane. It is not enough for the certifying practitioner to satisfy himself on this point. He must so state his facts as to satisfy the magistrate, and he must remember that the magistrate has not the knowledge of the patient that he himself has. To the doctor, who knows well the circumstances of his patient, it is a fact indicating insanity when the patient deplores his own poverty and ruin, or declares that his wife has deserted him. But to the magistrate, who knows nothing of the patient or his circumstances, these statements do not carry insanity, for, for aught he knows, they may be true. When the " fact indicating insanity " does not carry insanity upon the face of it, it should be supplemented by a statement that it is incorrect, and, if need be, by a further statement that the patient continues to hold it in spite of plain evidence to the contrary. That " he thinks his wife has deserted him " is of itself no evidence of insanity ; but that " he thinks his wife has deserted him, although she was in his room ten minutes ago, and left it for the avowed purpose of posting a letter " is evidence.

2. *The certificate should be definite.* It should give " facts indicating insanity," not opinions which the certifier mistakes for facts. To say that the patient

"feels miserable," that he "believes he has committed the unpardonable sin," that "he thinks he is king of the world" are not observed facts, but inferences from observed facts. What is actually observed is that the patient SAYS this or the other. Whether his mind is in accordance with his statement is a matter of inference, not of observation, and hence the statements in a certificate should be limited to what the patient says and what he does, and should not ramble into what he thinks and feels. Neither has the certifier any business to aver that the patient "cannot remember" this or "will not answer" that. All that he can observe is that the patient DOES not do what is required of him. Whether this defect is defect of ability or defect of will is beyond his power to determine. When you are giving evidence upon oath you must distinguish carefully between what you observe and what you infer, and the observation alone can be legitimately stated as a fact.

3. Lastly, *the certificate must be clearly expressed.* Unless you are a master of English composition, keep your sentences short, and do without qualifying clauses. Above all, avoid entanglements with the personal pronouns. You are not bound to give any "facts communicated by others." If the facts that you yourself observe are sufficient to prove your case, there is no need of facts communicated by others. But if your own facts are weak and need corroboration, then you must reinforce them by communicated facts; and never forget, what is usually forgotten, to give the name, Christian names, address, and description of your informant. By the "description" is not meant, by the way, the complexion, colour of eyes and hair, etc., of your informant, but his rank in life, occupation or profession. Having given these particulars with respect to

your informant, state the information that he gives you in as unambiguous terms as possible, making it clear to whom your pronouns refer. Here is a specimen of the kind of statement that ought to be avoided: "The patient states that he knew Mr. M. in Australia, and that he has often visited him at his house there, and that on one occasion he went into his house and ate the dinner that had been prepared for him." Who was the visitor, whose was the house, and whose the dinner are here left in uncertainty; and it is obvious that, on one reading of the statement, the fact that one man went into his own house and ate his own dinner is alleged as a reason why another man is to be considered insane.

The second method by which a "private" patient may be placed under control is by means of an urgency order, but this method is purely a temporary expedient to obtain immediate control of a patient while the usual order by judicial authority is being obtained. It takes time to obtain a judicial reception order, and there are cases in which it is expedient that a patient should be placed under control at once. For these exceptional cases the urgency order is provided. By its means a patient can be placed under control within an hour or two, and the urgency order will remain in force for seven days, or if within seven days a petition for a judicial reception order is presented, then until that petition is disposed of.

The urgency order must, like the petition, be signed if possible by a near relative of the patient, and in any case the person who signs it must be of full age, and must within two days have seen the patient. It must be accompanied by *one* medical certificate, and by a statement of particulars similar to that which accom-

panies a petition. In addition to the medical certificate, which is in precisely the same form as those which accompany the petition, a further certificate must be given by the medical practitioner in the following form :—

> I certify that it is expedient for the welfare of the said A. B. [*or* for the public safety, *as the case may be*] that the said A. B. should be forthwith placed under care and treatment. My reasons for this conclusion are as follows: [State them].

By this means a case of acute mania can be got under control at once ; a patient who is taken ill in an hotel or a lodging-house, or who arrives insane on board ship, can be immediately taken to a place of safety.

