Abnormal Behavior

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Pitfalls of Our Minds

An Introduction to the Study of Abnormal and Anti-Social Behavior

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INTRODUCTION

UNTIL a comparatively recent period, the individual who showed aberrant behavior traits was looked upon as an outcast from the social group and was made to pay a heavy penalty for being different from his fellows. Within the last two decades, however, a radical change has taken place in the attitude of the community toward the individual who does not conform to its customs and standards of conduct. Two factors have contributed more than any others to bring about this change. The first was the recognition of insanity as a form of disease and the equipment of hospitals for the care of the mentally sick. The second was the development of modern psychology, with its refutation of the old philosophical doctrine of freedom of the will and its conception of the human individual as an organism able to react only within the limits of instinctive, emotional and intellectual equipment.

The scientific knowledge from both these sources was gradually disseminated through the community, and by a slow process of education built up a change in the attitude of the group toward its aberrant members. In place of the old tendency to condemn and punish the psychotic, the psychoneurotic, the social radical, the laggard in school, the delinquent, or any other individual who did not strictly adhere to social standards,

there came a questioning attitude, a conviction that this atypical personality was ill or mentally deranged, and a desire to know the cause of his peculiar behavior.

This new attitude of the community has placed upon certain professional groups increasing responsibilities. It is, of course, to the neuropsychiatrist that the community looks for guidance in the treatment of conduct disorders. But the psychologist has also been called upon to assist in the diagnosis of certain types of behavior difficulties, and, particularly in cases of educational maladjustment, to aid in mapping out a plan for correction. More recently still, the social worker and the probation officer have found some knowledge of human conduct a necessary part of their equipment, since they are constantly being called upon to assist the neuropsychiatrist in becoming acquainted with the environmental situation of the patient who shows some behavior abnormality and to carry out his instructions as to the manipulation of that situation in harmony with the patient's needs.

In view of this general focussing of attention upon the scientific treatment of abnormal and antisocial conduct of all kinds, there is a growing need for literature upon the subject. A knowledge of the causation and treatment of conduct disorders and of methods for their prevention is an essential part of the training of the medical student of to-day. The student of psychology has equal need of this information, while the social worker and

those engaged in probation work must understand the fundamental principles involved in order to be successful. Moreover, the intelligent layman is also anxious to learn something of the matter, since he is constantly being requested to tax himself for the support of clinics in connection with the courts and schools of his city or town, and would like to cast his vote intelligently.

It is not the conviction of the authors of the present volume that they are contributing anything strikingly new and original to the problems of human conduct. It has appeared to them, however, that while there is now a fair accumulation of specialized books and articles in this field, there is a conspicuous absence of any well-rounded account which gives an accurate summary of our data up to date, without over-emphasis upon one aspect at the expense of others. Therefore they have attempted to present a clear and inclusive statement such as seems warranted in the light of our present scientific knowledge and in the test of practical experience. We have undoubtedly reached that stage where students who expect to enter upon some profession which involves the intimate dealing with human individuals need some such general discussion as a classroom text and as a guide to further reading.[1] But it is our hope that

[1] Hence our bibliographies at the end of each chapter will not attempt to include many references which although extraneous to the specific subject matter have indirectly contributed to our general formulations and viewpoint. Instead, we shall take particular pains to limit our bibliographies to books and articles which the student will find extremely valuable as supplementary reading to the text.

this book may serve a broader purpose than this in being sufficiently non-technical to be intelligible to the lay reader who wishes to gain some insight into the subject of conduct disorders.

As Professor E. C. Lindeman said not long ago,[1] the specialist too often fails to pass on to the community the knowledge which has come into his possession by virtue of his technical training and capacity for research. It is a part of his obligation to present to the community sufficient data to enable the average citizen to at least have some understanding of the value of the services which the specialist is capable of rendering if called upon to do so. When the specialist fails to do this, he soon finds himself in a community which has no interest in assisting him in further research. Furthermore, he loses his opportunity to accelerate social progress by not creating a demand for what he has to offer to the welfare of the group. It is our hope that this book may serve in some degree to form a link between the specialist in the field of human conduct and the community members who are eager to know a little of what he has discovered. In this way, we may be able to feel the satisfaction which comes from constructive effort, for in so far as the community understands such problems as delinquency, etc., in like measure will it be prepared to further those movements which look toward correction and prevention.

THE AUTHORS

[1] In his address at the National Conference of Social Work at Providence last June.

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PITFALLS OF OUR MINDS

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HUMAN behavior is the outcome of an infinite complexity of interacting factors. The conduct of an individual could only be completely intelligible if we possessed a full knowledge of his inherited tendencies, his instinctive and emotional equipment, his intellectual capacities, his general physical condition, etc. In addition to this information, we should also have to obtain a detailed life history of the individual, in order to understand the various habits and inhibitions which had been built up on the foundations of his physical, intellectual and emotional endowments. The most difficult subject which we should have to study in our search for an understanding of human behavior, is probably that of the instinctive and emotional life, yet in the final analysis we should undoubtedly find that these factors outweighed all others in the causation of the conduct of an individual, so that we should be well repaid for our effort.

From the academic standpoint, the study of the instincts and emotions is rendered obscure by the

difficulty with which experimental data are obtainable. Thorndike, Watson, McDougall and many others have spent much time in research for the purpose of determining the number and nature of instinctive and emotional reactions which are innate in the human individual as distinguished from those which are acquired during the early life history. The term instinct is, of course, by definition to be accurately applied only to those mechanisms which are known to be innate and inherited,[1] but at the present time there is some controversy as to whether some of the so-called instinctive tendencies are really instincts in the true sense at all, or if they are not rather woven into the mental makeup at some time after birth by the forces of the physical and social environment into which the infant is born.

In view of all the data accumulated up to the present, we may well leave this academic discussion concerning the instincts without going into details, and for practical purposes enumerate the principal instinctive and emotional activities as follows:

1. The instinctive tendency to seek food and the feeling of hunger.

2. The instinctive tendency to flee from the

[1] An instinct may be briefly defined as a native tendency to reaction which involves the whole or considerable part of the organism. It is a mechanism for responding to external stimuli, yet this response is dependent also upon the condition of the organism. (For example, a nest of eggs will not call forth the response of sitting unless the hen is "broody.") Instinctive reactions are unlearned, but are capable of a great deal of modification by learning.

dangerous situation and the emotion of fear.

3. The instinctive tendency to fight and the emotion of anger.

4. The reproductive or sexual instincts and emotions.

5. The parental instincts and emotions.

6. The gregarious tendencies (the impulse to act like the other members of the group) or the instincts and emotions of the herd.

7. The innate tendency to manipulation of objects present in the environment and the feeling of curiosity.

8. The instinctive and emotional activities which are included under the term play.

It is generally agreed that the tendencies included in this list are a part of the native equipment of the new-born infant, and that they manifest themselves without previous experience and training. They are not acquired characteristics; as Thorndike expresses it, they are part of the " original nature of man." Watson, to be sure, would question the existence of a parental instinct, and would consider parental behavior to be an acquired mode of reaction, but the majority of psychologists would disagree with him, so that we are justified in leaving it on our list despite his opinion. Thorndike, while agreeing to the parental instincts, would rule out play, but the consensus of opinion would include it as we do.

McDougall and some other workers in this field would add to the category of instincts and emotions given above three other sets:

1. The instinct of repulsion and the emotion of disgust.

2. The instinct of self-abasement or subjection and the emotion of negative self-feeling.

3. The instinct of self-display or self-assertion and the emotion of positive self-feeling or elation.

From the viewpoint of our study, these are relatively of less importance than the others which we have enumerated, so that we shall not enter into the controversy regarding them nor describe them in detail.

Of the various instinctive and emotional tendencies, it may be generally stated that from their relatively simple and rudimentary manifestations in the early life of the child, they gradually grow into more complex activities. Originally called forth by only one or two stimuli, as the child's experience broadens the number of stimuli which become attached to any instinctive and emotional response increases. Inhibitions and modifications are gradually built up, and substitute reactions replace the primitive ones which it becomes necessary to repress. In time, the emotional tone which accompanies these substitute reactions becomes almost as intense as that which accompanied the original response. These principles, abstruse when set forth as generalizations, become clear enough when described in connection with the development of the specific instincts and emotions.

The food-getting instinct, for example, is the first to manifest itself in the life of the individual. The infant comes into the world with this mechan-

ism ready to function, and aside from breathing and the other vegetative functions of the organism, it is the earliest activity which appears. In its primary stages it consists simply of a sucking reflex, for which the only stimulus necessary is contact with the mother's breast. Gradually other things become an adequate stimulus for this reflex, such as the sight of the mother unfastening her dress, or the presentation of the bottle (in place of contact with the nipple), in cases in which the infant is not breast-fed. Later, it is necessary to replace the sucking activity with other quite different responses, such as eating and drinking. In due season, these latter reaction-patterns replace the earlier sucking reflex almost entirely, so that it is repressed in favor of these more elaborate activities except when we visit the soda fountain or upon other suitable occasions.

As for the economic and sociological aspects of the food-getting activities of man, they are manifold. Hunting, fishing, agriculture, and the system of barter and exchange, with all its modern elaborations, originated in the necessity of obtaining food. The feeling of hunger was so powerful a motive in the life of primitive man that it even played a part in the molding of his religious rites and ceremonies. The primitive conception of God was in harmony with man's own emotions and desires, therefore he pictured his deities as demanding sacrifices in the form of food. Even to-day the strength of the hunger motive is evident in the attitude of the conquered European

countries toward their more prosperous victors. The necessity of obtaining food from the former enemy proved stronger than hatred, and hastened the resumption of commercial relations more than anything else.

Aside from hunger, fear and rage are the next earliest emotions which appear in the life of the child. Here, too, the rule of development is from the simple to the complex. Watson's observations on infants indicate that there are only two types of stimuli which evoke fear reactions in early infancy, namely, the sudden removal of support and a loud sound. The response to these fear stimuli consists of a catching of the breath, random clutching with the hands, closing the eyes, and in some cases crying. Fear of other things than these, as fear of the dark, of animals, etc., develops in the child as a result of experience, Watson discovered in the course of his laboratory work. Almost anything can become a fear stimulus in the life of the individual if his experiences are such as to make it so. As the child grows older, his activities in response to these stimuli become more elaborate and more effectual. When he is able to walk, his reaction to the terrifying situation is that of running away from it. Since this is the most biologically useful of the early activities accompanying fear, in that it assists in the preservation of the organism, McDougall and others usually speak of the instinct of flight in connection with the emotion of fear.

Anger produces opposite activities to those of

fear. In anger, the reactions of the individual are aggressive rather than avoiding. Watson found that the original anger-producing stimulus is hampering the movements of the infant, whereupon the child cries, moves its arms violently and kicks. Later, of course, anger is aroused by many other stimuli, and the response becomes more forceful as the strength of the individual increases and new resources are acquired. The traditional instinctive activity accompanying anger is fighting.

In the social history of mankind, fear has probably been a more influential motive than anger. The taboo control of primitive groups was based almost entirely upon fear. Religion, in its earliest stages, had its genesis in this emotion. Primitive man had a spiritistic interpretation of all phenomena which he did not understand, and his desire to propitiate these spirit forces was born of terror. The laws and religious beliefs which grew out of the primitive taboos and superstitions were no less free from this element. Modern society still depends to a large extent upon fear control. Fear of punishment was for a long time the only motive utilized in controlling the criminal passions of mankind.

Fear has played an important part in social progress in other ways. The fear of destruction has prompted the manipulation of the environment to make it more suited to men's needs. But although it has thus been an incentive to human progress, it has also held in check the inventive genius of mankind, since group conservatism has

often been slow to appreciate new departures from the customary ways and methods, and the inventor has more than once suffered ridicule or actual punishment at the hands of his fellows.

As the anger and fear reactions develop in the life of the individual, they tend to become ambivalent to each other, in that one may readily change into the other. The original fearful response to a given situation, and the initial impulse to flee may be replaced by attempts to master the difficult situation. Similarly, aggressive behavior may be abandoned, if the odds appear to be too great, in favor of fear and flight.

Whether the individual responds to dangerous stimuli by fear reactions or by aggressive behavior is in part due to minute variations in the situation, and in part is dependent upon the physiological condition and previous experience. The child who is born with some organic deficiency is apt to be fearful in attitude because of the feeling of inferiority which his biological insufficiency naturally induces. This sense of inferiority is increased or decreased according to the treatment which the child receives at the hands of parents and other associates. If parents and teachers prove critical of all his efforts, the feeling of inferiority is deepened and there is a tendency to become afraid in all difficult situations. On the other hand, if parents and teachers encourage wisely, the feeling of inferiority may be somewhat overcome and the child may learn to attempt to master the difficulties which he meets.

Very often the feeling of inferiority carries with it its own antidote, for there is a tendency to attempt to rid oneself of this unpleasant feeling by making every effort to demonstrate one's superiority over one's fellows and over environmental difficulties. The ambivalent quality of fear and anger readily permits the building up of this compensatory mechanism. The individual compensates for his fearfulness and sense of inferiority by the development of a superimposed aggressive attitude. This psychological trait has been described in detail by Adler as the feeling of inferiority and the compensatory "will to power." The will to power may become so strong in an individual as to dominate the behavior almost entirely. It is frequently seen in individuals who are in authority in political, educational or industrial fields, being manifest not only in their struggles to obtain such positions, but also in their attitude toward their subordinates and even toward those who have been instrumental in securing them their authority.

Under extreme stress of circumstances, however, these compensatory functions tend to break down and the individual reverts to a type of conduct in which there is complete fear control. Popular observation has voiced this in the saying that the bully is a coward at heart. It was best demonstrated in many of the war neuroses, in which the fear of impending danger could no longer be repressed, and the reaction became such as to insure the individual's removal to a safer place.

The instincts and emotions which serve the ends of racial continuance are quite as powerful as those which tend to preserve the individual. We have only recently learned that the sex instincts and emotions are present in the life of the infant, and that they undergo as many changes and modifications as hunger or fear before they reach their final biological expression in the life of the adult. Watson found activities which were obviously the forerunners of the love activities of later life in the infants studied in his laboratory. He describes the responses to such stimuli as stroking the skin, gentle tickling, etc., as smiling, gurgling and cooing, and an extension of the arms which is a faint beginning of the adult embrace to grow out of it. As the child grows older, the number of stimuli evoking erotic responses increases, and the child turns to one love-object after another, until it reaches its final fixation on the opposite sex at adolescence. Arrested development of this activity results in the fixing of the love-life at one of the infantile levels, and is frequently a cause of the sex perversions and abnormalities which sometimes appear in the adult. Freud's study of the polymorphous-perverse tendencies of the child's sex life offers a thorough treatment of this subject.

The sexual instincts and emotions have played an important part in the cultural history of the race. Social customs and religious observances have always united to enforce the repression of the sex life at its biological level to a great extent, permitting its operation only within certain sanctioned

limits. Many of the primitive taboos grew up in the attempt to subordinate the sexual desires of the individual to the demands of the group. The energy thus prevented from taking its natural outlet found substitute expressions in reinforcing the activities of individuals along other lines. In those gifted with special abilities, the repressed sexual cravings found expression in the arts. Musical rhythm, picture-making, dancing, folk-lore, all received a strong impetus from repressed erotic desires which found a partial fulfilment in these vicarious activities. Modern art and literature offer no less a means of gratification for repressed sexuality.

While repression of the sex tendencies has thus been of some advantage to the race in that it subserved the interests of art and culture, it is only fair to admit that in the life of the individual it has sometimes proven injurious. From mere day-dreaming and fantasy-weaving to incapacitating neuroses, the repressed sexual desires may impair the physical and mental efficiency of those who lack special abilities that would enable them to sublimate their cravings along more useful lines. Many anti-social traits, from mere perversion of the natural biological instinct of sex to conversion of its energy into pathological lying and stealing or into sadistic outbreaks which sometimes end in murder, may be traced to abnormal development of this instinct or to its failure to find normal or sublimated expressions.

The parental activities are by their very nature

closely connected with the reproductive instincts. Home-building grew out of the necessity of providing shelter for the mate and the child. As the infancy period increased in length, and the offspring needed the protection of its parents for a longer period of time, so the parental emotions became stronger and deeper. The parental instinct is naturally stronger in the mother than in the father, because her associations with the child are more intimate than his. It is by its very character, one of the latest instincts to appear, yet it may be seen in the girl child who cares for a baby brother or sister, or in the boy who assumes a protecting attitude toward one of his younger and weaker playmates.

The parental instincts and emotions lead the individual to make endless sacrifices for the sake of his children. These sacrifices are facilitated by the very nature of the instinct. The parent unconsciously identifies himself with the child, longing to see fulfilled through it the hopes and aspirations which he failed to achieve in his own life. This identification with the child is useful in so far as it causes the parent to subserve personal interests to those of the offspring. It is detrimental when the parent forgets that the child has a separate individuality of its own and attempts to interfere with the natural development of its personality. Therefore, although this self-identification of the parent is advantageous in infancy and early childhood, it is often handicapping at adolescence, when the child should be per-

mitted to work out its own vocational interests, friendships and emotional attachments.

There is indeed no other single factor which has so much influence on the development of the personality as the parental environment. On the basis of the attitude of the parents, the child models not only his reactions to them but to the rest of the world. The father who assumes a dominating attitude toward the child may inspire a fearful attitude, or he may cause the development of an antagonism not only to himself but to all forms of authority, so that the child's attitude toward the school, the church, and the whole social organization may come to be decidedly negativistic. On the other hand, the father who is too tender with his daughters may develop in them a fixation on himself which will prevent the transference of their love impulses at the proper time for mating, or will cause them to select a mate possessing traits like the father's regardless of suitability in other respects. So, too, the mother who lavishes an undue amount of love and caresses on her son binds him to her with ties which prevent a normal functioning of his mating activities in later years. Too much maternal affection is harmful to both sons and daughters in another respect, in that it is liable to prevent the development of self-reliance and render them unfit to meet the situations of adult life upon their own initiative and responsibility.

The wise parent is called upon to check the emotions that would prompt him to love his chil-

dren too intensely, or to manifest his affection in ways that protect the child for the present moment but leave him more open to injury at some later date when he is confronted with situations that call for training in independent judgment and self-reliance. Moreover, the parent must forego the joy of seeing his children accomplish those things which he hoped to do himself, and permit them to seek out for themselves the vocations and avocations to which they are best adapted. These are the real sacrifices imposed by the fufilment of parental duties.

The herd impulse is the desire to be with one's fellows, to act and even to think as they do. One of the chief causes of unhappiness is the feeling that one is set apart from one's companions by some peculiar characteristic. It is to the desire to conform to the group standards that we owe obedience to social laws and customs as much as to fear. Exclusion from the group has long been an accepted mode of punishment for those who transgress its laws, and solitary confinement has long been considered one of the most severe penalties which the group could inflict on the criminal.

Although gregariousness has been of much importance in the history of the race in this fashion, in other ways it has tended to impede progress by suppressing individual differences and forcing the genius to conform to the group average. Not only were criminal tendencies suppressed by the group, but creative tendencies were also regarded with suspicion because they deviated from the average

and implied a change or modification of social customs and traditions. The great leaders of religion and science were alike persecuted because they roused the hostility of the herd by reason of their deviation from the mass.

The development of the hand in the higher primates and in man has been accompanied by an instinctive tendency to handle the objects of the environment, to twist them into new shapes and to put different objects together to form others. This manipulative tendency is apparent in the infant. Watson finds that from the 150th day on children begin to reach for, play with and manipulate objects. He also states that there are marked individual differences in the materials selected, the length of time that any type of material will be utilized, and in the early constructive habits which will develop in various infants. One child of 18 months will work with blocks by the hour, building a neat wall, with one color always facing her. Another child cannot be made to play with blocks at all, but will voluntarily play with twigs and sticks for long periods of time. Watson suggests that a careful observation and record of the natural manipulative activities manifested in early childhood might possibly prove of value for purposes of vocational advice to the individual in later years.

The emotional impulse back of the manipulative activities is curiosity.[1] It was the manipulative

[1] With many authors, *curiosity* is considered the instinct, and the emotion is called *wonder*. We consider

activity acting in the service of curiosity which was the source of the earliest inventions of mankind, and it is a more complex expression of this instinct which has produced the mechanical miracles of modern civilisation. The desire to discover new principles and new methods of control is the spirit of scientific research. The physical and chemical knowledge which has aided man in obtaining control of many environmental forces, and the development of modern scientific medicine which has given him power over disease, are also the outgrowth of the workings of curiosity.

Whether play can be placed among the category of instincts as a separate entity is perhaps open to question. Thorndike says the same original tendency of manipulation is at the root of both the useful activity of work and the activity of play which is not specifically useful. He holds to the view that there is no definite play instinct in the original nature of man, but that the manifestation of any of the original tendencies may be grouped as play activities when they appear without serving a utilitarian end. Woodworth describes the instinctive activities of man as of two types, those which have to do with the preservation of life and those which have no survival value but are connected rather with the joy of living. These latter activities have a play value.

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the terms instinct of manipulation and emotion of curiosity to be more descriptive of what actually exists. We certainly have a feeling of curiosity about things, but our satisfaction of this feeling depends upon activities of a manipulative nature, to a large extent.

Woodworth believes that in addition to these general play activities, which may only be a useless expression of various innate tendencies, as Thorndike intimates, there is a definite group of play instincts. He refers to the kicking and throwing the arms about that is characteristic of the well-rested baby as the first manifestation of the play instinct. These movements appear to be random, and do not involve manipulation; their only purpose is in giving personal satisfaction. These original play activities probably appear in response to internal stimuli; they tend to disappear during fatigue. Certain of these random movements, such as drumming the floor with his heels, become habitual play habits during the first year or so of the child's life. Later, the play impulse becomes connected with external stimuli and adapts to its purposes other activities such as manipulation, etc., until finally the gregarious types of play are developed in the form of games in which two or more individuals participate. This elaboration of the first simple play response is similar to the acquirement of new fears in addition to the original ones under the influence of various experiences.

Many play activities have been considered by observers as a repetition of racial activities. The boy who goes hunting and fishing, for example, is repeating the story of his ancestors, except that activities which were useful to them from the standpoint of survival are merely contributing to the personal joy of living in his case. At the same time that play recapitulates ancestral experience,

it provides practice for the serious duties of life. The girl playing with her doll is not only mothering it as mothers have their children from time immemorial; she is also developing tendencies which will be useful when she actually becomes a mother herself.

A characteristic of play which must not be overlooked is its employment of make-believe. The surplus energies of the child naturally tend to run over into such activities as hunting, fighting, homemaking, etc., But the child's environment seldom offers opportunity for the actual carrying out of these activities. Instead of building a hut, he is obliged to content himself with a blanket stretched across two chairs. Or his gun is a toy one, and his steed a rocking horse. Thus a part of the child's play is left to the exercise of his imagination, by which he is forced to compensate for the deficiencies of his environment for the satisfaction of his play instinct.

The ability to compensate for deficiencies in the environmental situation by means of the imagination is found in connection with other impulses than that of play, and ranges all the way from idle day dreaming to organized artistic or literary effort. The fulfilment of many of the instinctive desires must often be by means of this fantasy mechanism, since social requirements enforce the repression of the original manifestations of such impulses as sex and anger except in certain prescribed situations. The energy which is prevented from finding expression along its natural motor

paths flows over into other channels. It may find an outlet in various overt activities which become infused with an affective tone such as accompanies the inhibited instinctive act in its original expression. This process is known as the sublimation of the instinctive and emotional cravings, and has already been referred to in describing the transmutation of sexual cravings into artistic endeavor, etc.

In other instances, the individual may seek satisfaction for his repressed desires by means of day-dreaming and imagination which never goes over into overt expression in any useful activity such as artistic or literary composition. This type of wish-fulfilment may involve a flight from reality, in which the actual external situation is distorted or replaced by fictitious creations more in harmony with the desires of the personality. This flight from reality is seen in its extreme form in the mental mechanisms of psychoneurotics and in some of the delusional and hallucinatory experiences of the psychotics. It is probable that some form of the flight from reality exists in the mental mechanisms of most people. The wife who refuses to see her husband's waning interest, the man who insists that he can play tennis better than the other fellow and that he was beaten by an unlucky accident, the workman who believes his discharge was due to personal enmity on the part of his employer rather than his own inefficiency, are common illustrations. It may be that this type of flight from reality is a protective mechanism.

It is quite possible that were the individual to visualize himself with all his limitations as clearly at all times as he does in those rare moments of self-revelation and self-appraisal which occasionally come to most of us, he would soon lose the courage to " carry on " in the business of life.

The source of the flight from reality is the desire to avoid pain and achieve pleasure. Biologically, the expression of the instinctive tendencies gives pleasure to the organism while the thwarting of the instinctive desires causes pain. The individual soon learns, however, that while the biological expression of the instinctive tendencies may give an initial feeling of satisfaction and well-being, the associations of the group may be such that painful consequences will ensue. In order to escape the unpleasantness either of complete inhibition or painful after-effects, he takes refuge in some form of substitute activity or sublimation or in the flight from reality by means of his imagination.

It must be reiterated that the above discussion of the instincts and emotions should not be regarded as final in any sense, but should only be taken as an entirely inadequate introduction to the subject. The student should undertake a great deal of supplementary reading along this line, in order to formulate his own conclusions. Many authors separate curiosity from the instinct of manipulation and class it as an instinct in itself. It is our opinion at the present time that these two impulses are inextricably interwoven. Before we can be sure of our ground at this point we need

further studies in infant psychology to round out the work already begun by Watson. It is left to the student to argue the debated points in the light of further reading.

In any case, the instinctive and emotional tendencies which we have described are by far the most universal and powerful motives of human conduct, and are most frequently concerned in the causation of abnormal and anti-social behavior. We shall find in our study of concrete cases that disordered conduct can often be traced to the abnormal development or perverted expression of some of these tendencies or to conflicts between two or more instinctive tendencies or emotional cravings. It must be remembered that these tendencies do not function separately, but rather in antagonism to or reinforcement of one another. It is obvious that in situations of a nature to rouse both fear and anger one mode of response must be suppressed in favor of the other. It is impossible to flee and to fight at the same time. Fear is also inhibitory to sexual expressions to a marked degree. Again, in civil wars, the fighting activity triumphs over gregariousness. To cite an example more intimately related to our general theme, the abnormal will to power which makes a parent cruel to a child is wholly incompatible with the parental instincts and emotions which we would expect to govern such a relationship.

On the other hand, many of the complex activities of man are the result of the synchronous operation of two or more of these instinctive and

emotional tendencies. If we analyze such an activity as homebuilding we shall find an interaction of the mating and parental instincts plus fear (in the desire for shelter and protection against the hostile forces of the environment) and manipulative activities. In that ordinary social activity the dance, there is opportunity for the exercise of play and gregariousness and of sublimated sexual impulses. In war, the instincts and emotions of the herd hold sway, together with fear and anger in an ambivalent relationship in which first one and then the other finds expression in overt action. The fear of group destruction is a powerful incentive in rousing the instinct to fight. A more remote motive in war is that of food-getting in its economic aspects. Economists and sociologists have repeatedly stated that scarcity of food supply is one of the causes of war. To turn again to an illustration nearer our general subject, stealing may be prompted in the case of a girl both by the desire to possess beautiful clothing wherewith to attract men and satisfy the erotic impulses and by the desire to be as well dressed as her companions, since to be different from them is not in harmony with the gregarious nature.

The study of the emotional and instinctive reactions of the individual is not an easy matter for other reasons than those already considered. Many of these motives are unconscious, and may appear in behavior only in a disguised form. We have already given incidental examples of this. The feeling of inferiority and compensatory will

to power to which we have referred previously is an exceptionally clear illustration. This mechanism is built up in the early character formation and personality development and is not at all a conscious motive in the life of the individual.

Perhaps a certain boy is of delicate physique and is unable to master his companions on the playground. This breeds a feeling of inferiority toward them and a longing to surpass them. Now if this same boy happens to possess a keen intelligence which makes it easy for him to outshine these same schoolmates in the classroom, he is going to find a satisfaction in achievement along the lines of scholarship out of all proportion to normal boyish ambition. Indeed, these emotional reactions may continue into adult life and furnish an incentive for the choice of some intellectual profession as a life work. Undoubtedly he will never recognize this as one of the motives determining his selection of a vocation (unless it is sometime explained to him) but will be sure his reasons were such entirely commendable ones as scientific curiosity or capacity to render service.

Another illustration of the unconscious operation of instinctive and emotional motives is found in the cases of war neuroses already mentioned in another connection. In many of these the primitive fear of death masqueraded as " shell shock." The sufferers were quite sincere in their protestations of illness and incapacity. There had been a " conversion downwards " of the emotional blocking into physical symptoms, and the resulting

paralyses, loss of speech, etc., which seemed entirely irrelevant to the emotional life, were in reality an expression of its deepest trends.

The substitution of language expression for overt action when this is deliberately inhibited or impossible offers a wide variety of guises for the instinctive and emotional impulses which are thus turned aside from their original motor outlets. The young woman bereft of her sweetheart was actuated by other than artistic interest and literary skill when she wrote:

" You are not very far from me,
Though mile on mile may stretch between;
Across the lands that intervene
I joy in your dear company.

" The red line of the sunset sky,
The moonlight on the crannied tower,
The piercing of the silent hour
Suddenly, by a night-bird's cry,

" Eternally with me abide,
In changing beauty; and their fire
Thrills through me with the old desire,
Feeling your presence at my side."

This was fortunately not written in the idea of producing poetry of literary merit. It was simply an expression for pent-up emotions which could no longer find an outlet in lover's caresses and kisses. It furnishes an excellent example of the scope which language expression offers to the affective

life. The modern politician who attacks his opponent through the press is also an excellent illustration of this, as he converts his pugnacious impulses into language form.

The unconscious nature of the instinctive and emotional impulses and their appearance in disguised activities, is dependent on the mechanisms of repression and sublimation. These mechanisms have been referred to frequently, and by context their meaning should have become fairly clear. They are not merely convenient terms utilized by the pschoanalysts; they are actual functions apparent in the patterns of human behavior.

Repression of an instinctive and emotional impulse occurs when it is antagonistic to the demands of society. The innate gregariousness of the individual impels him to conform to group standards and to inhibit activities which are not in harmony with these. When to the inhibition of the overt expression of an impulse is added a refusal to recognize its existence it is repressed or barred out of the field of consciousness. Relegation to the unconscious is usually accorded to those impulses which in the light of our social heritage have come to have an immoral or unethical connotation. For example, a conscientious husband would repress an interest in some other woman than his wife because society expects monogamy and censures any other relationship. Similarly, the good soldier would never admit even to himself that he felt any fear as he faced the enemy, because the group has only contempt for the coward.

Repression may also take place when a situation arises in which reality is too painful to be accepted by the personality. When it becomes impossible to satisfy intense emotional cravings because of environmental deprivation the feeling-tone thus created is often so unpleasant that the individual seeks to be rid of it by banishing his desires from the field of consciousness and forgetting their existence. Thus the young man who finds his sweetheart unresponsive may succeed in convincing himself that he does not love her anyway.

The mechanism of sublimation depends on what Watson describes as the capacity for diffusion which is one of the qualities of emotional activities. There is apparently a natural tendency for the emotional energy of the organism to diffuse into other channels when the natural original motor outlet is blocked for any reason. The conversion of this suppressed energy into vicarious activities is known as the process of sublimation in psychoanalytic terminology. We have already given many incidental examples of this mechanism. To add another we might continue our account of the young man described in the preceding paragraph, who turns the repressed affective energy away from his erstwhile sweetheart into channels of work, and redoubles his endeavors along vocational lines. Working hard and fast is a common and fairly effective way of utilizing the energy roused by the love object, and is recognized as a fairly successful method of recovering from an unfortunate love affair. This recovery is evidently ac-

complished by the processes of repression and sublimation.

In addition to the many sublimated outlets for repressed desires, the unconscious impulses of the instinctive and emotional life find a means of expression in dreams. In the dream the individual realizes the longings which are denied fulfilment in his waking hours. This is most easily seen in the case of a small child who is refused a baseball outfit with which he might satisfy his play instincts. At night he dreams of playing ball with a bat, mit, and suit which are facsimiles of those which he coveted in the shop window.

Many dreams, particularly of adults, are not such direct and simple expressions of the unconscious desires of the personality, although they are very often wish fulfilments along this line. Just as certain impulses which are open to social censure are repressed from the waking thoughts, so they are also refused admission to consciousness even in the dream life, except when they make their appearance in disguised forms. The disguises employed by the unconscious wishes of the affective nature in order to find expression in dreams are ingenious and elaborate. Very often all the figures and activities involved in a whole dream or series of dreams are simply symbolic of the unconscious longings of the instinctive and emotional life which have been sternly repressed from consciousness.

Through the study of the dream life and the interpretation of its symbols we arrive at a knowledge of the unconscious motives underlying

behavior. This is one of the essentials of the psychoanalytic method, and is often of much assistance in discovering the causes of abnormal conduct in cases which have previously remained enigmatic. In spite of the importance which it thus assumes, the psychology of dreams and their symbolisms is far too involved to receive presentation within the scope of this chapter. The interested reader should study it from the original sources in the works of Freud and Maeder, where it has received masterly treatment. For the present purpose, we must content ourselves with the statement that the dream reflects in symbolic form the hopes and fears which play a dominant part in the unconscious affective life of the individual, and which become the underlying motives of behavior which would otherwise appear obscure.

SUPPLEMENTARY READINGS

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Chapter II

EMOTIONAL CONFLICTS IN THE CAUSATION OF CONDUCT DISORDERS

Instinctive and emotional cravings a frequent source of misconduct.
Sex perversions as a cause of anti-social behavior; typical case.
Indirect connection of the sex instincts with pathological lying and stealing.
Case of a woman who stole in order to retain her lover's affection.
A case in which fear proved to be the motive underlying crime.
The feeling of inferiority as a cause of anti-social conduct; the western desperado.
Dissatisfaction with the self for having failed to live up to social ideas as a basis for erratic behavior, and a case illustrating this principle.
Cases which show the origin of conduct disorders in the family situation and conflicts caused thereby.
Adolescent conflicts as a source of malbehavior; the adolescent longing for independence.
The case of Mary Brown as an example of diverse forms of behavior produced by the same emotional conflicts.
Mary's development of sex perversions.
Mary's use of drugs as a relief from emotional conflict.
A language expression of Mary's emotions.
The outcome in Mary's case.
Necessity of furnishing substitute outlets to replace delinquent conduct.

IN trying to analyze the causes of abnormal and anti-social behavior, we shall find that there are innumerable ways in which the emo-

tional and instinctive cravings of the individual, when not satisfied in the natural biological fashion, can operate to produce various conduct disorders. Freudian psychology has shown that the dynamic force back of human activity is the search for gratification of the primordial desires of the organism, and that in one way or another a certain amount of satisfaction for these fundamental longings must be obtained. Modern social organization makes it impossible for the innate instinctive and emotional tendencies to find their original expression in such ways as fighting, running away, or entering into sexual relationships with every one who arouses erotic feelings. The ideals of the group demand that the individual restrain the impulse to strike the person who arouses him to momentary anger; they require that fear be suppressed, and courage and fortitude be shown under difficulties; they insist upon definite limitations of sex activity.

In making these demands upon the individual, the group is insuring its own survival and welfare. In war, for example, the individual overcomes the greatest fear of all, the dread of destruction, and willingly lays down his life for the community. The social standards are not entirely disadvantageous to the individual, however, for they make it possible for men to live together in a harmonious fashion which would be impossible were each member of the group to disregard the rights and privileges of his fellow-members and consider only his own feelings and desires. In the final analysis,

therefore, the sacrifices of the individual are prompted by his own gregariousness, which makes him want to be with and be approved by his fellows. From this point of view, we can only see in the repression of individualistic tendencies the interaction of antagonistic motives innate within the personality, in which sometimes one motive and sometimes another passes over into overt action.

What usually happens in the case of these conflicting emotions, is that the socially disapproved mode of behavior is repressed in the form in which it would meet with censure, but finds some substitute outlet or "sublimation." Sometimes these vicarious expressions are themselves antisocial. There are numerous studies which show how the repressed sex desires find some gratification in erotic fantasies and daydreams, in love poems and love songs, in psychoneurotic symptoms, or in actual biological perversions of the instinct. It is in the last mentioned, of course, that they fall within the classification of conduct disorders, and as such need some further description.

Case 1

We might cite in this connection the case of a man who had been widowed, had not remarried, and had failed to find an adequate normal outlet for his sexual cravings. He lacked sufficient intelligence to find a socially adapted sublimated outlet of his sex energy. (The psychometric examination showed that he was below average intelligence.[1]) He was not of the im-

[1] The measurement of the intellectual capacities and their relation to conduct disorders will be described in

aginative type which can find satisfaction in erotic fantasies and daydreams, nor was he sufficiently neurotic to develop a psychoneurosis based on his sex repressions. Instead, he sought a means of gratification of his sex desires in a perverted fashion, by means of committing sodomy on various members of his own sex. Having once begun to obtain satisfaction in this abnormal fashion, he began to go to all lengths to secure it. His favorite method was to induce some boy of 10 or 12 to accompany him to a secluded spot, and secure the child's submission to his perverted practice by threats of mutilation. There was one boy who finally became his constant partner, being thoroughly terrified, and living too near to be able to avoid his tyrant. When this boy was about 15 years of age, he came into the hands of the Society for Prevention of Cruelty to Children, and was sent to a summer camp.

Soon after the boy was sent away, the Society began receiving anonymous letters about him, followed by telephone calls from a man who gave his name as "McCarthy," and whose one inquiry was whether the boy had been returned to his home. On being answered in the negative, the so-called "McCarthy" would demand that this be done immediately. His refusal to give an address of his own, and certain remarks which he made to the effect that the boy had a habit of carrying on degenerate practices, aroused suspicion. The boy was brought back from camp, and the story of his victimization by a man whom he knew was elicited. The police were put on the trail of the man whom the boy accused, and following him to a telephone booth found that he was the mysterious

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Chapter III, and the student is referred to that chapter in regard to the meaning of the term "psychometric examination."

" McCarthy " who had manifested such interest in the boy's whereabouts. Investigation of the case revealed some evidence pointing to his connection with the murder of a boy which had occurred several years previously. The body of this child had been found mutilated in the same fashion as the so-called " McCarthy " habitually threatened his victims, and there were other circumstances sufficient to warrant suspicion although the evidence was not conclusive. " McCarthy " was sent from court to Bellevue Hospital Psychopathic Ward for observation. He was not definitely psychotic; he was simply one of those constitutionally inferior personalities whose mental dullness and emotional peculiarities prevent them from finding a socially adapted outlet for their activities.

To the average person, the details of such a case as this are shockingly revolting. Yet we must know of the existence of these perverted tendencies if we are to guard against their development and expression. The individual who takes such methods of gratification is a menace to the happiness of others than himself, and it is particularly unfortunate that so many perverts practice their abnormalities upon children. This is often done because the child can be terrified into keeping secret what has occurred. With our new understanding of the emotional life, we cannot censure these perverts too severely, but on the other hand it is essential that their existence be recognized and that they be prevented from building up in the youth with whom they come in contact habits similar to their own.

The sex instinct is less directly involved in cer-

tain other types of misconduct, particularly in stealing and pathological lying. Healy has described innumerable cases in which stealing in children was associated with sex behavior. He cites cases in which sex curiosity was satisfied by information furnished by some childish companion, who at the same time initiated his pupil into lying and stealing. Even if the sex conversations or practices are broken off with the original friendship, the habit of lying and stealing often persists for a much longer period, and becomes the occasion of much juvenile delinquency. This subject has been so amply treated by Dr. Healy in several of his books that it is unnecessary to continue its discussion in detail. The points to be remembered are the necessity for seeking for such an explanation in cases of juvenile lying and stealing, and for eradicating the habits thus formed. Sometimes the latter is accomplished by the child's realization of the process of habit-formation which he has undergone; sometimes it is only necessary to satisfy remaining elements of curiosity so that his thoughts will no longer revert to the bad companion and his influences; sometimes a substitute activity can be made to replace the delinquency. There can be no prescribed general rule; each case involves an individual with a personality and experience peculiarly his own, and must be dealt with from this point of view.

Women will often revert to stealing if this is demanded of them by the man who is the object of their affections. The case of Jane Grey is well

illustrative of this. A girl of 27 who had been working for eight years as a maid, and whose reputation for virtuous conduct and honesty was excellent, she finally fell in love with a man who induced her to live with him as his wife, promising marriage at a future date. At his instigation, she stole from three different families with whom she had been employed, only to be rewarded by having her lover desert her and marry another woman. Jane was a girl of fairly normal intelligence; her habits had been good; she was not of a particularly unstable make-up. Her conduct was motivated by the age-old sex longing of the woman to please the man she loved. After his marriage to another girl, Jane became remorseful and bitter against him, and confessed the whole story.

The rôle of sex in the etiology of conduct disorders has been recognized in its full implications by many students in this field. The manner in which the individual goaded by fear can be driven to abnormal and anti-social behavior has not been so well appreciated. The ragged street urchin who steals from the vendor's wagon rather than return empty-handed to the cruel parent is a familiar figure in the movies, but this conception is not so far from real life, after all. The fear motive is equally well shown in the following case, and could be duplicated in others:

CASE 2

A young man of 25, of average intelligence, and without psychotic traits or evidence of other abnormal

make-up is sent to the hospital for mental examination. He is charged with forgery, but aside from the fact that he has always been rather irresponsible in his attitude to his mother and that she found him rather difficult to manage, his previous record bears scrutiny very well. This sudden breaking into crime in a serious fashion after a history of harmonious married life and a clear work record led the court to request observation of the patient for some form of mental disease, but as stated above he was found to be entirely sane.