The inquisition is a purely legal procedure, and the only function of the medical practitioner in connection with it is to make an affidavit and to give evidence when called upon. It results in the appointment of a committee of the estate to administer the financial affairs of the patient, and of a committee of the person to direct how the patient shall be cared for, and to be responsible for his personal welfare.

IN SCOTLAND

Idiots and imbeciles under eighteen years of age may be received into training schools in Scotland without even the small formalities which are needed in England and Wales ; but in practice all such cases are sent to such institutions as lunatics, with the usual formalities required for lunatics, in order that thereby the Government grant may be obtained. When above the age of eighteen and when sent to institutions other than training schools, idiots and imbeciles are classed as lunatics, and are subject to the same formalities.

Insane persons whose malady is not confirmed may be placed in private care for a period not exceeding six months, under the certificate to that effect of one medical practitioner.

Insane persons, whether pauper or non-pauper, can be placed in institutions upon an order of the sheriff, which is obtained by petition, accompanied by a statement of particulars and the certificates of two medical practitioners. In the case of a pauper, the petitioner is the inspector of poor.

The English urgency order is paralleled by a certificate of emergency given by a single medical practitioner, and accompanied by a request from the person in the position of petitioner, to the superintendent of the institution, to receive the patient.

By *interdiction* a person who is prodigal or facile—that is, too easily influenced by others—can be restrained from alienating his property without the consent of guardians, called interdictors, who are appointed by the court. This provision has no parallel in English law.

The English inquisition is paralleled in Scotch law by the proceedings of cognition and curatory. The curator appointed by the court administers the estate of the lunatic, but there is no functionary corresponding to the committee of the person.

IN IRELAND

The formalities differ according as the patient is to be taken to a district asylum or to a licensed or unlicensed house.

Pauper patients who are not dangerous require for their admission into a district asylum four documents :—

1. Declaration before a magistrate stating that the patient is insane and destitute, and giving the names, addresses, and descriptions of two relatives of the patient.

2. The certificate of a magistrate and of a clergyman or poor-law guardian that they have personally inquired into the case.

3. One medical certificate.

4. An engagement by the applicant to remove the patient when called upon to do so.

Paying patients who are not dangerous require for admission into a district asylum even more documents than the foregoing, viz. :—

1. A declaration before a magistrate that the patient has not sufficient means to pay for his support in a licensed house, and has no friend who can do so ; and stating how long the patient has been resident in the country.

2. The certificate of a magistrate and a clergyman that the case has been investigated.

3. One medical certificate signed by two medical practitioners.

4. An engagement to remove the patient when called upon to do so, and to pay a specified sum for his support.

5. The sanction of an inspector of lunatics.

As might have been expected, proceedings so cumbrous are in practice never employed, and practically all the patients in the district or public asylums of Ireland are admitted as *dangerous lunatics*, having been apprehended " under circumstances denoting derangement of mind, and an intention of committing an indictable offence," and removed by warrant from gaol to the asylum.

Into *licensed houses, charitable institutions, and single care* in Ireland patients are admitted upon the following documents:—

1. An order by a relative or connection of the lunatic.
2. A medical certificate signed by two medical practitioners.

In cases of urgency the signature of a single practitioner is sufficient, provided that a second be added within fourteen days of the first.

The proceedings under *inquisition* are practically the same as in English law.

In connection with the placing of an insane person under control, and generally in connection with the examination and investigation of cases of insanity, a warning must be given to the medical practitioner never under any circumstances to lend himself to deceit, or subterfuge, or cunning devices, in dealing with his patients. There is a practice, unhappily still too common, of regarding persons who are in any degree of unsound mind as if all the ordinary canons of truth and honesty were dissolved and obliterated in as far as dealings with them are concerned. They are apt to be looked upon as beings to whom everything may be lightly promised, and with whom no promise need be kept; who may be shamelessly deceived without the natural consequences of deceit being incurred. Such practices are utterly inexcusable, and ought on no account whatever to be resorted to. When a patient is to be examined with respect to his state of mind, the only fair and proper course to pursue is to explain to him, if he is sensible enough to understand the explanation, what the object of his visitor is in subjecting

him to examination. And if it becomes necessary to remove him to an institution, the necessity should be pointed out to him, and he should be told where he is going, and why. If he objects, he should be reasoned with, and if reasoning and persuasion are of no avail, he must be told that, if necessary, force will be employed. Of course, if he is not sensible enough to understand, this procedure need not be adopted, but even then, no deceit should be employed to gain a temporary advantage at the certain cost of much subsequent trouble.