At the age of 19 he had contracted syphilis. He had received treatment for this but there always remains a fear lest the cure be not complete in the minds of those who have suffered from this disease. More recently, the patient had received treatment for an intestinal abscess due to gonorrhœa. He had not possessed sufficient money to pay for this treatment, and had forged a check in order to secure the necessary funds for this purpose. When one considers the degree of dread which venereal infection usually creates in the person who has any knowledge of its effects, it is not to be wondered at that the patient succumbed to his overwhelming anxiety, and allowed himself to be persuaded to take the solution which a forged check offered. The suggestion, as a matter of fact, originated with a fellow employee, who as treasurer of the company offered to cover up the matter after cashing the check, his only stipulation being that the sum should be large enough for him to receive his share. It may seem surprising that the patient did not seek treatment for his disease at one of the free clinics, but when one recollects that those who are suffering from venereal infection are usually morbidly afraid of being discovered, and that the charity clinic

is less secretive concerning its records, this, too, becomes clear.

At the present time we have paid less attention to the fear motive than to almost any other in our attempt to understand anti-social conduct. We shall probably find many forms of this motive operating to produce delinquency once our attention is turned to this possibility. We have already learned a great deal along this line, but we have yet to understand fully its more complicated aspects, such as its operation in connection with the sex life, etc., in reference to abnormal behavior.

Although fear in its open expression has not been given full recognition as a factor in the causation of anti-social behavior, the feeling of inferiority (which after all may be conceived to have its origin in the fear aroused by a sense of inability to cope with one's fellows and one's environment), and its compensatory will to power has been credited with causing misconduct in many cases. A striking example was given by Dr. Frankwood Williams not long ago,[1] and may well be quoted here.

It is the story of a western desperado, who had terrorized the country, and whose exploits were famous over a broad territory. When finally captured, instead of the imposing mass of brawn and muscle which the stories of his deeds would have led one to expect, there was brought to the

[1] In an address at the National Conference of Social Work, June, 1922.

jail a puny little man, insignificant in both size and bearing. The psychiatrist, by virtue of his insight into mental mechanisms, was soon able to obtain a light on this strange phenomenon. The boyhood history of the desperado was that of the undersized boy, who was tormented by his fellows until he longed for some method of evidencing his superiority. Out of the fear that he might always find himself thus at the mercy of others was bred the desire to have them at his mercy, in order to attain the certainty of his own ability to command the situation. And so he chose the career of a terrorizing bandit in order to satisfy this irrepressible desire.

Another motive underlying certain conduct disorders, is the dissatisfaction with the self caused by the failure to live up to the ideals which are woven into the life of the individual by reason of his susceptibility to the influence of social traditions. At bottom, of course, this implies that some other motive has been satisfied at the expense of the gregarious tendency which is an innate part of the personality. The relation of this dissatisfaction, which is productive of restlessness and erratic behavior, to actual misdemeanors is shown in the following case:

CASE 3

A young man of 21 was brought to the hospital by his father, who complained that his son had undergone such a noticeable change in the past few years that he felt convinced he was suffering from some mental de-

rangement. The boy had been in college in Montreal, when an adventurous impulse led him to join the army at the age of 17. He soon found that the army life was one of hardship and restrictions rather than romance, and his disobedience of rules, etc., soon led to his receiving a dishonorable discharge on account of his bad record. Later, when the war came about, and the boy desired to enlist in the service of his country, he found his patriotic spirit of no avail in the face of that old dishonorable discharge. Thenceforward dated his actual misconduct. He began to go out late nights, and when his father commanded that he be in by midnight, he simply left home altogether. He then found difficulty in supporting himself, and returned home to steal things which he pawned, thinking to return them when he should find a job. He finally did get work as a chauffer, for a time, but was located by his family, who coaxed him to enter the hospital for observation.

This boy was of average intelligence, and had good insight into his personality make-up. He frankly admitted that he had been spoiled by his parents, and that he had been unable to remain self-supporting as he had planned. The real source of his trouble was revealed by contrasting the truth concerning his army experience with his own story of this part of his career. At one time he would tell extravagant tales of having been overseas. He finally admitted that he had been in the army but did not get across, but he shrank from the voluntary confession of his discharge, and his whole attitude toward the situation showed that his feeling of having failed to do the thing which group emotion demanded was the biggest

part of his difficulties. That this should be the case is not strange when we recall how great a pressure was exerted by the group to instil a powerful feeling of patriotism into its members.

Perhaps the most frequent source of emotional disturbances leading to conduct disorders is found in the relationship of the individual to the parents and other members of his family. We find case after case in which antagonism to the father or mother, the brother or sister, lies at the root of anti-social behavior.

Case 4

Take the case of Tommy B, a boy of 11 years, who was brought to the hospital for observation with a record of stealing, retardation in school, truancy, and uncontrollable episodes of excitement when he would jump up and down and scream wildly. It must be stated at the outset that Tommy was a neurotic child, and hence more susceptible to emotional conflicts than an individual with a better balanced nervous system. Tom's troubles began in an antagonism between himself and his older sister. He tells a rambling story of their relations as follows: " My oldest sister is awful mean. She is mean to my other sister and she is mean to me. She took my other sister's fellow away from her and went out with him herself. When she got a box of candy from anyone the big fat slob ate it all herself. She wouldn't give me the little tiniest piece. She hated me and said she wished I would get runned over and I did. I never would have been runned over if she hadn't wished it on me."

The being " runned over " to which Tommy referred occurred when he was struck by an auto at the age of 8, causing a hernia. With a childish interpretation of cause and effect similar to that of primitive peoples, who attribute the cause of any phenomenon to anything which becomes associated with it and work out systems of magic and religious superstitions on these false premises, Tommy ascribed his accident to the wish of his sister. This mental process of his was not much different from the savage's fear of the " death-wish " and his belief in its efficacy when pronounced upon him.

" My sister said she wished I'd break my neck," Tommy's story continued, " and right after that I had a fall. I hate her. She was always being mean to me."

Whether or not he believed implicitly in his sister's wishes being the real cause of his troubles, there is no doubt of the fact that he returned her dislike with interest, and began plotting ways and means of " getting even " with her. He began to " hook " money from her, and taught his other brothers and sisters to help him. Besides taking money and candy, he attempted to steal a liberty bond from her. Gradually he began to extend his depredations from the property of his sister to stealing from other people. He began to play truant from school and to take things from the push carts and street stands. Along with this development of the situation, went a tendency to be troublesome in school. His teachers found that the only method of control was petting him and showing him affection; harshness only aggravated his naughtiness. This, of course, is also attributable to his antagonism to his

sister, which was transferred to his teacher when her behavior became such as to remind him of his sister's attitude.

These minor delinquencies of Tommy's finally got him into court, whence he was sent to a clinic for observation. The psychiatrist in charge of this clinic attempted to use fear as a form of therapy, and threatened Tommy with being beheaded if he did not take the medicine given him and behave himself properly in general. To this fear motive Tommy reacted in as over-exaggerated a manner as he had to his sister. He now refused to go to school, was afraid of other boys and would not play with them; he became obsessed with the idea that a fat man from whom he had once stolen was after him, and the sight of a fat man was sufficient to bring on an attack of weeping and excitement. In this condition, he was brought to the hospital for observation and treatment.

At the hospital, his conduct approximated its usual type as far as the circumscribed environment of the ward would permit. Tommy would steal candy from the other children, and if harsh discipline seemed to threaten, would become excited, stubborn, and unmanageable. He refused to talk with the male physicians, because they frightened him "with their deep voices," as he expressed it to the psychologist, who was a woman and who became his confidante, because he did not fear her and because her attitude never became such as to remind him of his sister and rouse the antagonism connected with her. It is not to be supposed, however, that the full understanding of Tommy's emotional reactions was easy to acquire. The boy, although not mentally defective, was below average intelligence and in the beginning showed little insight into his condition or little realization of its

origin. The real story came out by means of dream analysis, which proved to be an easy matter in his case, as his dreams were still at times on the childish level of simple and direct wish-fulfilments without any of the distortion and symbolism which requires an involved analysis.

One of Tommy's dreams ran as follows: He dreamed that he was watching a submarine full of people among whom he distinguished his sister. As it came up out of the water, he fired at it, " bang! " and it sank with all its occupants including his sister. When asked if he felt frightened or sorry, he said that on the contrary he was glad. Then he went on to explain that he hated his sister, anyway, and finally gave the complete story as recounted above.

The family situation and its rôle in the life of the individual is often revealed in some such indirect way as this. It is seldom recognized by the individual as the direct origin of his difficulties, although he usually includes at some point in his story as he recounts his life history a tale of dislike and disharmony within the family circle. This is often casually mentioned, although sometimes the person will voluntarily make the statement that the father or mother or someone else in the family is to be blamed for his behavior. More often this has to be ascertained by asking the patient about his relations with various members of his family, or by searching his dreams for a clue to his misconduct, etc.

The lack of sufficient parental affection is often the starting point for anti-social behavior. The

girl who receives little understanding and love in the home is apt to seek for it elsewhere, with grave consequences. Annie B's history well illustrates this statement:

CASE 5

At the age of 12 she was the household drudge. Her mother got her up at 5 o'clock in the morning to do the work. Whenever the mother went anywhere, Annie was left at home to mind the baby, while her sister, who was about Annie's age, but was a sickly child, was taken with the mother. As Annie grew up conditions did not improve for her. She was always obliged to work, and was never permitted to bring her playmates and friends to her home. When she was only 16 she ran away from home with a man named Jack, with whom she lived for a time, until rescued by the ———— Neighborhood Association. The word " rescued " is used advisedly in this connection, for Jack had been trying to coerce the girl into becoming an inmate of a disorderly house, promising her $50 a week if she would consent to this arrangement. She was taken away from this man and brought to court, from whence she was consigned to the care of the Protestant Big Sisters.

Annie's experience with Jack had developed bad habits in her, so that she was not found to be an easy charge. She constantly picked up men on the street, a habit which does not seem peculiar in view of the fact that she had never been permitted to bring friends to her home and must always have made her friends in this fashion or at least have met them away from the house. Finally she went to live with a man named Fred S. with whom she had become acquainted in this

fashion. When she was about to have a child by this man, she presented herself at the S—— Hospital, claiming that she was married but that her husband had deserted her. When the baby was a little more than a week old, it was found dead in the hospital nursery under circumstances which roused suspicions concerning its death. Annie could not be induced to admit any guilt in the matter, however. A year later, she returned to the same hospital once more about to give birth to a child. After the birth of this second baby, she began to act rather queerly, and in view of her previous history on the ward, it was thought best to transfer her to the psychopathic service of Bellevue Hospital for observation.

At Bellevue, Annie laid no claim to being married, but said that this was her second illegitimate child. She explained that she had planned to marry its father, but that he was " no good " and she had decided not to do so. Her story ran that even while she was pregnant, he would do no work, but depended upon her efforts to support both him and herself. Her conduct on the ward was entirely normal. She had a friendly attitude toward the other patients, and manifested proper maternal solicitude for her child. She showed no symptoms of mental disease or mental defect, although her intelligence according to the rating of the psychometric examination was somewhat below average. To all appearances her search for an object for her affection had finally resolved itself into love for her child. She was therefore discharged into the care of a social service worker whose task it was to find work for her in order that she might support herself and her baby. Up to date, no further difficulties have been reported.

There are more unwanted children in the world than we suppose. In hospital clinics we realize this keenly when parents bring children who are fairly intelligent in the hope of getting them adjudged feeble-minded and sent to an institution for mental defectives. Sometimes the child in question has sufficient insight into the situation to realize that its parents are anxious to dispose of it. Then it becomes so terrified that its condition may closely simulate mental deficiency or some type of mental disorder for the time being.

Case 6

One day a girl named Fannie D. was brought to the mental clinic by a cousin who claimed she was mentally deficient and requested commitment papers to an institution for the feeble-minded. Fannie did not appear stupid; she would not talk to the doctors, but only begged to be taken back home to her mother. Her school record did not harmonize with this extreme stupidity, so that mental disorder was suspected rather than simple mental defect, and the cousin was asked to leave Fannie at the hospital until her coöperation could be secured for psychiatric and psychometric examinations.

On the ward, Fannie showed some symptoms characteristic of the mental disease known as dementia praecox. She sat by herself, did not mingle with the other patients, and her one response to all remarks addressed to her was a mumbled "I want my mother." It was a long time before she could be induced to coöperate on the psychological examination. One day, however, a new approach was made to ob-

tain her coöperation by explaining to her that the quickest way to get home was to do her best on this test. After this was repeatedly told her, Fannie finally consented to go into the examining room, and pulled herself together sufficiently to answer certain parts of the psychometric examination in a way that would have been supposedly impossible from the impression given by her conduct on the ward. She was assured that the rating on this examination, although not exceedingly high, was good enough to preclude the possibility of her being sent to an institution for mental defectives. Upon receiving this information, Fannie became more animated, and was finally induced little by little to admit that she had refused to talk to anyone because she was afraid that anything she might say would be used against her to prove that she was either "crazy or foolish." Her mother was sent for, and Fannie was sent home with her with orders to report back to the clinic occasionally in order that the home situation might be kept under supervision for a time. As she came back to the clinic, she gradually lost her furtive expression, and became coöperative and trustful with the doctors. Her whole difficulty had been simply the reaction to the excessive terror of finding herself unwanted at home.

While in Fannie's case the feeling of being a burden to her people and the realization that they wanted to get rid of her produced a state of mind in which fear paralyzed her mental functions and made her temporarily appear to be defective or mentally deranged, in most cases it results in some form of misconduct. Take the following case of a boy whose step-father drove him away from home.

CASE 7

This boy's childhood had been normal enough, but with his mother's second marriage he became sensitive, antagonistic to correction, and frequently quarrelled with his step-father, until the latter finally drove him away, as has been stated. Then he drifted into bad company, and having nothing to hold him to his ideals now that his father was dead and his mother apparently had ceased to care for him, he drifted from bad to worse rapidly. At the age of 18 he was arrested for grand larceny, his whole record having been one of increasing delinquency. As the boy himself expressed it, after leaving home he did not care what he did or what became of him. He admitted that he did not have to steal, as his parents were willing to pay his expenses at a boarding home. But what he had wanted was affection rather than economic protection. Even now, after having spent four years at a reformatory, and with a prison sentence to be anticipated for his last charge of larceny, since he could not be excused on the ground of mental disease or mental defect, his attitude was one of recklessness. "Let them send me to jail, I don't care," he reiterated. The loss of his mother's love had touched him so deeply that these later misfortunes had little power to move him.

At no time of life are emotional conflicts more apt to be present than during the period of adolescence, which involves as many psychological as physiological changes. If we contrast the life of the child with that of the adult we shall have a clear conception of the necessity of transferring the instinctive and emotional cravings from the in-

fantile to the adult level. In infancy, the wants of the child are satisfied not by any adequate effort on his own part, but by the administrations of an attentive mother (or nurse). The feeblest cry is sufficient to bring this devoted slave to his side. As the child grows older, more and more effort is necessary for the satisfaction of his needs. In time he finds that the act of crying is not so effectual as it originally proved to be, and that other movements are necessary to secure the desired ends. But the gradual change from a parasitic mode of existence to one of increasing independence is not made without reluctance. Indeed, it is not until the time of adolescence that the child begins to actually desire to meet situations upon his own responsibility and wishes to escape from the parental guidance and protection.

At adolescence, unless there is a pathological refusal to make the transition to adulthood and abnormal clinging to the parental shelter, comes a strong desire to throw off the rulings of the parents, to try things for one's self, to make one's own decisions. The popular interpretation of these longings is that the boy or girl wants to appear "grown-up." In following out this motive the youthful lack of experience may cause some wrong decisions. Therefore the position of the parent becomes one of confidante and adviser. This requires much tact and the suppression of the natural longing of the father and mother to use their authority when they perceive that their advice is not to be taken. When the parents unwisely attempt

to subdue the budding independence of their adolescent sons and daughters, misconduct is apt to result.

A dramatic example of a daughter's rebellion against maternal authority and her attempt to achieve a freer life is given by Judge Hoyt in his book "Quicksands of Youth." It is the story of a quarrel between Helen Burns and her mother over the style of hair-dressing suitable for a young girl in her teens.

CASE 8

While in school, Helen had been content to arrange her hair in the prescribed fashion, but when she went to work and the other girls taught her a new and ravishing coiffure like their own, she could no longer endure the plain style which met with her mother's approval. Helen's mother called her a hussy when she appeared with her hair done in the prevailing mode, and ordered her to put it back the way she had always worn it. Helen refused, and her mother delivered the ultimatum that she could either do her hair in a respectable fashion or clear out for good. Helen chose the latter alternative. She had saved $25, and with this in her purse she started out to have a fling at life.

After work, Helen persuaded one of the girls to help her "do up" her hair in the desired way, and then she proceeded to a well known hotel in New York, where she engaged a room, explaining that she was a motion picture actress. At first the clerk was suspicious of a fifteen-year-old girl who appeared unaccompanied, but Helen glibly explained that her mother would arrive in a day or two, and offered to

pay in advance. She spent an incredible day and night in the hotel, then she realized that her money was gone and her game was up. She sat in the lobby at evening, wondering what she should do next, when a man came up to her and invited her to go to a show with him. At the theatre Helen became frightened by the attitude of her escort, and sought the protection of a policeman who referred her to the Society for the Prevention of Cruelty to Children. Next morning Helen and her mother met at the children's court, where Judge Hoyt attempted to reconcile them. This time it was Helen who delivered the ultimatum in the following letter to the Judge:

"DEAR JUDGE:

"I want to be a good girl and I am willing to go home to my mother. But I want you to tell her that I can go out to dances and shows once in a while, and that I can go around with my friends more.

"Yours truly,

"HELEN BURNS.

"P.S. — I think one dance every week will be enough."

CASE 9

Jennie E. was another girl who did not have ideas similar to those of her mother and father. Jennie was ambitious; the poverty of her home was a trial to her; she was eager to train herself in some vocation which would tend to raise her in the social scale. She was almost 16 when her case came to our attention. She had quarreled with her father because he wanted her to go to work, while she was determined to go to business school. Jennie was an intelligent girl, and

quite capable of acquiring the training she desired. Her temper was rather violent, however, and the constant opposition of her parents did not improve it. In one of their arguments, she finally attacked her mother with the broom. As a result of this, she was taken to the children's society by her parents, who charged her with ungovernable temper and attempted assault. She was sent to the hospital for psychiatric observation where she was found to be neither defective nor suffering from mental disease. The source of her difficulties was simply the usual conflict between the wishes of the parents and the child.

The adolescent desire for independence can carry the boy or girl to almost any lengths.

Case 10

Jimmy L. was a boy whose father had died when he was very small, after which his mother transferred all her affection to his small person, and never let him out of her sight night or day. This was all very well until Jimmy began to feel that it was time for him to have some of the privileges due to his age. At the beginning of adolescence he changed from a loving, tractable son, into a stubborn and wilful creature who opposed everything his mother suggested. When he was 14, and had finished the eighth grade, he asserted his independence by refusing to return to school, nor could he be persuaded to do so. When his mother attempted to control him he would display violent temper, strike her, break the furniture, etc. Still his mother insisted on keeping him with her, never letting him go anywhere alone. One day when they were out together Jimmy stole $5 from the pocket of an

overcoat and slipped away from his mother, to spend a glorious, unchaperoned afternoon at Coney Island. When he returned, a tearful mother could not understand why he should do such a thing. "If he had only asked for the money, I would gladly have given it to him." But she also admitted that she would not have permitted him to go alone, but would have accompanied him herself.

Jimmy's favorite reading matter became the stories of gunmen and thieves. Theirs was an enchanted career to him, for it seemed free from all the restraint which he had grown to hate so much. He allowed his mother to get him a job, but his dreams were of being a crook, where he could be his own boss. He stole from his employers, was arrested, and put on parole. His period of probation was unsatisfactory; he began to stay out all night to write letters to the newspapers describing himself as a desperate gunman and warning the public to take care. He was arrested again and sent to the House of Refuge. He was so much of a problem there on account of his rebellion against authority, which had long since become habitual, that he was sent to the hospital for observation.

He was tractable under the mild discipline of the ward, because he was trying to make a good impression. He showed some insight into his difficulties when the situation was discussed with him, and as his story was gradually elicited and the conflicts he had undergone brought home to him, he seemed to appreciate the significance of his conduct. His mother, however, did not grasp the situation so well. She never seemed to realize that she had tried to keep her son from becoming a man, and had thus driven him to assert his independence in unfortunate ways.

That the above discussion is inclusive of all types of emotional conflicts is not for a moment to be supposed. It does give a fair picture of some of the different motives operating in conduct disorders and demonstrates that various methods of reaction may be the result of these motives. The human organism is a complex one, and the individual is swayed now by one motive now by another, and seeks satisfaction in first one and then another form of activity. In analyzing human behavior, whether normal or abnormal, we must always keep this in mind, and not overevaluate one motive at the expense of another. We must also bear in mind the fact that the same motives may act to produce various types of behavior, both socially adapted and anti-social in nature. We may well present a case history in illustration of this point, in which the emotional conflict was variously expressed in attempts at literary composition, drug-taking, sex perversions, and delinquent conduct including prostitution and attempted murder.[1]

Case 11

Mary Brown was a colored girl of 23 or 24 who had had as pathological a childhood and adolescence as could be well imagined, hence her development of abnormal reactions and emotional conflicts need not be considered extraordinary. It would have required an unusual degree of nervous stability to have under-

[1] This girl was studied during her stay at the N. Y. State Reformatory for Women at Bedford. Her subsequent career has been followed up.

gone her experiences and preserve the emotional balance. It is not surprising that she had been variously diagnosed as a borderline defective of excitable temperament, an emotionally unstable personality, and even suspected of psychopathic tendencies. Only a long analysis could have revealed the fundamental motives underlying her erratic behavior.

Mary had never received the parental care and affection which she in common with every other child yearned for and bitterly resented being denied. She never knew who her father was, and until the age of 8 she was separated from her mother, being cared for by a maternal aunt. This aunt was not demonstrative or affectionate; as Mary herself described her recollections of this early childhood period, she was dependent for what signs of love she did receive upon her pet dog. After her aunt's death, Mary was returned to her mother, to whom she looked forward in the hope that at last she would be cared for as other children were. In this she was doomed to disappointment, for her mother was living the life of a prostitute, and did not want any such encumbrance to her professional activities as was represented in Mary's small person. She bundled Mary off to an orphan asylum after a few months, but the child ran away and found her way back home. Then she was sent to a school for incorrigible children, where she remained until the age of 14.

The years spent at this school increased Mary's sense of loneliness and consciousness of lack of affection, and this was reflected in her conduct. Twice she became so depressed that she attempted suicide. The one bright episode in her stay at the school was her affection for the school physician, who to some extent became a mother substitute and received the clinging,

dependent affection which Mary would normally have felt for her mother. It was a sad day in the child's life when this doctor left her position at the school, and only the realization that her term of imprisonment had almost expired saved Mary from another suicidal attempt after this loss. The first sublimation of her emotional cravings into language expression in versification took place when she was bereft of this love object. Because this was an important step in the development of her emotional life, this maiden literary effort of Mary's is reproduced in all its imperfection:

" Oh, songster, take this message to the woman I love for me,
She is just across the river, and she took my heart away.
Go, tell her how I miss her, how dreary is the day;
Tell her I can't do without her longer, the days are too dreary.

" Her eyes were brown as the squirrel's fur,
Her eyes as the chestnut burr.
She was as sweet as sweet could be,
And love shone in her eye.
Go, tell her if she doesn't come
I'll lay me down and die."

After five years of absence, during which she had changed from a child to an adolescent, with all of the adolescent's sensitiveness to environmental impressions, Mary returned once more to her mother. Now all that she had seen but not understood during her

previous brief companionship with her mother and her friends was borne in upon her consciousness with all its implications. She had already seen women with blackened eyes and bruised bodies complaining of maltreatment by their " men," so that she had received the childish impression that these masculine creatures were to be regarded with fear and terror. She now understood the relations between these dominant males and the women who were their slaves, furnishing them with money gained from the illicit trade in sex. Abhorrence was added to fear in the category of her reactions to men, and she fled from them to her mother's women friends.

She was received into disorderly houses because her mother was well known there without herself becoming a part of their system for some time, but although she did not immediately enter upon a career similar to her mother's she entered upon a new phase of her emotional life. The adolescent sex awakening was strong within her, but her fear and hatred of men, the outgrowth of her early experiences, prevented her from an emotional fixation upon the opposite sex. She fell in with a group of sex perverts and learned homosexual practices from them. Through this connection she entered into the trade in sex, being sent out on the street as a decoy for a less attractive woman who was her own companion in a perverted relationship.

This state of affairs did not last long, however, and Mary was finally forced into actual prostitution. In order to escape from this, she married a man who had fallen in love with her, and tried to become a good wife to him. Unfortunately, the habit of her perversions prevented a transference of her affection to her husband, and she finally left him to return to a life of prostitution again, since in this she could find satis-

faction of her distorted love life with others like herself, and could at least reduce her relations with men to a business basis without the necessity for simulating an affection which she did not feel.

This period of Mary's life was one of exceeding stress and strain. There was always the fear of arrest and the need of constant vigilance to escape this fate. Indeed, the girl was twice arrested and placed on probation. With the addition of this new anxiety to the emotional conflict caused by the nature of her profession, which demanded that she submit to the men whom she feared and loathed, life became almost unendurable to Mary. When she quarreled with the woman who had become her companion in perverse practices, it was more than she could face, and Mary now sought relief in drugs, since under their influence she could escape the realization of the horrible situation in which she was entangled.

Of course, Mary did not recognize the motive of her beginning the drug habit as a flight from reality which had become too painful to face. She only knew that she was getting into a nervous condition in which she could not rest, and she had heard the girls say that drugs would restore the ability to sleep. But her explanation as to why the drugs proved satisfactory and why she continued their use was that they "stopped her from thinking." In other words, they meant a temporary cessation of the mental conflict which was torturing her waking hours. Thus Mary's affective life was at the bottom of a new type of behavior, just as it had previously been the source of literary endeavor and of perverted sexuality.

The next matter of significance in Mary's emotional development was her arrest and sentencing to the state reformatory at Bedford. At this institution she was

cut off from drugs, for the most part, and there was little opportunity for the satisfaction of her perverted tendencies. At first the emotional energy blocked along these lines found expression in a general irritability, and Mary became the leader in " smashouts " and other rebellions against the institutional régime. Gradually, however, the old familiar expression of emotional cravings through language came into force and Mary entered into a phase of steady writing of poetry, drama and stories.

From the viewpoint of literary criticism, we shall have to admit that Mary's efforts were lamentable. But from the psychological angle they were exceedingly interesting, since they were an obvious expression of the emotional dissatisfactions of her life and a direct fulfilment of her suppressed desires. For instance, the news of Mary's mother's death came to her in the institution, and in her writing she immediately began to create for herself the picture of a mother type which she had always longed for but never found in real life. Witness the following poem:

" God bless you, dear Mother, my dark life's sun,
For of all God's blessings, you were the greatest one,
Your light of love so tender, so patient, so sweet,
Will shine ever brightly until we meet.

" God bless you, dear Mother, my life's only light,
May he give you Heaven's pleasures, day and night,
Forgotten life's trials, may all be sunshine,
God bless you, dear Mother, sweetheart of mine."

The sentiment of this poem, and many similar ones, could scarcely have been inspired by the picture of Mary's mother which has been drawn in the foregoing pages except for the tendency of human nature to remold things nearer to the heart's desire and to tincture reality with the lights of the imagination whenever possible. The last line is also worthy of note. It is more usual for a son to address his mother as " sweetheart " than for a daughter to do so. In this connection we must remember the peculiar perversions of Mary's love life, which made her assume many masculine characteristics. Thus the poem represented Mary's longing for motherly love and furnished an imaginary fulfilment for this desire which had remained ungratified by reality, and also held a faint implication of the distortions of her erotic nature. There were other poems in which this latter factor was even more apparent, as in the following, which was dedicated to a former woman friend:

" Somewhere, my darling, somewhere to-night,
As the pain in my heart begins to hurt and tear,
Somewhere, my darling, somewhere as I fight,
Would you care if you knew, would you care?

" Somewhere, my darling, somewhere in this vast universe,
Will our love still be beautiful as on the day 'twas given?
Somewhere when we meet, will our love be a curse,
Or will it be the charm to turn my Hell into Heaven? "

The last lines of the foregoing verse, in which perverted love is called a curse, express an emotional reaction which is apt to accompany any expression of the sex life which is not in harmony with social approval. The pervert always feels himself a social outcast, and this feeling itself involves emotional conflict to no small degree. Now that this conflict could no longer be drowned in the haziness of drugs, there was born in Mary an ardent desire for social rehabilitation. She developed a dependent attitude toward one of the workers at the reformatory, and asked for advice concerning her line of conduct when she should go out on parole. This mood was also put into poetry, of which we cite one example:

" I wonder if the bridge of time is strong enough for me to cross,
I wonder if 'twill hold me to pass to the other side?
I wonder if it's strong enough to help me reach the years I lost?
For the waves test its strength with Life's restless, swelling tide.

" I wonder if the bridge of time is long enough for me?
I wonder and I wonder till my heart sinks with fear.
I wonder will it stand the waves of life's tempestuous sea,
That are trying hard its frail strength to tear? "

When Mary had reached this stage, came the time of her parole. Unfortunately, she was not kept under

close supervision after leaving the institution and in spite of her high resolves of reform, she went back to the old life and to drugs. More bitter than ever by reason of her failure to live up to her new ideals, she speedily got into new difficulties, and was arrested for attempted murder and sent to prison, where she is confined at the present time. Here she has been repeating the history of her reactions at Bedford, going through the same stages of writing and making new plans for her rehabilitation once she shall be free. She has made one advance in that she has devoted the time of this last imprisonment to the study of stenography, so that she may possibly find a legitimate means of livelihood after her release unless her habitual emotional instability leads her into fresh misconduct.

To fully describe and analyze a case as complicated as Mary's would require a chapter to itself, just as it takes hours of intimate self-revelation to learn the emotional conflicts back of her career of delinquency. In the limited space which can be devoted to her story here it has been impossible to touch upon the details of her life or to recount the many interesting situations which occurred in the course of her analysis.

It is possible to point out several facts in connection with the brief history which we have related, however. It has already been suggested that Mary's life illustrates to a remarkable degree the capacity of emotions to find substitute channels of widely divergent types when the original expression is denied. It also implies a factor of supreme importance for the rehabilitation of the

delinquent, i.e., the necessity for a vocational pursuit into which his energies can be turned. Had Mary been trained in some means of self-support and been given constant guidance by someone she could have regarded as a friend and whom she liked well enough to desire to please (a sublimation of her sex perversions) her history subsequent to her discharge from the reformatory might have been different. She might have become an accepted member of the community instead of ending in prison. Our study of conduct disorders is not ended when we have outlined the causes in each case; we must also be able to map out a line of activity for the individual which shall provide an adequate outlet for the energies that have hitherto been turned into anti-social forms of behavior.

SUPPLEMENTARY READINGS

BLANCHARD, PHYLLIS. The Adolescent Girl. Moffat, Yard. N. Y. 1920. Read the account of adolescent conflicts given in Chapter IV.

HEALY, WILLIAM. Mental Conflicts and Misconduct. Little, Brown. Boston. 1917. This book is a classic on the subject and should be carefully read by the student.

HEALY, WILLIAM. The Individual Delinquent. Little, Brown. Boston. 1915. Chapter X gives some excellent case histories of mental conflicts causing misconduct.

HOYT, FRANKLIN C. Quicksands of Youth. Scribner's Sons. N. Y. 1921. Read the sections entitled "Pathological Liars" and "Homes That Are Bad."

TAFT, JESSIE. Some Problems in Delinquency. Publications of the American Sociological Society, Vol. XVI: Factors in Social Evolution. University of Chicago Press. Chicago. 1922. Excellent studies of two adolescent girls which should be read by the student.

WILLIAMS, F. E. Anxiety and Fear. Mental Hygiene, Vol. IV, No. 1. Jan. 1920. An excellent article giving a general statement of emotional conflicts and their influence on behavior. Although it does not directly apply to conduct disorders, it treats the subject of conflict with such clarity that it is advisable to read it.

Chapter III

INTELLECTUAL CAPACITIES AND THEIR RELATION TO BEHAVIOR

Individual differences in intellectual development.
Graphical representation of the typical distribution of intelligence in the general population.
Meaning of "innate intellectual capacity."
Tests for the measurement of intelligence.
The Stanford-Binet.
The Performance Scale.
Group Tests.
Individual differences in special abilities and disabilities.
The relation of intelligence to behavior.
Mental defectives who are self-supporting: data from Fernald's studies.
Mental deficiency as a contributing factor in the production of conduct disorders.
Cases in which mental deficiency and its accompanying tendency to suggestibility rendered the influence of bad companions disastrous.
Feeble-minded girls who are unmarried mothers or prostitutes: case histories.
Cases in which conduct disorders can be traced to the childish irresponsibility of the defective.
The unruly type of mental defective: case study.
The mental defective with episodes of excitement: case histories.
Superimposition of mental disease upon mentally defective basis.
Necessity for careful diagnosis of mental deficiency in the high grade and borderline cases.
Institutional care of defectives.
The Special Class in the public schools.

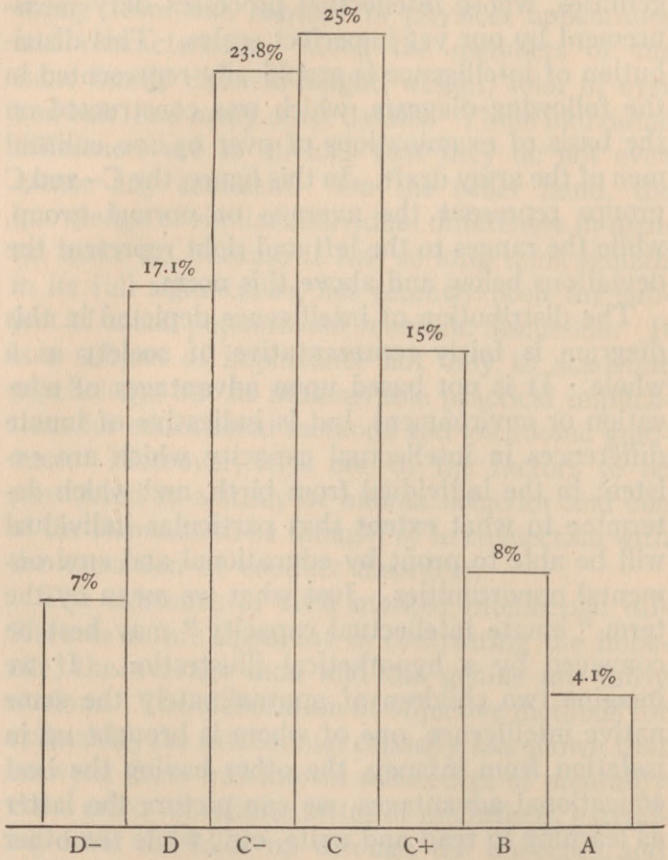
IT is a matter of common observation that the various individuals of a community differ vastly from one another in physical appearance and characteristics. Even the members of the same family differ in height, weight, color of eyes and hair, and many other details. These individual differences are so obvious that they do not even create any comment. On the other hand, the knowledge of similar individual differences in mental make-up, because it was so long unrecognized in its full significance, has recently been the subject of much popular and scientific discussion. It is a subject of importance not only to academic psychology, but of innumerable practical implications for educational methods and vocational guidance. Moreover, it is one of the factors to be considered in a study of human behavior and one of the elements to be thought of in connection with the causation of conduct disorders.

The existence of such marked intellectual differences as are apparent in contrasting the imbecile, the average man and the genius are fairly obvious. The elaboration of objective methods for estimating the intellectual capacity has shown that between these well-known differences of mentality there exists an infinite series of gradations, extending from the idiot up through the imbeciles and still higher grade defectives known as morons, through a borderline group and a still higher class who are only dull, into the great mass of individuals who represent the average and are therefore termed the intellectually normal, and even above

these into the levels of superior and very superior intelligence until we reach the smaller group of geniuses, whose intellectual processes defy measurement by our yet imperfect scales. This distribution of intelligence is graphically represented in the following diagram, which was constructed on the basis of examinations of over 93,000 enlisted men of the army draft. In this figure, the C– and C groups represent the average or normal group, while the ranges to the left and right represent the deviations below and above this norm.

The distribution of intelligence depicted in this diagram is fairly representative of society as a whole. It is not based upon advantages of education or environment, but is indicative of innate differences in intellectual capacity which are existent in the individual from birth, and which determine to what extent that particular individual will be able to profit by educational and environmental opportunities. Just what we mean by the term " innate intellectual capacity " may best be conveyed by a hypothetical illustration. If we imagine two children of approximately the same native intelligence, one of whom is brought up in isolation from infancy, the other having the best educational advantages, we can picture the latter as learning to read and write, etc., while the other child grows up in ignorance of these accomplishments. Yet if the first child should be removed from his isolation, he, too, would learn these things, and after a time would be able to read and write as well as the child who had always been in school.

Moreover, could we measure the intellectual capacity of these two children by means of tests



Percentage of distribution of intelligence of 93,937 enlisted men in 15 camps. (Figure constructed on basis of data given in Table 199, page 679, Vol. XV, of Memoirs of The National Academy of Sciences, *Psychological Examining in the United States Army.*)

entirely independent of educational material, we should find them achieving almost identical ratings upon such a purely objective scale, although the child who had been deprived of environmental advantages might appear stupid to ordinary observation in comparison with the developed abilities of his more fortunate brother.

In so far as possible, the various psychometric scales in use for the estimation of intelligence do aim to measure innate differences in capacity rather than differences due to educational and environmental advantages. The earliest intelligence test of this type was devised by Binet. It consisted of a series of tests, which by 1908 were classified into groups according to mental age. The grouping was determined by actual experimention and the collection of statistical data. The three-year tests were those which the majority of three-year-old children were found capable of answering correctly; the four-year tests were those which the majority of four-year-old children were able to answer, and so on up the scale. Thus, a child with a chronological age of eight, who could answer correctly only such tests as were in the five-year group, was considered to have an intelligence equal only to that of the average five-year-old child, which was expressed by saying that he had a *mental age* of five years.[1] This Binet scale was

[1] The typical achievement on the test is not an abrupt cessation at a certain year, but a gradual tapering off in which more and more failures occur in successive year groupings, until finally no more correct responses are secured. This necessitates the rating being made in years and months of mental age, instead of in years alone.

revised by the author several times, and was also revised by Goddard and later by Terman. Terman's revision of the Binet scale, which is known as the Stanford Revision, or the Stanford-Binet, is the form most generally in use at the present time.

In order to estimate the intellectual capacity of individuals who were illiterate, unable to speak English fluently, or who were deaf and dumb, some other measuring scale had to be devised than the Stanford-Binet, which depends for the most part upon language expression. Pintner and Patterson constructed a series of performance tests for use in such cases. These were modified in the army examining to a flexible scale including as many or as few tests as time and the exigencies of the case warranted. These tests are quite independent of language; they can be given by pantomime, and involve only the manipulation of concrete materials. The rating on the performance scale, which can be translated into terms of mental age for comparison with the Binet, does not offer so accurate an estimate of general intelligence as the latter. The reaction-patterns to these tests, however, as interpreted by the expert technician, give a fairly accurate estimate of the intelligence level of the individual. The mental processes of memory and apperception (ability to grasp a situation) are particularly well brought out by some of the performance tests.

In order to reduce the time required for the estimation of the intellectual capacity the so-called

" group-tests " were devised. These can be given to 100 or more individuals at a time, so that by their use a number of individuals can be tested in the same length of time required for a single person on the Binet. Group testing was first used extensively in making psychometric examinations in the army for the determination of the intelligence levels of the enlisted men and officers, in order that this information might be available in deciding on promotions, etc. The Army Alpha was the first group test perfected for use in this connection. Later the Beta examination was made for use with illiterates and foreigners. This was a test in pictorial form, for which the instructions were given by pantomime. Group testing proved so successful in the army that afterward similar tests were issued for colleges, vocational guidance bureaus, etc. Less difficult group examinations, such as the National Intelligence Test and the Terman Group Test, were prepared for school children.[1]

The rating on the group tests is usually expressed by a numerical score (on the Alpha this score is translated into a letter grade ranging from A to E), but it can also be expressed in an equivalent mental age which makes comparison with the rating on the Stanford-Binet possible. Generally speaking, the rating on group tests such as the

[1] The World Book Company, Yonkers-on-the-Hudson, N. Y., publishes a large number of tests for use with school children, including both group tests for the estimation of general intelligence and special tests for the detection of vocational aptitudes. This publishing house also issues a catalogue of test materials and a bibliography of tests.

Army Alpha or National Intelligence Test correlates very well with achievement on the Stanford-Binet. There is more possibility of error on the group tests, however, so that in cases where the score on these does not agree with the subject's school record or with the estimate of his associates it is always necessary to check up the group tests by individual testing with the Binet. In the clinical diagnosis of mental deficiency, individual testing with the Binet and Performance Scales is imperative.

Even in the use of individual tests, a blind acceptance of the rating must be avoided. Affective disturbances of all kinds can so impair the mental efficiency of the individual by interfering with the attentive and associative processes as to lower the achievement on the examination materially. The expert clinician is often able to recognize the existence of emotional blocking, and to interpret his results accordingly. In doubtful cases, or in instances in which the ranking on the psychometric examination does not harmonize with the subject's school and vocational record, repeated examining may be necessary.