KEEPING UNDER CONTROL

The law with regard to the custody of insane persons is extremely stringent, and in these days, when every medical practitioner, while waiting for his practice to grow, seeks to eke out his income by taking a resident patient, it is important that this should be known. The terms of the Lunacy Act, 1890, are as follows :—

> "Subject to the exceptions in this Act mentioned, a person . . . shall not be received or detained as a lunatic . . . as a single patient, unless under a reception order made by a judicial authority," etc.
>
> "Every person who, except under the provisions of this Act, receives or detains a lunatic or alleged lunatic in an institution for lunatics, or for payment takes charge of, receives to board or lodge, or detains a lunatic or alleged lunatic in an unlicensed house, shall be guilty of a misdemeanour, and in the latter case shall also be liable to a penalty not exceeding fifty pounds."
>
> "Except under the provisions of this Act, it shall not be lawful for any person to receive or detain two or more lunatics in any house unless the house is an institution for lunatics or workhouse."
>
> "Any person who receives or detains two or more lunatics in any house except as aforesaid shall be guilty of a misdemeanour."

It is unlawful, therefore, to receive into residence a lunatic or alleged lunatic without a reception order, and only one such patient can be received into a private house even with such an order. It matters not whether a profit is made or no. Last year a medical man was prosecuted for having, for payment, taken charge of his brother, an "alleged lunatic," for having, for payment, received him, and for having, for payment, detained him in an unlicensed house. It was proved that the Master in Lunacy was aware of and approved the arrangement, and it was proved that the income that the medical man received for his brother's keep did not cover the charges for him, but nevertheless the defendant was convicted of the technical offence. The important question, upon which the whole of the section practically hangs, is, What is an "alleged lunatic"? Without presuming to decide a legal point, it may be stated that, as far as can be at present ascertained, an "alleged lunatic" probably means a person who is certifiably insane.

If, therefore, a medical practitioner—or, indeed, anyone else—desires to receive, for payment, a patient who is certifiably insane, it is absolutely necessary that he should refuse to receive the patient except upon a judicial reception order, otherwise he may find himself liable to severe penalties. He must remember, moreover, that when he does receive a patient under a judicial reception order, he is at once responsible for keeping statutory books and sending statutory notices and reports, that he must submit to have his house periodically visited and inspected, and his domestic arrangements criticised and reported upon, and generally that he will be under supervision, and responsible, it may be to more than one authority, for every detail in

the treatment of his patient. The numerous duties of record and report cast upon the person who has charge of a patient in private care are far too lengthy to set out here, and will be found in detail in "Lunacy Law for Medical Men" (Churchill) by the present writer.

TESTAMENTARY AND CONTRACTING CAPACITY

It may happen to any medical practitioner to be called upon to give evidence as to the capacity of a testator to make a valid will. It is not infrequent for the family medical attendant to be called upon to witness a will, and when he does so he should remember that he does not do so as an ordinary witness, whose attestation means merely that the signature of the testator was attached to the will in the witness's presence. When a medical practitioner attests a will, his attestation means, not only that the testator executed the will in his presence, but it means in addition that the testator was at the time of sound and disposing mind, and fit to make a will. The attestation of the medical witness is a certificate of competency given to the testator.

When there is any question of the capacity of a testator, the following are the points to which the examining practitioner should give his consideration :—

1. Does the testator understand the nature of his act ?—that is to say, does he realise that he is making a disposition of his property to take effect after his death ? Does he know whom he is benefiting and whom he is excluding from benefit, and the extent to which his legatees severally benefit under his will ?

2. Does he understand and appreciate the nature and extent of his property ? It is not essential, of course, that he should be acquainted with every detail if

he is a man of large property, but he should have a general knowledge sufficient for the purpose.