In addition to variations in general intelligence, there are individual differences in the way of special abilities and disabilities. Persons of average or inferior intelligence in general may be endowed with superior manual dexterity, exceedingly vivid auditory or visual imagery, etc. By these special qualifications they are enabled to attain heights of achievement along some one particular line

which would otherwise lie beyond their reach. On the other hand, there may be special disabilities inherent in the mental make-up which prevent the individual from utilizing his general ability to the full capacity. Defective visual or auditory perception and memory, paucity of associative processes, etc., causing special disabilities in reading and spelling or in arithmetic, are a great handicap to a child in the present educational system, for instance. These and other disabilities limit the vocational possibilities for the individual to a considerable extent.[1]

After we have succeeded in measuring the intelligence of the individual, we are still confronted with the problem of determining to what extent this becomes a factor in behavior. There was at one time an attempt to correlate the degree of intelligence positively with certain behavior traits. Because a certain number of mental defectives were found among the criminal and delinquent classes, it was believed for a time that mental deficiency was one of the chief causes of immoral and criminal conduct. Of 608 criminals examined at Sing Sing, Dr. Glueck found 171 cases of mental deficiency, or 28%. Of 647 prostitutes examined at the Social Hygiene Laboratory at the Bedford State Reformatory for Women 193 were found to be mentally defective, or 29.8% of the total population of the institution. Similar figures

[1] For further discussion of the relation between general intelligence and special abilities and disabilities to occupational pursuits see Chapter XII.

were quoted as a result of studies made in other penal and correctional institutions. As a result, the chief reason given for advocating institutional care for the feeble-minded was that they were potential delinquents.

At present, the pendulum is beginning to swing in the other direction, and leaders in the work with mental defectives consider institutional care necessary only for such low grade types as the idiots and imbeciles who are incapable of an independent existence because of their helplessness. A great many of the higher grade defectives, who fall within the moron and borderline classes, if given proper training are quite able to become adapted to the community life. The over-crowding of institutions for the mentally deficient made it necessary to try the experiment of returning the promising inmates to the community with a view to having them become self-supporting. An idea of the success of the experiment may be obtained by glancing at the following figures from the Massachusetts State School for the Feeble-Minded.

During the 25-year period from 1890 to 1914 (inclusive), 646 mental defectives — 470 males and 176 females — were returned to the community. In 1916 Dr. Fernald made the following report concerning their adjustment to life outside the institution:

MALES

Earning a living without supervision	28
Working for wages, supervised at home	86
Working at home, no wages	77
Living at home, not able to work	59
Arrested, but not sentenced	23
Sentenced to penal insitutions	32
Committed to other institutions	43
Readmitted to Waverley	68
Died	54
Total	470

FEMALES

Married (11 doing well)	27
Self-supporting and self-controlling (unmarried)	8
Working at home under supervision	32
Living at home, not able to do much work	23
Committed to other institutions	29
Readmitted to Waverley	33
Died	24
Total	176

Thus 250 of the 470 males and 52 [1] of the 176 females could not be considered to constitute a menace to the community, since they have shown no delinquent tendencies and have adapted themselves to the home or work situation fairly well.

Dr. Helen B. Woolley has contributed a somewhat similar study of 177 mentally defective indi-

[1] Only 20 of the women working at home and 13 of those living at home but not working have adjusted themselves satisfactorily; the others are considered troublesome. Hence the summary of 52 doing well.

viduals who had passed through the special classes in Cincinnati. All of these defectives had been out of school at least four years or longer when the follow-up study was made (in 1918). A glance at the following table will show with what degree of success these mentally defective boys and girls adapted themselves to community life.

Occupation	Number men	Per cent men	Number women	Per cent women	Total number	Total per cent
In institutions	9	8.0	6	9.4	15	8.5
At home, never worked	5	4.4	21	32.8	26	14.7
At home, previously working	15	13.3	26	40.6	41	23.2
Working for relatives	11	9.7	0	0.0	11	6.2
In industry	65	57.5	11	17.2	76	42.9
Army or Navy	8	7.1	0	0.0	8	4.5
Totals	113	100.0	64	100.0	177	100.0

(Reproduced from the Report of The Mental Hygiene Survey of Cincinnati, page 109, Table 1.)

The salient figures of the above table might be summarized as follows:

53.6% of the 177 defectives included in the follow-up study were gainfully employed either in industry, in the Army or Navy, or working for relatives.

Only 17.7% of the men were unemployed and living at home.

Although 73.4% of the women were not employed outside their homes, 57.8% of the women had been in industry at one time or another after leaving school.

The wages per week varied from $4.00 or less to $25.00 or more. This indicates that some feeble-minded individuals are capable of earning a living for themselves in the community.

In order to be convinced that the mental defective is capable of self-support when trained in habits of regularity and industry, we need only to consider further data reported by Dr. Fernald concerning some of the " boys " who are on parole from the State School at Waverley, Massachusetts. The following is only a partial table reproduced from Dr. Fernald's study:

Age	Mental Age	Years at School	Occupation	Wages per Week
15	9–6	2	Errand boy	$9.00
28	10–3	6½	Fireman	24.64
24	9–2	14	Machinist's helper	24.50
33	11–1	9	Stock-keeper	28.00
25	6–2	8	Roofer	24.00
17	7–2	5	Carpenter's helper	30.00
27	7–4	8	Laborer	25.50
17	6–8	2	Errand boy	7.50
20	8–3	5	Fruit handler	30.40
17	8–1	7	Cutlery factory	12.00
21	9–3	10	Packer	23.28
32	9–2	10	Porter	11.00 (Per mo.)
18	7–2	6	Farm helper	35.00

(Mental age is expressed in years and months. Thus, 9–6 would be 9 years 6 months; 10–3, 10 years 3 months, etc.)

Probably the most accurate statement of the situation would be that while mental deficiency

is not in itself a primary cause of anti-social conduct, under certain conditions it does become a contributing factor in the production of conduct disorders. The characteristics of suggestibility, inadequate judgment, defective foresight, etc., which are typical of the mental defective predispose him to easily drift into delinquency under the influence of bad associates. If his mental defect is combined with an excitable and emotionally unstable personality make-up his potentiality for anti-social behavior is enhanced, for he is liable to outbursts of temper which his defective mentality sees no necessity of controlling. A more intelligent individual with the same emotional make-up would be more apt to realize the necessity of inhibiting his impulses.

Since we cannot expect all of the mental defectives in a community to be brought up in a good environment and to be endowed with a docile personality, we shall find that our description of conduct disorders will include many cases in which mental deficiency is the outstanding feature. The following case histories present various types of conduct disorders in which mental defect can be considered the principal factor, either through permitting the individual to yield too readily to the suggestions of bad companions, through failure to understand the need for inhibition and control of emotional impulses, or mere irresponsibility due to inability to foresee the consequences of certain acts.

Case 12

Harry S. was sent to the hospital from the Children's Court for observation as to his mental condition. He was charged with robbery, and this was his fourth offense of that type. He was a boy of 15. He had always been dull in school and had been a chronic grade repeater, but had always been obedient and well-behaved until four years ago. Then he began to go around with some boys who taught him to steal. Through their influence, he became implicated in a robbery, was arrested and sent to the reformatory. Since his return from that institution he had fallen under the influence of these same companions, and was again in trouble.

The boy's physical examination showed nothing of significance. The mental examination revealed no evidence of mental disease, but indicated mental defect. On the Stanford-Binet the patient was only able to achieve a mental age of 5 years 10 months. On the Performance Scale his score was equivalent to a mental age of 6 years 7 months. His attitude was child-like; his attention was easily distracted; he did not comprehend instructions readily, and his memory and apperception were poor. He had a tendency to play childishly and somewhat destructively with the test materials. These reactions, in connection with his history of backwardness in school, and his suggestibility and tendency to fall under the dominance of his associates, are typical of the mentally defective individual. Harry was therefore committed to an institution for the feeble-minded where he might receive training in habit formation and be taught some useful type of work.

Case 13

Another boy of 15, Joseph C., was sent to the hospital for observation from the Children's Court. The charge against this boy was burglary. The family history and physical examination were negative. Mentally, there was no evidence of psychosis or active mental disease. His mental age of 12 years 5 months on the Stanford-Binet placed him in the class of borderline intelligence. He had lost his job as an errand boy, and needed money to buy himself some clothes. Two fellows whom he knew suggested robbing a store, and he fell in with the suggestion. He readily admitted this, and said that he had taken a suit of clothing and a tie pin. He did not seem to realize the seriousness of his behavior nor the consequences likely to follow.

Case 14

Lena Z. was the oldest of six children. Her family lived in a tenement house in a congested neighborhood. Mrs. Z. was sick much of the time, and could not supervise the children sufficiently. Mr. Z. was out of work and could not give them the things he would have liked to see them have. Lena began to go around with a group of vicious girls and men. She met an Italian who owned a fruit store on Third Avenue. This man's family was still in Italy. Lena allowed him to persuade her to become his partner in a sex relationship. She received 15 cents each time she visited him, with which she bought candy and cake. She was arrested on the charge of a disorderly child, and placed on probation. She now discontinued her visits to the Italian, but took up petty thieving.

She was considered to have broken her probation by this conduct, and was committed to a reform school. She gave a great deal of trouble at this institution by her constant attempts to run away. She was finally brought to Bellevue for observation by one of the officers of the school.

At the hospital, Lena showed no psychotic symptoms or vicious tendencies. She adapted herself to the routine of the ward, and was helpful with the work. She frankly admitted her past misconduct. Her physical examination showed nothing of note. The psychometric examination gave her a mental age of 10 years 4 months on the Stanford-Binet, in contrast to her chronological age of 16. Her school record showed that she had repeated two grades and had often been truant. She was diagnosed as a high grade moron and returned to the reform school in the hope that she might acquire better habits through the discipline there.

The suggestibility of the feeble-minded girl, plus her inability to realize remote consequences of her acts, renders her particularly liable to be seduced by unscrupulous men. After this experience, she often continues her sexual activity until she drifts into prostitution or becomes the mother of illegitimate children (or both). This does not mean that the mentally deficient girl is any more prone to irregular sex life than her better endowed sisters. It is simply that she has not the same inhibitory forces at work in her make-up since she does not foresee the results of her conduct. Nor has she the intelligence to avoid unpleasant consequences

by methods adopted by more clever women who even when they allow their inhibitions to be broken down quite as completely assure their immunity from social censure by caution and concealment.

CASE 15

Mary M., who was brought to the hospital from the Municipal Lodging House in a condition of pregnancy, gives a typical mental defective history. Her mother is herself somewhat defective. Mary was retarded in physical and mental development in infancy and childhood. She did not walk and talk until she was over two years of age. In school she continually repeated grades, and had only reached the sixth grade at the age of 16. Her mother had placed her for a time in an institution for mental defectives. After a period of training at this institution she was released on parole for a time. At the end of her parole period she ran away from home, and when found by her mother at the Municipal Lodging House was in a pregnant condition. She was 21 years of age at the time of her examination at the hospital, but her mental age was only 7 years 6 months. Her memory was poor and her judgment entirely inadequate. She was able to read some, but appeared to have no conception of the meaning of anything which she read. Her attitude on the ward was simple and childish. There was no doubt that her mental defect was at the root of her difficulties.

CASE 16

Sadie S. is a similar case. She was brought to the hospital by the Friendly Aid Society after having given birth illegitimately to twins. Sadie had been em-

ployed as a domestic, but was now practically homeless. Her parents were separated, and her mother was dependent on one of the other children and unable to assist Sadie. Mrs. S. said that Sadie had always been different from the other children. She was backward in physical and mental development, and was unable to learn readily at school. At the age of 25 she had reached a mental age of only 6 years 8 months, according to the rating on the psychometric examination. Besides having had two illegitimate children, she had contracted syphilis as a result of her irregular sex habits.

CASE 17

Jennie W. was brought to the hospital for observation by another organization. Like Sadie, she was an unmarried mother. She was a girl of 24, who had lived in Russia the first 10 years of her life. She had never been able to get on in school, and when she left at 16 was only in the third grade. Since leaving school she had been employed at housework and in a factory. While working in the latter place she met a man who became her lover. He promised to marry her, but when she became pregnant he left her and began to go around with one of the other girls. Jennie's mental age on the Stanford-Binet was 6 years 8 months. Her attitude on the ward was docile and obedient, but she was unable to do anything except simple tasks. She was a low grade moron, who would not have gotten into trouble had she been properly supervised and guarded from the influence of bad company.

Very often these defective girls, after having one illegitimate child, find that the easiest way to

live is to use their sex functions to induce some man to take care of them. In this frame of mind, they live with first one man and then another, or else become prostitutes.

Case 18

Annie B. was sent to Bellevue for observation after being arrested on a charge of incorrigibility preferred by her mother. At the age of 23 Annie was the mother of three illegitimate children. The first child was born when Annie was only 15 years of age. After its birth, the father was induced to marry Annie, but did not live with her. Annie's mother was constantly reproaching the girl for her mistake, and Annie finally left home, and began living with different men. Occasionally she would go home to her mother when she was unable to find a man to care for her. At the birth of the third child her mother lost patiencc and had the girl arrested. A psychometric examination showed that she had a mental age of 10 years 10 months. Her attitude was childish and her judgment was defective. She seemed to have no realization of her wrong-doing, could not understand why her mother should find fault with her continually, and was only mildly disturbed by the fact that her two children had been taken away from her.

Case 19

Rose G. was a girl of 23, who had been in the United States only 7 years. She, too, had been seduced by a lover, had given birth to an illegitimate child, been discharged from her place of employment and had drifted into prostitution. She was arrested on the charge of

vagrancy and sent to the hospital for observation as to her mental condition. Examination showed that she was not suffering from any physical or mental disease, but that she was a mental defective, with a mental age of about 8 years. She was committed to an institution for mental defectives.

Many defectives become delinquents because they have a childish irresponsibility which is a part of their deficiency. With their limited mentality, the full implications of such abstract terms as good and evil are beyond their comprehension. They may know a certain act is wrong because they have been repeatedly told so, but they can give no better reason for their belief than some such statement as "father said so." Between right and wrong as separate entities they make no clear demarcation in their thinking. They commit anti-social acts without any idea of the seriousness of their offenses, and confess their misdemeanors readily without comprehending the penalties certain to ensue.

CASE 20

Mark L. was such a type. He was always backward in mental development. He had not begun to talk until he was four years old, and had never gotten on well at school. He left at the age of 15, and had not gotten beyond the primary grades even then. He was never able to keep a job on account of his inability to learn to do the work required of him in various places where he sought employment. He finally began to peddle powder puffs. At one of the houses where he was trying to sell his wares he saw a diamond ring

lying on the table, and attempted to steal it. He was seen by the janitor, who called a policeman. The boy readily admitted his act. He appeared so irresponsible that he was sent to Bellevue for observation. On the ward he appeared exceedingly dull and stupid. He said that he liked the hospital — " it was such a nice place." He showed no insight into his situation, and did not in the least comprehend the gravity of having a charge of burglary pending against him. His mental age on the Stanford-Binet was 8 years 8 months while his actual chronological age was 27. He was recommended for commitment to the state institution for defective delinquents.

Case 21

William L. was a mental defective with a penchant for stealing pigeons. He had never given his parents or teachers much trouble until he began keeping pigeons at the age of 13. He spent all his spare time with his pets, and began stealing others from his neighbors to increase his flock. He was arrested five times, each time for bird stealing. After the third offense of this nature, he was sent to the New York Juvenile Asylum for three months. After his release, his mother tried to keep him from having pigeons. He went to work as an errand boy, but stole a cage of canaries from a bird store. He was arrested for this, but was released when he offered to return the birds. The craving for birds caused another crime and arrest, however, and the case was considered so peculiar in some of its aspects that he was sent to the hospital for observation. He showed no evidence of active mental disease, but appeared to be a mental defective, of high grade moron type, with

a mental age of 10 years 4 months in contrast to his chronological age of 17 years.

CASE 22

Florence F. was the type of defective who adds unruliness and disobedience to irresponsibility. This combination of traits almost always leads to misconduct. Florence was no exception to this generalization. Her developmental history was typically that of the mental defective; she did not get her first tooth until the age of 10 months, and was 3 years old before she began to walk and talk. In school she was backward and repeated several grades. She reached the seventh grade at the age of 16, and then left school and went to work. After she began to work she became entirely unmanageable. She began to go around with men, and sometimes stayed away from home for several days at a time without letting her parents know where she was. Remonstrances were of no avail. The parents finally had her arrested, and she was sent to the hospital for observation as to her mentality. She was found to have a mental age of approximately 11 years. She was diagnosed as a high grade defective and on account of her bad sex habits institutional care was recommended. Her parents refused to commit her to an institution, however.

The type of mental defective described in the preceding cases is delinquent because of his suggestibility and irresponsible attitude. Under proper supervision, he can be expected to perform simple routine labor and can be left at large in the community without serious mishap. A different

type of mentally deficient individual represents a menace to the community under almost any circumstances, and can only be safeguarded by the strict discipline of an institution. The type referred to in this statement are the feeble-minded who combine emotional instability with their undeveloped mentality, and who are subject to outbursts of temper or actual episodes of excitement. Mental defectives of this type become destructive when such episodes occur, and may attempt to do injury to themselves or others.

Case 23

Frank M. was such a type. There was some defect in the family stock; he had a feeble-minded maternal uncle, and one of his sisters had had chorea. Frank himself showed the typical retardation of development in early childhood. He did not walk until 2 years of age, and did not talk until 3 years old. He never showed any interest in books, was continually running away from school, and had only reached the fifth grade at the age of 16. He was always stubborn and quarrelsome. He did not get on well at home or at school, and later had trouble with various employers. When he was 19 he wrote a letter to the man for whom he was working, asking for a loan of $1.00 and forging his step-mother's signature to the request. When questioned about the letter he became so irascible and threatening that his employer sent for the police. At this the boy became very much upset, and tried to hang himself by a necktie tied around his neck.

Frank was sent to Bellevue for observation after this exploit. He readily confessed the whole story of

his misdeeds and attempted suicide, but his manner in discussing them was silly and superficial. On the psychometric examination his mental age was 9 years 10 months. When told he was to be sent to a school for defectives he became upset again, threatened to kill himself, and actually did attack one of the other patients on the ward. He was committed to one of the state institutions for mental defectives as a high grade moron.

Case 24

Millie B. was another excitable moron. She was a 24-year-old girl, who in addition to her generally low grade of intelligence had the handicap of being deaf and dumb. Her mental defect was probably due to the effects of meningitis, which she had had when 4 years old. Previous to that time she had appeared normal enough in her development, and had learned to walk and talk. She had a history of being subject to violent attacks of excitement in which she would become very noisy and destructive, screaming and tearing her clothes. She lost her mother while still a small child, and lived first with a grandmother, then with her father, and later with an aunt. None of these were able to keep her because of her violence and excitability. At her aunt's she would kick and strike the children, break their toys, etc. Her brother was a lawyer and also lived with this aunt. Millie would go into his office and drive the clients away. At last this state of affairs became unendurable, and the brother and aunt sent her to Bellevue for observation. Here she showed her usual emotional instability, becoming excited at times, screaming and tearing her clothing, etc. On the Performance Scale she

achieved a score which was equivalent to a mental age of 9 years 9 months. She was diagnosed as a case of mental deficiency following meningitis.

Sometimes the type of mental defective described above becomes chronically restless and excitable to a degree which borders on insanity.

Case 25

Izzy M. is a typical case of this kind. He was a boy of 20, with a mental age of 8 years 1 month. His history at school was typical of the mental defective; he had never been able to learn and had been put in a special class for feeble-minded children. He was always of a restless, unstable make-up, a constant source of trouble to parents, teachers and the police. Whenever he could get any money from his father or by doing odd jobs he would run away from home and stay until it was gone. He was arrested several times for minor delinquencies, and finally was sent to Bellevue for examination. In addition to the mental age reported above, the patient was found to have an episode of excitement which warranted his being diagnosed as insane. He was restless, overactive, boisterous, irritable and constantly in trouble with the other patients. His conversation was rambling and flighty, as the following sample shows:

"Just because I came here once the doctors will send me away. Where is this Central Islip anyway? On land or water? Here is one that bothers me all the time. (Referring to the nurse.) I read a piece in the paper by Mr. O'Brien. I am a good hand at writing. I came out of school with two medals and I don't know what else to tell you."

He was sent to a state hospital for the insane, as he was too excited and restless to be amenable to the discipline of an institution for the feeble-minded.

Cases such as this, in which there is a combination of active mental disease and mental defect, are not so rare as might be expected. Psychoses of the manic-depressive or dementia praecox types, psychoneurotic symptoms, and other mental abnormalities, may be superimposed upon primary mental defect as well as upon normal brain tissue. Conduct disorders which result in these cases are motivated by multiple factors. It is best to describe these types in connection with the psychoses, however, as they will be more intelligible at that point.[1]

The diagnosis of mental deficiency is not always so simple a matter as one might at first suppose. This is particularly true in cases of the high grade or borderline type. There is often a tendency to place too much dependence on the results of the psychometric examination, without reference to other factors in the case. The danger of such a course of procedure is clear when we realize the possibilities for error in the use of these scales for the measurement of intelligence. Incipient forms of such psychoses as dementia praecox and manic-depressive insanity may cause a disorder of attention and association which materially lowers the achievement on intelligence tests, and makes the

[1] See Chapter VI, in which these cases of psychotic tendencies in combination with mental defect are discussed in detail.

rating far below the actual mental level of the subject. Certain diseases of the nervous system, such as epidemic encephalitis, may be followed by a condition which simulates mental deficiency but is only temporary. Almost any emotional disturbance may cause an affective blocking of the mental processes which interferes with intellectual efficiency and prevents the individual from doing his best on the psychometric examination. Any of these or several other factors may cause a lowering of the rating on the Stanford Binet of from one to three years, according to a study made by Dr. Jewett and Dr. Blanchard.

In view of the fact that a mental test cannot be accepted as in itself an incontrovertible proof of the subject's lack of innate intellectual capacity, other substantiating circumstances must be obtained. A study of the family and personal history, the school and work record, and the general conduct of the individual in respect to ability to adapt himself to the demands of his environment, etc., must be taken into consideration as well as the physical and mental condition at the time of the examination. It is on the basis of evidence along all these lines that we can safely differentiate between the borderline defective and the merely dull or subnormal.

The problem of mental deficiency as a cause of conduct disorders is no small one. Already the state institutions for mental defectives are almost everywhere filled to the limit of their capacity. This necessitates returning to the community such

members of the institutional population as seem to have benefited by their training sufficiently to be trusted to earn a living and stay out of trouble. This they can often do, especially if a certain amount of supervision is maintained either by relatives or parole officers and field workers from the institution. This parole system enables the institution to make room for new inmates who are either incapable of caring for themselves or have developed habits of misconduct.

The public schools are helping to handle the problem by establishing special classes for defective children in which they are trained along manual and pre-vocational lines. In these classes, the mental defective is taught to form habits of obedience and industry instead of being allowed to play truant from the regular classes of the school (where he was an unmitigated nuisance to a harassed teacher who never succeeded in interesting him in work for which he had no mental capacity) and learning all sorts of delinquent activities. The importance of a special curriculum for the defective child and of supervision by the school of his first few years in industry cannot be overestimated as a measure for the early inculcation of proper habits which will tend to prevent the development of conduct disorders which often occur in the case of mental defectives who are permitted to fall under less stabilizing influences.

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Chapter IV

THE PHYSICAL BASIS FOR BEHAVIOR AND THE INFLUENCE OF SOMATIC DISEASE UPON CONDUCT

The cell as a unit of structure.
The skeleton of the body, bones, cartilage, ligaments and joints.
Types of muscle tissue.
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Digestion of various elements of foodstuffs.
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DURING the past decade, great strides have been made in the study of psychological mechanisms in normal as well as in abnormal behavior. The utilization of well established psychological laws and principles, especially those of the Freudian school, has given a dynamic value to the interpretation of the oddities of conduct of the neurotic and insane. The employment of these principles has proven efficacious for the prevention of mental disease.

In the interest evoked by the study of the various psychological mechanism, there was a general tendency to neglect the various anatomical and physiological factors that play important rôles in normal behavior. It is appropriate for a work of this kind to discuss briefly these different ana-

tomical, pathological and physiological facts and call attention to the part they play in abnormal conduct. This has a most important and practical bearing. In the management of abnormal behavior manifestations it is imperative that we take cognizance of these factors, and evaluate the rôle which they play in a particular case. Failure to do so has resulted in serious blunders. We have seen patients sent to us with a diagnosis of hysteria, etc., who were suffering from pulmonary tuberculosis, serious forms of heart disease, pleurisy, etc. We know of instances where the family regarded the person as lazy, the " nerve specialist " called him neurotic, and the patient submitted to all sorts of mental analyses, only to be found, on proper examination, to be suffering from a serious physical disease.

In this chapter, we shall therefore discuss the human organism from a mechanistic viewpoint, and indicate the manner in which the different parts of this remarkable machine influence normal and abnormal behavior. We shall briefly outline the structure of the body, its energy creating mechanism, its energy distributing mechanism, waste disposal, defensive methods, its correlating and integrating mechanism, and the part they play in both normal and abnormal reactions.

The human organism is composed of a multitude of cells which are so grouped as to form specialized tissues and organs. The cells of a specialized tissue are characterized by uniformity of structure and function. Each organ subserves a definite

function and all are working for the ultimate benefit of the organism. The functions of most of the organs are fairly well known to the physiologist but those of some organs are still in doubt.

The skeleton of the body is formed by bone and cartilage tissues and is united in part by firm rope-like structures known as ligaments. Bone tissue also serves an additional purpose in affording protection for more delicate tissues and organs, such as the brain, the eye, pituitary gland, blood vessels, etc. Its marrow forms blood cells. The bones of the female are more delicate than those of the male, and the trained observer may tell the sex by studying certain bones, especially those of the pelvis. The proper skeletal development is essential for the normal personality. An undersized male, especially if the musculature development is poor, is apt to be laboring under an inferiority complex, and react in several ways as described by Adler. Well developed skeletal and muscle structures inspire confidence and aggressiveness. It must be remembered, however, that there are certain disorders of the glands of internal secretion that may be associated with gigantism, very large skeletal development, and the personality of the individual may be of inferior type. There are other disturbances of the endocrine glands, especially of the thyroid gland, that are associated with small skeletal development. Diseases of the bones associated with changes in behavior are rare.

Where two bones come together, a joint results. The joint may be immobile, or may permit all de-

grees of motion. Diseases of the joints or arthritis, especially when of a chronic nature, are conducive towards an irritable and ugly personality.

Muscle tissue is characterized by its power to contract and thereby alter its size and shape, causing movements of itself and of the parts to which it may be attached. There are three types of muscle tissue:

1. The heart or cardiac muscle;
2. The smooth or unstriated muscles, lining the gastro-intestinal tract, uterus, glands, blood vessels, and
3. The striated or skeletal muscles.

The striated muscles cause voluntary motion at the joints, and also give contour to the body. They are more powerfully developed in the male than in the female. When adequately developed they induce a feeling of aggressiveness and confidence in the owner. It is a matter of common observation that every male is proud to display well developed muscles of the arm, especially the biceps muscles. There are a few definite, though rare, muscle diseases, which incapacitate the individual, and make him dependent upon the community for support.

The energy creating mechanism of the body is the alimentary tract, the lungs and the glands of internal secretion. They furnish the energy necessary for the proper functioning of the body. The fuel used is the various foodstuffs, salts and water. The ordinary diet consists of fat, carbohydrates and proteids, together with different salts and water.

Food is taken into the mouth where it is broken up into smaller particles by the teeth. The teeth have lately been receiving considerable attention from those interested in mental diseases. It is a well-known fact that the insane, because of the very nature of the disease from which they are suffering, are unable to care for their teeth properly. It was also found that many of them were suffering from pyorrhoea, which is an infection of the gums. They frequently suffer from an infection of the roots of the teeth also. These so-called focal infections of the teeth were regarded by many psychiatrists as the cause for mental disease. Further research revealed the fact that many of the teeth of the insane had not erupted or had become impacted, and were causing reflex pain which was considered by a few observers to play an important part in the mental breakdown. Much has been written about this subject.

It is true that the toxin or poisonous substances from pyorrhoea or root abscesses may so exhaust an individual and lessen his general power of control as to be indirectly an additional factor in precipitating a psychosis. We cannot agree, however, with those who maintain that infected gums or impacted teeth are responsible for an attack of insanity. We have met many patients not mental patients who have had these disorders of the teeth, and who are mentally sound. Furthermore, there are many mentally sick people whose teeth are in excellent condition. It is true, however, that infections of the teeth may cause an exhaus-

tive state, and an impacted tooth may cause reflex pain which may act as additional factors in the many that have precipitated a nervous breakdown.

In the mouth cavity, the food comes into contact with the saliva, which contains a ferment known as ptyalin. The latter acts on the carbohydrate element of the food and changes it into a simpler compound so as to be more readily assimilated by the body. The food is then swallowed and passes along the oesophagus into the stomach.

In the stomach the ptyalin continues to digest the carbohydrate element of the food for one half to three quarters of an hour. The hydrochloric acid of the stomach continues to digest the carbohydrate changing it still further into simpler chemical compounds.

The proteid element of the food is being digested by a ferment known as pepsin which breaks up proteid into simpler and more soluble molecules. The proteid compound of milk, caseinogen, is digested by a ferment called renin. The fat component of the food is attacked in the stomach by a ferment known as lipase which breaks up fat into glycerol and fatty acids.

The food is then passed on into the small intestines. Into the latter are poured the juices of an important organ, the pancreas. The pancreatic juice still further breaks down the carbohydrate component of the food into still simpler compounds, through a ferment called amylase. The final result is the change of the carbohydrates into glucose, chemically a monosaccharide, which

is assimilated by the body. The action of amylase is enhanced by similar ferments present in the juices of the small intestines.

Trypsin, a ferment of the pancreatic juice, and erepsin, a ferment of the intestinal juice, still further change the proteid component of the food into simpler compounds and leave it in the shape of amino acids which are then absorbed by the body. Lipase, a fat splitting ferment of the pancreatic juice, continues to convert the fats into glycerol and fatty acids. The bile is poured into the small intestines and by virtue of its salts assists the pancreatic juice in its function, and promotes digestion. Bile brings fatty acids and soaps into solution and renders it absorbable.

The final results of the action of the juices on the foodstuffs is, therefore, their conversion into monosaccharides (from carbohydrates), amino acids (from proteids) and fatty acids, and glycerol (from fats). The product of digestion is absorbed by the epithelial cells of the lining of the intestines, aided by the physical processes of diffusion and osmosis.

The foodstuffs are thus digested, absorbed into the blood and carried to the tissues of the body. The series of chemical changes which the foodstuffs undergo and their absorption into the tissues, and the elimination of the end product by the lungs and kidneys are spoken of as metabolism. Metabolism may result in the building up of fresh tissues from the material carried by the blood and is then spoken of as anabolism, or the tissues un-

dergoing constant changes are broken down in parts and removed from the body and this process is called catabolism.

About 90 to 95 per cent. of food consumed in the ordinary diet is absorbed into the blood stream, conveyed to the tissues of the body and turned into energy in the form of heat, gland activity and muscle work. The remainder of the food is expelled in the feces. Fat and carbohydrates and part of the proteids are converted into water and carbonic acid; the nitrogen is excreted as urea and other partially oxidized substances; water is removed by the skin, kidneys and lungs; carbonic acid by the lungs, and urea by the kidneys.

Fatty acids and glycerol are combined in the walls of the small intestines to form fats, are absorbed by the blood, and stored in the fat layer under the skin; and in the omentum (an apron like structure in front of the intestines) to be called upon by the body in time of need.

Carbohydrates are absorbed from the intestines and enter the blood stream chiefly in the form of glucose. This passes to the liver where it is converted into a compound called glycogen. Muscle also contains considerable glycogen. Whenever there is an immediate need for energy the body calls upon this glycogen which it changes into glucose and uses the latter for energy. Some sugar is changed to fat and used as stored potential energy.

The proteids are absorbed into the blood as amino acids. Some of it is built up into the tissues

into living substance; and part of it is burnt up by the tissues in the form of carbonic acid and water furnishing energy to the body. Some of it is excreted as urea and other incompletely oxidized substances.

The residual material passing from the small intestines into the large intestine is in the form of a jelly, colored by the presence of coloring matter from the bile. Water is absorbed from the large intestine, and the residuum passes to the rectum forming feces. The latter is expelled from the body in response to the stimulus caused by its presence in the rectum.

As a rule, diseases of the stomach and intestines are not accompanied by any marked conduct disorders. However, many of the patients suffering from mental disorders refer their trouble to the stomach and intestines. The depressed patients usually complain that their stomach is not functioning properly, that their intestines are clogged, etc. The psychoneurotic patient frequently refers his symptoms to the stomach and intestines. Needless to say, thorough examination of these organs fail to reveal any evidence of disease.

It is opportune to speak here of the claims made by a group of psychiatrists of the rôle played by ulcerations of the lining of the large intestine in the causation of insanity. These observers claim that in a fairly large group of insane patients, they found infection and ulceration of the lining of the large intestines. They maintain that the toxin or poison from these infected areas causes mental dis-

ease. Such claims are unwarranted in the face of present day knowledge of the nature of insanity. Furthermore, their claim is not substantiated by other authentic workers in psychiatry.

The lungs are two elastic sacs in the chest cavity, which allow oxygen of the inspired air to be taken up by the blood circulating in its capillaries and also permit the circulating blood to expel the carbonic acid of the tissues to the exhaled air. The process of transference of oxygen from the air to the tissues of the body and of carbonic acid from the body tissues to the atmospheric air is called respiration. Oxygen is essential to the activities of the body tissues and indispensable in carrying out life's processes. Oxidation is the process of combination of oxygen with other substances. Oxygen is an essential element in metabolism. It is carried by the red cells of the blood in the form of a compound with hemoglobin (the coloring element of the red blood cells).

Tuberculosis of the lungs, consumption, is associated with a peculiar change in the personality of the patient suffering from the disease. The tuberculous patient may have a feeling of well being, or euphoria, which is entirely unjustified by circumstances. The patient is apt to be rather selfish and self-centered. He often makes plans for the future which are obviously unachievable. We have met tuberculosis patients who on the very day of their death, were planning trips to the woods and seashore, were confiding their plans for securing funds of money, etc. They would

never admit the seriousness of their ailment. This peculiar euphoria of the tuberculosis patient is a phenomenon which has baffled many a student of medicine.

Asthma, a disease of the lungs which is characterized by difficulty in breathing, due to changes in the lung tissue itself, is often accompanied by nervous symptoms such as anxiety, fear, and a sense of impending death. The asthmatic patients suffer from periodic attacks of difficulty in breathing and are therefore constantly in dread of impending death.

The glands of internal secretion, ductless glands, or endocrine glands, are organs which secrete a specific chemical substance into the blood circulating through the gland. The blood carries this substance secreted by the gland, and other tissues and organs of the body are affected by it. The chemical substance secreted by these glands are usually referred to as the active principle of the gland, hormone, or autocoid substance. The thymus, pineal thyroid, parathyroid, adrenal, pituitary, testicles and ovaries, are usually dealt with in endocrinology — that branch of the medical science which deals with the glands of internal secretion. These glands secrete their active principle directly into the blood and not through a duct; hence the names ductless glands and glands of internal secretion. These glands play important rôles in the development of physical and mental characteristics of the individual, in the maintenance of physiological balance in the body, in meta-

bolic processes, in the emotional and instinctive responses of the individual, and in his general method of adaptation to his surroundings. The science of endocrinology is attempting to critically analyze these different rôles assumed by the endocrine glands, the changes that they undergo in disease processes, and the influence they exert both in health and in disease upon other organs and tissues.

It must be admitted that while definite progress has been made in the field of endocrinology, the subject is still in the experimental stages. Much has been learned about the thyroid and adrenals, but still more information is desired about these organs and especially about the other glands of internal secretion. Experts in the field of endocrinology are reluctant to say much about these glands and do not make many positive statements referable to their physiology and pathology. On the other hand, there has been a tendency on the part of a few unscrupulous men, to flood the lay press, and, to a lesser degree, the semi-medical journals, with unwarranted claims and unjustified inferences about these organs. The "monkey gland" accounts are filling the front pages of the newspapers. Unwarranted statements as to the causation of delinquency, criminality and insanity by disordered functioning of these glands are flooding the semi-scientific publication. Lately we read a book published by an international reputable house, in which the importance of the endocrines in conduct has been so pictured as to make the

critical reader stop and wonder how even a gullible public would believe such claims!

We do know, however, that the different glands of internal secretion have an important part in human life, especially in the field of conduct.

The thymus has been a source of controversy amongst the authentic workers in medicine. It does not appear to be glandular in structure when examined under the microscope and resembles more the lymphatic tissue of the body. However, experimental evidence seems to indicate that the thymus contributes to the growth of the body and to checking excessive development of the sex glands. In the human, the gland reaches its maximum size during the first two years of life. It then becomes smaller and disappears about puberty. Whenever the thymus gland fails to undergo a reduction in its size at the proper time, there results a condition known as subinvolution of the thymus.

In people thus afflicted the skin is very soft and smooth, with very little hair, so that the male need hardly shave; the bones of the body are very long, the blood pressure is low and the genitals are poorly developed. These people are quite tall. Their general resistance to all forms of stress is lowered. They are apt to die suddenly, especially during anaesthesia or following some shock. Their personality is characterized by an infantile attitude towards life, and dependency upon others. They lack aggressiveness and are handicapped in meeting the various problems of

life. Whenever there is a precocious involution (degenerative changes) of the thymus gland there results an individual rather stockily built with an unlimited amount of energy, rather irritable, impulsive and unreasonable in behavior, and of very intense sex activities.

The pineal gland is another gland whose functions are not as yet definitely established. Tumors of the pineal gland in the young are accompanied by precocious sex development. Deficiency in function of this gland is therefore said to be followed by marked and precocious sexual development, and by a rapid body growth. Excessive activity of this gland is apt to be accompanied by retardation in sexual development. This gland normally undergoes regressive changes in puberty.

The thyroid gland was the first of the endocrine organs to interest medical men, and clinical manifestations of diseases of this gland have been recognized by physicians for a long time. The active principle is thyroxin, a chemical combination of thyroid secretion with iodine. Undersecretion of the thyroid gland results in the infant in a condition called cretinism, and in the adult, myxedema. Cretinism and myxedema are thus caused by insufficient supply of the active principle of the thyroid gland. In the cretin, there is small stature, the nails are brittle, the skin is dry, rough and thrown into folds; the metabolism rate is very low; the temperature is below normal; the pulse is slow, and blood pressure is diminished. Mentally the patient shows a retarded development in the in-

tellectual and emotional fields. Whenever there is in the adult a diminished supply of the active principle of the thyroid gland, there results a condition known as myxedema. Such condition may result from disease of the thyroid, or from a new growth in it. The patient becomes sluggish in his mental activities, loses interest, is retarded and irritable. The skin becomes thickened and edematous. The hair falls out and the nails become brittle. The pulse is slowed, the rate of metabolism lowered and the patient becomes an uninteresting, dull and stupid individual. Both cretinism and myxedema are amenable to proper medical treatment, which consists in administering to the patient thyroid gland or its active principle.

Overactivity of the thyroid gland results in increase in the heart beat, a slight rise in temperature and an increase in all secretions of the body. The skin becomes very soft and warm and moist. The rate of metabolism is markedly increased. There is a loss of weight. The mental activities of the patient are enhanced and their ideation is rapid. There are tremors in the fingers. The eyes appear very bright and sparkling, and there may be a moderate bulging of the eyeballs.

In Graves' Disease, or exopthalmic goitre, we have a condition in which there is abnormal increase in the secretion of the thyroid gland. In this condition the thyroid gland is enlarged. The heart beats rapidly; the skin is flushed and moist. The eyeballs are bulging from their sockets and there appears to be visible an undue amount of the

white of the eye. The breathing is rapid and shallow. There is a fine tremor of the extended fingers. There is a moderate muscle weakness. Insomnia is apt to supervene. Emotional control is lacking. There are frequent outbreaks of laughing and crying caused by emotional instability. Due to increased rate of metabolism, the appetite may be ravenous, and yet there is a consistent loss of weight. There is diarrhoea. The blood shows an increase in its lymphocytic elements.

It is not common to have insanity associated with disturbances of the thyroid gland. Deficiency of the thyroid gland causing cretinism and myxedema results in definite retardation of physical and mental processes with a tendency to stubbornness, and ugliness. Hyperthyroidism is usually accompanied by fear and anxiety and emotional instability. Rarely does one one see real psychoses develop in hyperthyroid cases, and then they are characterized by delusions, illusions, visual and auditory hallucinations of a persecutory nature. Delirium also occurs in these types of psychoses.

In cases of extreme hyperthyroid activity, there are profound changes in the brain cells, and manifested in the solution of the chromophilic or staining substances of the cell.

Activity of the thyroid is increased during menstruation and pregnancy. It is also increased during periods of stress and intense emotion.

It will be observed from what has been said before that the thyroid gland secretes a substance which is essential to proper metabolism and which

influences many other glands and organs in their proper functioning. It regulates the rate of oxidation of the body.

The parathyroids are glands secreting a substance which in some manner tends to check excessive excitation of the nerve cells. Their function is best understood by studying the conditions following their removal from the body. When these glands are extirpated, tremors and convulsions occur, followed by death. The condition following complete removal of the parathyroids is spoken of as tetany. There are no known clinical picture types resulting from excessive activity of the parathyroids.

The adrenal glands are really of dual structure, i.e., (1) the cortex and (2) the medulla. The cortex is developed from the mesodermic layer of the original embryonic layers, and from the very same tissue which later causes development of the sex glands. The medulla is derived from the ectodermic layer of the original embryologic layers, and is in reality a modified nerve structure. The function of the adrenal cortex is not clearly understood. It seems to bear some relation to the function of the sex glands, but its exact nature is unknown. Tumors of the cortex of the adrenals are often associated with abnormally precocious sexual development.