3. Does he comprehend and appreciate the nature of the claims to which he ought to give effect ?—that is to say, has he a clear knowledge and recollection of the existence of the persons that he excludes from his will, and of the relation in which they stand to him ? Has he sufficient intelligence to compare the claims of different people upon his bounty ? And lastly, has he any such disorder of mind as shall " poison his affections, pervert his sense of right, or prevent the exercise of his natural faculties " ? Has he such insane delusion as may " influence his will in disposing of his property, and bring about a disposal of it which, if the mind had been sound, would not have been made " ? To vitiate the disposing power, it is not sufficient that the testator should suffer from delusion. Many insane persons suffering from delusions have made wills which have been upheld by the court. To destroy the " disposing mind," the testator must not only suffer from delusions, but the delusion must be of such a character as to influence him in the disposal of his property. Contracting capacity requires the same conditions *mutatis mutandis* as testamentary capacity.

Criminal Responsibility

The third occasion upon which a medical practitioner may be brought into contact with the law in dealing with an insane person is in connection with criminal responsibility. When the plea of insanity is raised in a criminal case, the question left to the jury is, Did the prisoner, at the time the crime was committed, know the nature and quality of the act that he was com-

mitting and that it was wrong? What amount of light the medical witness will be allowed to throw upon this question, supposing that he can throw any, will depend upon the discretion of the judge who tries the case, but the practice nowadays is for the judge to allow a very wide latitude to the medical witness, and for the latter to state his opinion very freely. In doing so he should, however, not allow himself to be influenced by any sentimentality or professional prejudice in favour of the plea of insanity, and there are certain practical precautions which it is his duty to take. In his interviews with the prisoner he should furnish himself with writing materials and take down the prisoner's statements in the prisoner's own words and in the prisoner's presence. He will then be entitled to refer to his notes in the witness-box in order to refresh his memory. He is, of course, entitled to record anything that the prisoner may say about the crime and his share in it, and to ask him *consequential* questions arising out of these statements, but he must most carefully avoid asking the prisoner whether he committed the crime, or putting to him leading questions implying that the crime was committed by him. The matter comes too rarely into the practice of the general practitioner to need explanation at length here, and those who desire to pursue it will find it treated in detail in any book on Criminal Responsibility. (*Clarendon Press.*)

APPENDIX A.

55 Vict. 5.—Sched. D., Form 8.

CERTIFICATE OF MEDICAL PRACTITIONER.

In the matter of *Amos Snooks,*
of (a) *Larranaga Gardens,*
in the (b) *Bloomsbury, W.C.*
(c) _____
an alleged lunatic.

I, the undersigned, *Omicron Pie, M.D.,*
do hereby certify as follows:—

1. I am a person registered under the Medical Act, 1858, and I am in the actual practice of the medical profession.

2. On the *24th* day of *October,* 1901
at (d) *Larranaga Gardens,*
in the (e) *Borough* of *Bloomsbury, W.C.*
(separately from any other practitioner) (f) I personally examined the said *Amos Snooks,*
and came to the conclusion that he is (g) *insane,*

(a) *Insert residence of patient.*

(b) County, city, or borough, *as the case may be.*

(c) *Insert profession or occupation, if any.*

(d) *Insert the place of examination, giving the name of the street, with number or name of house, or should there be no number, the Christian and surname of occupier.*

(e) County, city, or borough, *as the case may be.*

(f) *Omit this where only one certificate is required.*

(g) A lunatic, an idiot, or a person of unsound mind.

Line 2. The number of the house is omitted.

,, 3. "Bloomsbury, W.C.," should be inserted in the previous line. On line 3 the proper description is "County of London," or "County of Middlesex," Bloomsbury being in the former administrative county and in the latter geographical county.

,, 4. The occupation or description of the patient is omitted. As he had retired from business, the entry should have been "of no occupation" or "retired civil servant."

Line 11. Number of house omitted.

,, 12. See remark on line 3. Bloomsbury is not a borough.

,, 15. The word "insane" is not permissible. The patient must be described in the terms of the statute, as a lunatic, an idiot, or a person of unsound mind.

and a proper person to be taken charge of and detained under care and treatment.