The medullary portion secretes a substance which is known as adrenalin. When injected into the blood, adrenalin causes liberation of sugar from the liver, it relaxes the smooth muscles of the

bronchials leading to the lungs, it accelerates the heart beat, it raises the blood pressure, it checks secretions of the digestive glands and inhibits the movements of the gastro-intestinal canal, increases the rate of metabolism and diminishes muscular fatigue. It also is capable of reproducing the various changes of the viscera which are characteristic of emotional reactions. It aids in coagulation of the blood. It also enhances the activity of the sympathetic nervous system. Diminished activity of the medulla resulting in adrenal insufficiency makes the individual unable to cope with the problems of life. It results in extreme exhaustion and fatigability, diminished rate of metabolism, slow pulse, and tendency toward haemorrhages.

The pituitary gland is composed of three parts: (1) anterior lobe, which is developed from the same very primitive tissue that gives rise to the root of the pharynx; (2) posterior lobe, which is derived from a primitive tissue which gives rise to nerve structure, and (3) a middle lobe, commonly referred to as pars intermedia. The secretion of the anterior lobe is poured directly into the blood vessels and lymphatic, while the secretions of the middle and posterior lobes are supposed to be poured into the cerebro-spinal fluid. The anterior lobe is essential to life because its removal is followed by death within a few days while removal of the posterior lobe alone does not cause death. The anterior lobe produces a substance which produces growth and sexual development. The pos-

terior lobe raises the blood pressure, influences the vessels supplying the heart, increases the contraction of the smooth muscles of the bladder, uterus and intestines, causes increased urine secretion, increases spinal fluid secretion and milk secretion, increases metabolism, and constricts the bronchioles of the lungs. There has been isolated an active principal of the posterior lobe of this gland known as pituitrin which is extensively used as a medicinal agent especially in the practice of obstetrics and surgery. No active principle as yet has been isolated from the anterior lobe. Since the middle lobe is so intimately connected with the posterior lobe it is usually removed with the latter on dissection. Several authorities maintain that it is the middle lobe that is responsible for the function usually attributed to the posterior lobe, and that the latter has no secretion of its own. (However, this is more of academic than practical interest.)

In visiting neuro-psychiatric clinics, one is apt to gain the impression, judging from the number of X-rays of the skull that are usually taken, that the functions and anatomical boundaries of this gland are definitely and clearly understood and their interpretation is a simple procedure. Such a condition is far from being true. X-rays of the skull reveal certain changes in the bone that will cast a definite shadow upon the X-ray plate. There are only relatively few pathological conditions of the pituitary gland that will cause changes in its bony envelope demonstrable by X-ray examination.

In hypopituitarism we have a condition with a

definite deficiency in the secretion of the pituitary glands. There is an accumulation of fat and an increase of body weight. The skin is very dry and cool, the hair is very thin and sparse, the genitals remain infantile in their development. There is a lack of desire for sexual intercourse, and there is a diminution in potency in the male; menstruation is very irregular and often absent in the female. There is is a generally lowered metabolism. Often there is frequency of urination. The mental state of the individual is one of sluggishness and moderate intellectual impairment. Occasionally an X-ray examination of the skull may reveal a rather small bony envelope which encloses the gland and prevents its proper growth (small sella tursica).

Hyperpituitarism is a condition resulting from increased activity of the gland. Clinically, it results in rapid growth of the skeleton bones, an increase in the psychosexual and physicosexual development, an increase of growth of hair and a low sugar tolerance. When this condition occurs in childhood, real gigantism results. When hyperpituitarism occurs in an individual in whom body growth has already reached its maximum and ossification has become complete, there results a condition in which the skeletal growth is limited more or less to the skull and the small bones of the hands and feet. We then have an individual who presents a markedly protruding lower jaw, protruding forehead, widely spaced teeth and very broad toes and fingers.

Acromegaly is a condition usually attributed to

an increased function of the anterior lobe of this gland and most frequently it results from a new growth. The individual presents a slow but steady increase in the size of his hands and feet, his forehead becomes more or less protruding, especially the upper part of the orbital cavity, his lower jaw becomes prominent and his upper teeth become separated. The upper jaw appears broad and thickened. He then presents a definite change in his facial appearance that attracts the attention of his family. He may then complain of increasing headache and of difficulties in vision. An X-ray examination of the skull will usually reveal an enlarged sella tursica. This condition is best managed by a surgeon skilled in neurosurgery. Usually excision of the tumor is resorted to in order to secure a cure.

The sex glands, besides producing a definite specific secretion for procreative purposes, also secrete a substance which enters directly into the blood circulating through these glands, and which influences the physical and mental development of the individuals. At the time of puberty in the male a definite change in the contour of the body takes place, there is a change in the voice, and a definite distribution of the growth of the hair on the body. Furthermore, there is a definite change in attitude towards members of the opposite sex and to a lesser degree towards those of the same sex. A feeling of aggressiveness and a pugnacious attitude develops.

In the female at the time of puberty there oc-

curs development of the mammary glands, a deposition of fat around the hips and buttocks, a characteristic change in the contour of the body, a modification in the voice, and a definite alteration in mental attitude giving her the characteristic feminine traits.

These changes are known as secondary sex characteristics. In the so-called normal male and female, these changes are definite and evident to any observer. Unfortunately, however, there are all grades of imperfections in development of these characteristics which not only cause an imperfect physical development but an incomplete psychic development as well. Many observers have met this so-called indifferent or neutral sex which is composed of members of both sexes in whom the primary as well as the secondary sex characteristics are incompletely developed. An understanding of normal and abnormal development of primary and secondary sex-characteristic will enable one to explain such phenomena as men using cosmetics, homosexuality, female prize-fighters, etc.

The secondary sex characteristics enumerated above are supposed to be developed in response to stimulation of the supporting cells of the testicles in the male and of the interstitial cells and corpora lutei of the ovaries in the female. Whenever through disease or castration the influence of these cells is removed, there results a condition which can be best described as that of desexing the individual. In the male the voice becomes altered and resembles that of the female, the hair falls

out and both desire and potency for intercourse are diminished. He becomes more gentle in his manner and loses most of his aggressiveness. In the daily routine he displays a definite change in his general attitude becoming interested in those subjects which are usually relegated to the feminine domain. In the female, the voice becomes harsher, there is a disturbance in menstruation and frequently complete loss of this function. There is a growth of hair on the upper lip and chin. An attitude towards daily activities resembling that of the male is apt to be assumed.

While the above glands are the usual ones discussed under the heading of the glands of internal secretion, there are others which have the power of secreting a substance which is taken up by the blood and which plays important rôles in the perfect functioning of the human organism. The liver, pancreas, mammary glands, and the spleen are the most important of these. The stomach and intestines, the uterus and even the brain are known to produce similar substances.

The liver plays an important part in metabolism of the foodstuffs. It stores sugar in the form of glycogen and later changes glycogen into sugar whenever there is need for energy. It forms urea, which is an important end product in protein metabolism. It secretes bile which is an important element in the absorption of fat. It converts the pigments of the broken down red blood cells into bile pigments.

The pancreas produces a secretion which influ-

ences the digestion of starch, proteids and fats, to which we have already referred. It also has a group of cells arranged more or less in clumps which are commonly referred to as the islands of Langerhans and which are supposed to be the chief factor in the proper metabolism of carbohydrates. These are regarded as capable of producing an internal secretion which is poured directly into the blood circulating through the gland.

The mammary glands are primarily for the purpose of secreting milk to be used as food for the new-born. There is sufficient evidence to believe that the mammary glands also have an internal secretion which plays an important part in the various physical changes that occur in the female reproductive organs during the period of childbirth.

The spleen is alleged to take part in digestion and is apparently intimately connected with the functions of the liver and the pancreas. Many authorities believe that it has an internal secretion the function of which is neither definitely established nor proven. The spleen may be removed from the body without any serious after effects.

Thus far we have considered these glands as distinct unit entities. We must remember, however, that the working mechanisms of these organs are indeed delicate ones and are to a certain point interdependent. One gland or a group of these glands may increase or diminish the activities of another gland or another group of glands. Thus the thyroid gland enhances the activity of the sex

organs, adrenals, thymus and the sympathetic system, and increases nerve irritability; on the other hand, it diminishes the internal secretions of the pancreas. The adrenals stimulate the activity of the sex glands, the liver, and the thyroids, and diminish pancreatic activity. The pituitary stimulates activities of the adrenal, thyroid and sex glands and retards thymus gland activity. The pancreas stimulates the parathyroids and checks the thyroids. The parathyroid checks the activity of the pituitary, adrenal and thyroid glands, and lessens nerve irritability. The proper activity of the glands of internal secretion results in normal balance in function of these glands, and induces a normal healthy organism. Improper function in one of these organs results in imbalance of activities of the other glands so that there is hardly any disease of a gland of internal secretion in which the other endocrine organs are not affected.

It will be noticed that in describing the functions of the endocrine organs, there were a definite number in which the functions were not clearly understood. There were others, however, in which the functions were definitely established. A thorough knowledge of the physiology of these glands is essential to a proper evaluation of the functional efficiency of any individual, either in health or in disease. Such a procedure necessitates not only a physical examination of the person but also an analysis of his secretions and excretions as well as an understanding of his methods of adaptation to different environmental situations. Only then can

we arrive at a proper conclusion of the rôle played by the endocrine glands in the behavior of the particular individual. We must not allow ourselves to make exaggerated claims of the importance of these organs in behavior and its disorders, since we are still in the experimental stage of obtaining information regarding their activities.

The energy distributing mechanism is the cardio-vascular system (heart and blood vessels), and the blood. Blood has rightly been called the fluid of life. It consists of the fluid part known as plasma, and a cellular element known as the red and white blood cells, and platelets. The blood absorbs the products of digestion from the intestines, and the active principles of the glands of internal secretion and the oxygen from the lungs. It also carries these different elements to the various organs enabling them to perform their respective functions. It likewise carries from the different tissues waste products and conveys them to the waste disposal apparatus of the body. In the blood are formed the many defensive agents which the body utilizes in combating the various infectious diseases. The red blood cells originate from bone marrow, and carry oxygen in combination with its iron containing element called hemoglobin. The white blood cells originate partly in blood marrow and partly from the so-called lymphatic tissues of the body and are more or less the standing army of the body in combating infectious disease. The plasma contains various agents to combat disease, (antibodies). The blood platelets

are found in recently shed blood and participate in clotting of the blood. Besides the antibodies, the plasma also contains the foodstuffs which are conveyed to the tissues and the waste products which are carried to the excretory organs as well as the enzymes and hormones of the different organs.

The heart is an organ which is composed of a highly specialized muscle tissue, which is characterized by its power to contract and relax rhythmically. Each contraction of the heart is called a heart beat. With each heart beat the blood is sent through the arteries to their smaller divisions, (arterioles) and finally into the capillaries. In the capillaries various products of digestion and oxygen are given to the particular tissues, and the waste products gathered from them. The capillaries then form small veins which in turn form larger veins and are returned to the right side of the heart. The chambers of the right side of the heart send this blood, which is now rich in waste products and carbonic acid, through the lungs, where some of the carbonic acid and some of the other waste products are given up to the expired air and oxygen is taken up from the inspired air. This blood, rich in oxygen, is now returned from the lungs to the left side of the heart and from there sent again to the different organs and tissues of the body. The blood passing by way of the arteries through the kidneys gives off most of its water and many of its waste products which are then excreted by the kidneys in the urine. The blood

in circulating through the different organs and tissues combats the different infectious diseases by virtue of the various defensive agents that it has for this purpose. The blood also tends to regulate the temperature of the body.

The arteries are the vessels carrying blood from the heart to the different organs and tissues. The arteries have the power to dilate and to contract as the blood rushes through them. The pulse is the force conveyed to the arteries by the circulating blood. It has been an old dictum that a man is as old as his arteries, which indicates that with increasing age the arteries lose their elasticity and are not as efficient as they were in earlier life. The veins return the blood from the different body tissues and organs to the heart.

Diseases of the heart play an important part in the personality of the individual. Many different types of heart disease are associated with anxiety and fear reactions. Others may in their terminal stage be associated with marked confusion and even delirium, which may result in a frank psychosis. Poor circulation may result in a poor blood supply to the brain, giving a condition known as cerebral anaemia, which is characterized mentally by irritability, lack of concentration, and inability to perform one's work properly.

Hardening of the arteries or arteriosclerosis is in a mild degree present in the vast majority of people reaching old age. The clinical signs and symptoms produced by arteriosclerosis will depend in a measure upon the organs whose arteries are

chiefly affected. In hardening of the arteries of the brain, a condition called cerebral arteriosclerosis, we have an individual who is quite irritable, and somewhat stubborn, who cannot maintain his attention for any length of time on any task (lowered mental tension) and who is apt to show defects in memory, especially of remote events. They also are apt to show impairment of the power to retain new information. When this condition is present in extreme degree, it is apt to be associated with a definite outbreak of insanity. This type of psychosis is characterized by marked irritability, impulsive acts, memory and retention defects, and may be associated with delusional ideas of a persecutory nature. Many of these cerebralarteriosclerotic individuals have in their prime been men of prominence and have achieved considerable success in their various fields of endeavor. As they grew older, their cerebral activities became more limited and more or less automatic.

Arteriosclerotics are apt to become intolerant of opinions of others. They find difficulty in adapting themselves to new customs and habits of life. They often become cranks and faddists. By virtue of their recognized authority in their various callings, they are apt to gather new followers and disciples in various movements which they may undertake. Thus several prominent men who have in their later years become actively engaged in such movements as spiritualism have done so because of impaired judgment due to cerebral arte-

riosclerosis, and have gathered many disciples because of the prominence which they have achieved in some field of human endeavor during their prime of life.

The waste disposal mechanism of the body consists of the lungs, skin, kidneys and rectum. Through the lungs are excreted carbonic acid gas and some water, which are brought there by the blood. The skin through its sweat glands excretes considerable water, allows evaporation of excessive heat of the body, and some of the poisonous material resulting from metabolic processes. The kidneys are the most important organs excreting waste products from the body. The kidneys are composed of a system of tubes which are able to gather from the blood circulating through the kidneys practically all of the end products of the metabolism of the protein element of food and of the changed tissue proteids, and water. From the kidneys the water containing the different excretory elements passes through ureters (or tubes) leading to the bladder, which expels it through the urethra (a tube leading to the outside of the body) as urine. Occasionally in process of disease the urine contains different infectious agents. The rectum is the reservoir which holds that part of the food which has failed to undergo digestion, as well as some of the bacteria normally present in the intestinal tract; also many chemical compounds which result from bacterial decomposition of different organic substances present in the intestinal tract.

Diseases of the kidneys result in incomplete

elimination of the end products of metabolism, and cause considerable clouding of the sensorium and interfere to some degree with normal mental processes. In the more serious types of diseases of the kidney, there often results confusion, disorientation, excitement and delirium. Not infrequently a real psychosis may ensue. It is a matter of common observation that constipation, especially if chronic and protracted, causes considerable sluggishness of mental as well as physical activities. This is due to the action of the products of decomposition of the different waste materials upon the nerve cells of the brain.

Excepting in the lowest forms of life, there are special cells and tissues set aside for the purpose of continuing the species. The process by which a new being springs from these specialized cells is known as reproduction. Those organs which participate in reproduction are called the generative organs. In the male the testicles produce types of cells called spermatozoa while in the female the ovaries contain a group of cells called ova. From the union of a spermatozoon with an ovum, there results the new being. By the process of copulation or sexual intercourse these specialized cells are able to meet. In man alone, sex congress is an end in itself; in all other forms of life, copulation is merely a means for reproduction. The failure to realize that in the human being sexual intercourse is not only for the purpose of reproducing the race but is also an end in itself, in satis-

fying an instinctive craving, has led to considerable unhappiness.

Sex relationship and all its concommitant emotions has occupied the interest of the world at large. Much has been written about it both by trained and untrained observers. The ancients surrounded sex with all sorts of taboo and mysticism which have found expressions in many religious and civil ceremonies.

Physiologically, it may be said that at puberty (12 to 14 years of age) the various sex glands begin to functionate. In the female there is a periodic monthly discharge of an ovum from the ovaries. This is accompanied by general physical as well as mental signs and symptoms in the individual. The uterus becomes congested and there is a discharge of blood from it, which escapes through the vagina. The breasts become somewhat enlarged and tender. The thyroid becomes somewhat enlarged. Mentally, the individual becomes rather restless, somewhat irritable and emotionally unstable. For a few days preceding these changes and for a number of days following them, the desire for sex relationship is great. These symptoms are characteristic of the general phenomenon called menstruation. At about 45 years of age, at the so-called period of involution, the ovaries fail to expel any more ova and menstruation ceases. At this period, there is a rather delicate and tense mental state in the individual. She is apt to become morose, irritable, nervous and emotionally unstable.

In the male, there is no such periodicity in the sex function. Furthermore, there is no definite cessation of spermatozoa production corresponding to the cessation of ova formation in the female.

In both sexes, sex relationship has not only a definite physical side to it but a well defined psychic phase. Disturbances in the psycho-sexual field are responsible for most of the psychoneuroses. Disturbances in the physical phase of sex relationship are caused by diseases of the nervous system especially of the spinal cord.

The defensive and protective mechanism of the body consists of the skin, the lining of the different cavities of the body, the blood and the nervous system. The skin is protective in nature, and it is aided by various appendages such as the hair, nails, and sweat glands. The mucous membranes lining the various cavities of the body are an aid in repelling different disease organisms that gain entrance into these cavities. The blood by virtue of its power to form antibodies, (substances that are able to combat disease producing agents) and through the white blood cells which are able to ingest certain disease producing germs, is a powerful defensive agent of the body. The part the nervous system plays in protecting the organism from danger will be discussed later in this chapter. Suffice it to say that it enables the individual to detect any danger in his environment and to mobilize all the defensive mechanisms to meet that danger.

We have thus far discussed the different organs

of the body, as more or less less distinct entities, performing a definite function and serving a distinct purpose, and all of which are performed for the ultimate benefit of the being as a whole. In order for these different organs to work in harmony, and in the most efficient manner, nature has produced a definite and distinct organ for the purpose of correlating and regulating the different organs of the body. This organ is the central nervous system. The unit of structure of the central nervous system is the neuron. It consists of a cell body with protoplasmic processes for the reception of stimuli which are called dendrites, and a prolongation of its protoplasm into an elongated process called axis-cylinder, for the purpose of conveying the stimulus. The cell body contains a highly specialized substance called chromophilic substance which gives it its coloring properties, and which is used as an index in determining the health or diseased state of that particular cell. Where the axis-cylinder of one cell meets the dendrites of another cell there results a synapse which is the unit of function of the central nervous system.

In the unicellular organisms the particular organism responds to danger or to a source of food by mere movement of its protoplasm sending out processes which enable it to get away from a particular danger as well as to ingest the food. It does so in response to a stimulus directed to some part of its body. In those organisms in which there is developed a nervous system the different parts of the body and its various organs are adjusted by

this nervous system. Furthermore, in response to stimuli brought to it by means of this nervous system, the simplest method of response to the stimulus is by means of the reflex action. A stimulus reaches a central station by means of a receptor or sense organ and a conductor or afferent nerve. The correlation centre or adjustor transmits this stimulus along a second conductor or efferent nerve to the so-called effector operators which is a group of muscles or glands. In the simpler forms of life most of the nervous activity consists of reflex acts. As we ascend in the scale of development, the reflex acts are so correlated and collaborated as to form a more elaborate nervous activity. It is only in the human that the nervous system is developed to its final degree, and here we have those different mental processes such as memory, reasoning, and judgment.

The sense organs are highly specialized nervous tissue which are able to detect certain stimuli coming to them from the environment. In the skin we have specialized nervous structures which are enabled to perceive sensations of pain, touch, cold, and heat, and convey them by means of the sensory nerves to the spinal cord through the different centres in the cord, the medulla, pons, and midbrain to the thalamus, which sifts all these sensations, and finally to the sensory part of the cerebral cortex. There the sensation is interpreted, recorded as a memory and associated with previous experiences, and the human being is thus enabled to respond to these sensations in an appropriate

manner. The eye, for the purpose of seeing, the ear for the purpose of hearing, the nose for smelling, the tongue and mouth cavity for the purpose of tasting, represent in the human the final stage of sensory evolution. These sense organs also send by means of the various carnial nerves impressions to the brain cortex which are interpreted in the light of old experience, and responded to in appropriate fashion. The response to these sensations is performed by way of the efferent or motor tracts of the cerebro-spinal system. The cortex of the brain has a specialized area for sending stimuli along the motor pyramidal tract to the different voluntary muscles which enables the individual to get away from danger or to utilize his various apparatus in securing food and nourishment, etc.

The type of nervous activity that we have thus far discussed is voluntary — that is, one in which the individual is fully conscious of his stimuli and reacts to them in a deliberate, wilful manner. However, there are certain processes such as respiration, heart beat, activities of the sweat glands, gastro-intestinal tract, reproductive functions, etc., of which the individual is unaware, but which go on in a definitely regulated and well controlled manner. That part of the nervous sysem which controls these unconscious activities of the organism is called the autonomic nervous system. This system not only controls the activities just enumerated but also regulates the action of the glands of internal secretion, and participates in the re-

sponses of the various emotions such as anger, fear, rage, joy, sorrow, etc. The autonomic nervous system is composed of two parts; the sympathetic and parasympathetic system.