3. I formed this conclusion on the following grounds, viz. :—

(*a.*) Facts indicating Insanity observed by myself at the time of examination (*h*), viz. :—*He thinks that he is about to make a voyage round the world in order to collect butterflies. Will not answer simple questions. Suffers from delusions. Cannot remember recent events. Talking loudly and excitedly. Pupils irregular. Knee-jerks absent.*

(*h*) *If the same or other facts were observed previous to the time of the examination, the certifier is at liberty to subjoin them in a separate paragraph.*

(*b.*) Facts communicated by others (*i*), viz. :—*Mr. John W. Snooks informs me that he is very nervous and excitable, and sometimes gets up and knocks at his door at three o'clock in the morning and complains*

(*i*) *The names and Christian names (if known) of informants to be given, with their addresses and descriptions.*

Lines 19 and 20. The statement as to what the patient thinks is not permissible. The examining physician can observe what he says only. Supposing that the patient does entertain the thought in question, it is not in itself evidence of insanity. That the patient *will* not answer simple questions is not a "fact observed," it is an inference. All that is observed is that he *does* not answer.

,, 20 and 21. "Suffers from delusions" is not explicit enough. A delusion should be stated and described. That he *cannot* remember recent events is an inference. All that is observed is that he does not appear to remember. Moreover, the statement is too vague. A specific instance of lapse of memory should be given.

Line 21. The examiner here unjustifiably passes from the indicative mood to the participle. The mere fact of talking loudly and excitedly is no evidence of insanity.

Lines 21 and 22. These particulars are irrelevant and redundant. They are not "facts indicating insanity."

Line 27. The second Christian name of informant should be given in full. His address and description are omitted. It is not made clear who it is that is nervous or excitable, who it is that gets up at three o'clock in the morning, whose door is knocked at, who makes the complaint, nor whose room the people are in.

that people are in his room.

4. The said

appeared to me to be ___ *or not to be* ___ in a fit condition of bodily health to be removed to an asylum, hospital, or licensed house (*k*).

(*k*) *Strike out this clause in case of a patient whose removal is not proposed.*

5. I give this certificate having first read the section of the Act of Parliament printed below.

(Signed) *Omicron Pie,*

(*l*) *Insert full postal address.*

of (*l*) 461, *Brook Street.*

Dated this *fourth* day of *November,* 1901.

LUNACY, 8.

(53 Vict. c. 5, ss. 4, 11 16, 28, 29.)

Any person who makes a wilful misstatement of any material fact in any medical or other certificate, or in any statement or report of bodily or mental condition, under this Act shall be guilty of a misdemeanour.—*Extract from section* 317 *of the Lunacy Act*, 1890.

(SEE ALSO NOTES ON FLY-LEAF.)

Line 33. Name omitted.
,, 34. Redundant words are not deleted.
,, 39. Address insufficient.

Line 40. The certificate is dated more than seven clear days after the date of the examination, and is therefore invalid.

APPENDIX B

LETTERS OF INSANE PERSONS

In many forms and varieties of insanity letters are never written. In other forms the writing of letters forms one of the chief occupations of the patient, and the letters are often very characteristic.

The two varieties in which the writing of letters is most characteristic are general paralysis and paranoia. In sub-acute mania also, the letters written are often very numerous.

In the early stage of general paralysis, the letters are very numerous, and have the characteristics already described. They very often contain orders for the purchase of goods in great quantity. In paranoia, the writing of letters is usually a very prominent symptom, and the letters are often of an extremely insane character when little or no indication of insanity can be obtained from the conversation of the patient. The letters sometimes, but by no means always, contain references to the persecution from which the patient believes that he suffers. They are sometimes neat and tidy, but more often are written anyhow—first a body of writing down the middle of the page, then the margins are utilised, then the writing is crossed, and perhaps recrossed and interlineated. When all the paper has been occupied in this way, ragged scraps are added, old envelopes are

utilised, margins of newspapers, pages torn out of books, bits of paper bags, anything in the shape of paper, and finally the letter is concluded on the flap of the containing envelope, and often on the outside of it also. The handwriting is usually very bad, often illegible, and when deciphered, the confusion of thought so characteristic of paranoia is very conspicuous—more so, usually, than it is in the conversation. Often there are long strings of words from which no meaning whatever can be extracted. Sometimes the manuscript is varied by sketches, or by mysterious symbols and diagrams. The letters are usually written to prominent people with whom the patient has no acquaintance—to the sovereign, to the Secretaries of State, to foreign potentates, to prominent politicians, philanthropists, actors, athletes, to anyone whose name is mentioned in a newspaper.