The sympathetic division of the autonomic system causes dilatation of the pupils, increases the rate of the heart beat, maintains the tone of the arteries, causes secretion of sweat, erects the hair, inhibits activities of the digestive organs, contracts the muscles of the internal genitals, relaxes the bladder, and enables the liver to change glycogen into sugar. It has an inhibitory effect on the muscles of the trachea and the bronchi and on the smooth muscles of the gut from the stomach to the descending colon; contracts the muscles of the external generative organs, and stimulates the adrenals, as well as the thyroid glands.

The parasympathetic division of the autonomic system has two divisions, the cranial and sacral branches. The cranial autonomic division (vagus) contracts the pupils, inhibits the heart action, causes secretion of the salivary and gastro-intestinal glands, maintains the tonicity of the gastro-intestinal canal wall; the sacral division of the autonomic nervous system contracts the rectum and the distal part of the colon, and causes an erection of the generative organs.

The action of the sympathetic division of the autonomic nervous system is best seen in time of intense emotions, in combat, in rage, and anger. To the cranial division of the sympathetic system belongs the duty of building up reserve energy

to be utilized by the body in time of need. The sacral division of the autonomic nervous system deals especially with the function of waste disposal and reproduction, serving therefore the species as a whole.

It has been found by Cannon especially and by Crile that the autonomic nervous system plays a most important part in the control of the glands of internal secretion, and during the major emotions. The latter observer utilizing these various theories for practical application in the surgical operating room has shown how fear causes a disturbance in the glands of internal secretion and actual changes in the various cells of the nervous system, demonstrable under the microscope. Through the various stages of evolution the body has acquired a pattern of reaction to meet the different dangers in its environment. The adrenals, the thyroids, and the liver are especially called upon to meet dangerous situations in time of fear and rage. Adrenalin is poured into the circulation, which stimulates the sympathetic nervous system, causing a shifting of the blood supply of the body to the brain cells, relaxing the smooth muscles of the bronchioles and increasing respiration, therefore causing increased oxidation, and liberating glycogen from the liver to be utilized by the muscles and glands in the formation of energy. The thyroid gland excretes increased thyroid secretion and thereby enhances oxidation. In times of stress and danger, the body reacts by the utilization of the function of the glands of internal secretion

through the autonomic nervous system.

In time of relative peace and freedom from danger, the body is constantly storing up energy through the parasympathetic division of the autonomic nervous system and is also enabled by this division of the involuntary nervous system to procreate itself.

Crile has shown that during the major emotions, in anger, rage, fear, the cells of the brain show definite dissolution of its staining substances indicating an expenditure of nerve energy. Fatigue also causes similar changes. He found that during sleep the nerve energy is restored, and the cells regain their normal healthy staining properties.

The foregoing is merely an indication of the various changes that occur in the tissues of the body during rest and excitement, joy or sorrow, fear and anger. It will be noticed that all emotions are accompanied by definite physiological and anatomical changes. Furthermore, the glands of internal secretion play a prominent part in the manifestation of emotions. It is therefore logical to assume that in the different types of physical and mental activities, the processes are not distinct but interdependent. In other words, there is no distinctive physical or mental process. Each elicits activity of the other. Normal conduct is the result of both physical and mental processes, and abnormal behavior is caused by a combination of both organic and psychogenic factors.

In disease processes, we have an altered physical

as well as psychogenic activity. In the various diseases associated with fever, there is a definite change in the cells of the nervous system which results in a dissolution of its color substances and loss of nerve energy. In a person recovering from febrile disease, it is very common to see restlessness, sleeplessness, irritability, lack of emotional control, and often excitement. This is caused directly by the biochemical changes in the nerve cells. In chronic wasting diseases, there is a constant source of stimulation and irritation reaching the nerve tissue causing exhaustion and resulting in a loss of emotional control in the individual. Chronic infections such as results from infections from the teeth, tonsils, blood-poisoning, etc., also cause irritability, restlessness, fatigability, inability to concentrate for any length of time, lack of emotional control, etc.

In diseases of the kidney, as mentioned before, we have an interference with the excretion of the various toxic elements of the end product of metabolism which causes clouding of the sensorium, confusion, and delirium which may lead into a frank outbreak of insanity. In diseases of the heart there are often periods of anxiety, fearfulness, confusion and delirium. In diseases of the brain, especially when it involves the frontal lobes or those areas which are especially concerned with the highest mental faculties, namely, reasoning and the passing of judgment, there is commonly found definite interference with proper cerebration. They have difficulty in retaining new per-

ceptions, and in recalling old memory, association is retarded, and often there may result confusion and excitement.

Many diseases of the nervous system are powerful factors in the causation of abnormal behavior. Epidemic Encephalitis, a disease attacking the central nervous system, may be followed by marked behavior abnormalities and characteristic mental disorders. Injuries to the brain tissue often result in definite traumatic psychoses. General paresis, a psychosis resulting from neurosyphilitic conditions, plays a prominent part in the production of conduct disorders. These mental disorders will be fully described in later chapters (see Chapters VI and XI). Epilepsy is probably more conducive to abnormal behavior than almost any other one disease. So varied are its manifestations that this subject requires a chapter to itself (Chapter VIII) to which the reader is accordingly referred.

The mind is primarily for the purpose of adapting the individual to his surroundings. The highest mental processes are dependent upon proper functioning of the brain. The glands of internal secretion, especially the thyroid, play an important part in normal mental life. From what has been said before, it is quite evident that adequate adaptation to the environment and normal behavior is possible only with a healthy, adequate functioning of every organ in the body, and a thorough understanding of the various deviations from normal behavior can only be obtained by an appreciation

of the part played by pathological changes in causing abnormal conduct. One must have a knowledge of anatomy, physiology, pathology, physiological chemistry, and psychology, and have extensive experience with not only mental but also physical diseases, in order to fully understand the different factors involved in the causation of abnormal behavior.

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Chapter V

THE RELATION OF PERSONALITY TYPES TO BEHAVIOR

Variations of response to similar situations in different individuals explained by variations in personality make-up.
Definition of personality.
The physical, intellectual and emotional factors of the personality.
Various outlines and rating scales for description of personality.
Adaptability as the criterion for normal personality.
Abnormalities of personality due to emotional imbalance.
The mood fluctuations of the manic-depressive type.
The shut-in or seclusive personality.
The neurotic constitution and its characteristics.
The personality of the psychoneurotic.
The emotionally unstable personality.
The egocentric personality and its relation to criminal conduct.
Physical conditions and personality changes.
Effect of environmental influences on personality development.
The father and mother complexes in relation to personality and behavior.
The aggressive and passive personalities.
The self-confident and self-distrustful types.
Development of the moral and ethical attributes of personality.
Importance of the environmental factor for personality reconstruction.

IT is a matter of common observation that different individuals respond differently to the same situations. A striking example was afforded

in the late war, which called out heroic qualities in some participants, but evoked only expressions of weakness in others. Of a group of men who perhaps fought side by side in the trenches, some went on and on from one battle to another, while others collapsed under the strain and had to be removed from active duty. In civil life we see similar variations in individual behavior under identical circumstances. One business man who sees his enterprises threatened will exert every energy to avoid the failure of his schemes, while another, similarly situated, will endeavor to close up his transactions with as little loss as possible. An analogous situation exists in the field of love activities. One lover is easily discouraged if he meets with rivalry over the object of his affections, while another only becomes more determined in his pursuit of the love object under competition. We might go on indefinitely quoting illustrations of like nature from almost every sphere of human activity. We may accept a general principle that the behavior of different individuals in the same or similar situations is as varied as the personalities of the individuals concerned.

In its broadest aspects, personality may be defined as the aggregate of the physical and mental characteristics that enable the individual to respond in a characteristic fashion to a definite situation, that distinguish him from others and give him his own peculiar individuality. To make this general statement more specific, we may consider that differences in personality make-up depend

upon differences in the following traits:

1. Differences in intelligence.
2. Differences in physical make-up.
3. Differences in the strength of instinctive and emotional drives.

Under these three main headings, it is possible to group the various personality traits described in most treatments of this subject. As a matter of convenience, however, different authors enumerate certain selected characteristics, which might be considered as subdivisions of the three main headings given above, but which have so predominant a rôle in determining the personality make-up that a rating of the individual in respect to these qualities gives a fairly accurate representation of his personality. The Hoch-Amsden guide to the descriptive study of the personality included an inquiry into the following characteristics of the individual:[1]

1. Traits relating essentially to the intelligence, the capacity for acquiring knowledge, the judgment, etc.
2. Traits relating essentially to the output of energy.
3. Traits relating essentially to the subject's estimate of himself.
4. Adaptability toward environment.
5. Mood.
6. Instinctive demands, traits which are more

[1] Quoted from "A Guide to The Descriptive Study of The Personality," by Hoch and Amsden, State Hospital Bulletin, November, 1913.

or less clearly related to the sexual instinct.

7. General interests.
8. Pathological traits.

Lyman Wells, after a study of the Hoch-Amsden outline and of data contributed by Heymans and Wiersma, Cattell and Davenport, presented a synthetic scheme for the study of the personality which consisted of an evaluation based on the following points:[1]

1. Intellectual processes.
2. Output of energy.
3. Self-assertion.
4. Adaptability.
5. General habits of work.
6. Moral sphere.
7. Recreative activities.
8. General cast of mood.
9. Attitude towards self.
10. Attitude towards others.
11. Reactions to attitude towards self and others.
12. Position towards reality.
13. Sexual sphere.
14. Balancing factors.

A somewhat later personality rating scale evolved by F. H. and G. W. Allport has these divisions:[2]

[1] Quoted from "The Systematic Observation of The Personality — in Its Relation to Hygiene of The Mind," by F. L. Wells.

[2] Quoted from "Personality Traits; Their Classification and Measurement," by F. H. and G. W. Allport.

I. Intelligence.
II. Temperament.
    1. Emotional breadth.
    2. Emotional strength.
III. Self-expression (strength).
    3. Extro-version.
    4. Ascendance-submission.
    5. Expansion-reclusion.
    6. Compensation.
    7. Insight and self-evaluation.
IV. Sociality.
    8. Social participation.
    9. Self-seeking and aggressive self-seeking.
    10. Susceptibility to social stimuli.

Without entering into any detailed discussion of these various outlines and rating scales for the description of the personality,. we may point out that in general their points would all be included under one or another of the main headings, intellectual capacity, physical make-up or instinctive and emotional drives. The only case in which this is not immediately apparent is perhaps that of adaptability to environment, but in a severe analysis, we should undoubtedly find that this, too, depends upon the interaction of the intellectual, physical and emotional factors of the organism. The ability to adapt readily to new situations depends partly upon the degree of intelligence, partly upon physical well- or ill-being which renders a radical change of conduct comparatively easy or

difficult, and in part upon the presence or absence of emotional impulses which tend to accelerate or retard the newly required response.

The so-called normal personality is rated as such principally upon the ability to make adjustments to new situations in an adequate and socially approved manner. That is, the trait of adaptability referred to upon the various rating scales is placed at a premium as an indication of normalcy. This means that the normal personality must have average or even superior intelligence; must possess a well-balanced physique, and must either be free from emotional conflicts or have the emotions well under the control of the conscious mental life. Aside from the inadequate personality of the mental defective, whose deficient intelligence renders him ill equipped to meet the exigencies of life, most definitely pathological personalities are based upon imbalance of the emotions. These abnormal personality types are well known to the psychiatrist. Their incidence as a cause of abnormal behavior and in the production of maladjustments of all kinds is so frequent that it is relevant to discuss them somewhat in detail.

A rather common type of personality among those showing abnormal tendencies is that which is characterized by an almost or entirely complete absence of the gregarious impulses. This has been called the seclusive or shut-in type of personality. Individuals of this seclusive nature do not mingle with others readily, but prefer to remain aloof,

wrapped in their own thoughts and fancies. Very often, they are indifferent not only to their associates but to the realities of the external milieu in which they live. Thus they appear to have little interest in either people or events. As children, they are shy and timid, do not play with other children, are quiet and reserved. Sometimes they are considered model boys or girls because their withdrawal from the natural activities of childhood saves them from being involved in the mischievous pranks of their schoolmates. Their dreaminess and their habit of staying by themselves to read, etc., instead of joining in the play of the group is often mistaken for studiousness and intellectual superiority, which justifies forgiveness for slight peculiarities. As a matter of fact, this type of personality may be found in conjunction with almost any degree of intelligence, from actual mental defect to very superior intellectual endowment.

Unless these seclusive habits are modified before it becomes necessary for the individual to make adjustments independently and to rather complicated social situations, this personality becomes an important factor in preventing the proper adaptation to the demands of life in general. It may become a source of marital difficulties, of vocational misfits, etc. In extreme cases, we shall find that it becomes so intensified as to obscure all the other traits of the personality. The individual is then considered to be mentally ill. The type of insanity known as Dementia Praecox invariably

develops in individuals who have possessed a seclusive or shut-in personality. (See Chapter VI.) The converse is not true, however. Not all seclusive personalities pass over into definitely psychotic states. Individuals of the shut-in type may make a fair adaptation to the community life, simply remaining more or less aloof from their fellow-men, or developing other eccentricities. The hermit and the miser are classical literary examples of such mildly seclusive personalities.

Another abnormal type of personality is that which finds its extreme expressions in the Manic-Depressive patient of our psychiatric clinics. This is the personality which is subject to marked fluctuations of mood. It swings in alternate cycles of elation and depression. In the elated or manic mood, the person is talkative, facetious, restless, overactive, impatient and perhaps a trifle boisterous. The opposite phase is one of sadness or depression, in which the patient is quiet, retarded in thought and movement, is oppressed by a feeling of sorrow and even of guilt, blaming himself for all sorts of acts which were in reality innocent enough in their intent, and at times inclined to be morose or tearful. The Manic-Depressive temperament is also inclined to irritability and uncertain temper. In the elated phase, when there is a free and active flow of associative processes, it may become inventive and original.

One author of exceedingly clever and witty short stories possesses this type of personality. The manic tendency to a rapid stream of verbal imagery

is well adapted to the profession of writing so long as the associations are maintained in fairly logical form. Many manic-depressive patients write plays, poems and stories on the ward while in the manic phase, only in these extreme cases the associations are disordered and fragmentary so that their productions could not be considered to possess any literary merit. They may, however, choose a striking title, as did one brilliant manic who conceived the name of a play as " Souls." Unfortunately he spent more time describing the play and writing press notices than in actual construction of the acts, so that his scheme fell through.

Certain personalities maintain the elated or manic phase indefinitely. They are known as hypermanic or hyperkinetic (hyper- or over-active) types. These hypermanics, if mild in degree, are capable of incredible expenditure of energy without exhaustion. They can work and play incessantly. They are the life of any social party. They are mischievous and indulge in all sorts of pranks. These traits make them pleasant patients, if they develop definite psychoses, but it also renders them somewhat dangerous, as they carry their mischievous impulses to extremes, and sometimes become assaultive while intending to be merely playful.

In other instances, the depressed mood predominates; the person is subject to frequent attacks of " the blues " and often develops a pessimistic philosophy of life. He reproaches himself for

trivial errors. He becomes introspective and surly in attitude. He has suicidal obsessions, dwells upon the thought of self-destruction, and in extreme attacks of melancholy may even attempt to take his own life. Often such a depressed personality is difficult to " get along with," as in this mood the person is apt to be sensitive and feel himself badly treated by friends and relatives, accusing them of not having a proper amount of affection and consideration, etc. It is not strange that a certain percentage of marital difficulty can be traced to this personality type in either the husband or wife. The thought of coming home to such a personality might well drive a would-be faithful husband to seek relief in the society of other women, while the wife who finds her husband wrapped in his imaginary woes may well feel a desire to elope with some old flame to whom she once preferred her husband.

As we shall see in later chapters, the manic-depressive personalities, when their traits are developed in extreme forms, may become involved in all types of behavior difficulties, from simple peculiarities of habit and vocational maladjustments to actual delinquent conduct, including even some of the major crimes against society, such as larceny and assault. On the other hand, this personality make-up may become a distinct business asset to some individuals. One business man of distinctly manic-depressive personality found this temperament exceedingly helpful. In the manic mood, when his mind was alert and hyperactive,

he could prophesy changes in the market and use this foresight to his own advantage. Occasionally he made mistakes, but when he became depressed he was dominated by a feeling of inferiority and self-accusation which made him review these errors. This recurrent tendency to self-analysis prevented him from repeating his previous mistakes, so that he constantly remained ahead of the market as a result of these alternating phases of mental activity and introspection. Many prominent figures of history have also been of a Manic-Depressive temperament. A notable example is Abraham Lincoln, whose depressive personality has been described by L. Pierce Clark.

Less definitely pathological, perhaps, yet certainly abnormal, is the personality which accompanies the neurotic constitution. The neurotics are those fearful, indecisive, constantly complaining individuals, who show a fundamental weakness and lack of stamina. They try to compensate for their deficiencies by assuming a set of virtues which are not natural to their personality, and are therefore overdone and patently artificial. Instead of being punctual they arrive ahead of time; instead of being rapid and efficient, they are so methodical as to be slow. They replace a wholesome regard for cleanliness by over-fastidiousness; lacking a wholesome sense of honesty and moral integrity, they become the type known in the vernacular as "goody-goodys," and are scrupulous about unnecessary details.

Adler has devoted a whole book to a description

of the neurotic and a theory as to the underlying causes for the development of this type of personality. According to this author, the neurotic constitution is characterised by organic deficiencies which impair the general physique of the individual. This physical defect gives rise to a feeling of insufficiency and inability to cope with the struggle for existence, and thus produces the fearful, vacillating type of individual whom we have described in the preceding paragraph. This theory of the neurotic constitution and personality is confirmed by the fact that the developmental history of many neurotics gives a typical picture of a delicate and sickly infancy period, with prolonged enuresis and other physical symptoms.

Like the neurotic, the psychoneurotic personality is lacking in certain fundamental characteristics which make for strength and stability. The symptoms of the psychoneurotic patient are at their source an indication of the inability of the individual to face the hardships of reality. Sensitive, easily discouraged, shrinking from pain, these personalities take refuge in day-dreaming, in hysterical manifestations, minor "nervous breakdowns," etc., in order to escape from the unpleasant situations which are often a part of life. The wife who secures everything she wants from her husband by becoming ill when her wishes are not granted is the classical illustration. Her illness is often nothing more than a fit of temper which appears in hysterical form. This method of reaction is as infantile as the crying of the baby

for its bottle when hungry, since it involves no more acceptance of reality and necessitates no more strenuous activity on the part of the individual.

The neurotics and psychoneurotics, although unpleasant personalities in many ways, seldom become definitely anti-social in overt action. They develop minor mental disorders, such as phobias (abnormal fears), morbid obsessions (irresistible impulse to certain habits of behavior), hysterical attacks, anxiety neuroses, etc. The abnormal behavior of these two personalities will be discussed in detail in a later chapter (Chapter VII) and need not detain us at this point.

There is a certain type of personality which may best be described as emotionally unstable. This implies that the emotional reactions are set off by inadequate or inappropriate stimuli on many occasions, or that they are exaggerated out of all proportion to the external situation. We consider such personalities to be over-suggestible and impulsive, because their behavior would indicate that such is the case. They are easily upset, are subject to uncontrollable spells of crying or laughing, and often have actual temper tantrums. When this emotional instability becomes extreme in nature and prevents the individual from making a satisfactory social adjustment either by causing continued vocational malajustment and inability to earn an adequate living, or by resulting in abnormal and anti-social behavior which brings the individual into conflict with the law, we have a

definitely pathological personality known as the psychopathic personality or constitutional psychic inferior. (This type will be further discussed in Chapter VII).

It is characteristic of the emotionally unstable individual to seek the causes of his maladjustment outside himself. Because he is unable to adapt himself to the demands of society he wishes to change social customs to suit his own unstable personality. He seizes upon some social or economic theory, and becomes a dangerous leader of his group, either as a labor agitator or a radical political leader. That modern society could be reconstructed to advantage cannot be denied, but one could hardly devise a social system in which the constitutional psychopath could find a safe haven. Were all the changes demanded by his favorite theory to be made, he would still find himself discontented and dissatisfied, for social regulations must be shaped in harmony with the demands of the average or normal individuals. Thus, although the radical psychopath may inadvertently bring about changes of benefit to his confreres, he himself profits little thereby, for he soon becomes as ill adjusted as ever to the new environment which he has created in the hope of achieving satisfaction.

The personality types which we have been describing are those which are definitely associated with some form of mental disorder, although their mild characteristics are found in a great many individuals who are making more or less satisfactory social adaptations, and could not be

considered in the least verging upon a state of mental disease. There is an equally well defined personality type which leads more directly to anti-social behavior than these others, which produce serious misconduct only when they have obtained a pathological control over the activities of the individual and robbed him of conscious appreciation of moral and ethical standards. The egocentric personality, on the other hand, is that of the natural criminal, if indeed such an anomaly exists.

The egocentric person is characterized by such traits as selfishness, aggressiveness, cruelty, stubbornness, etc. He never admits that he is in error, but places the blame on his associates, or on society in general. He is entirely lacking in sympathy, is superficial, and has no well-grounded ideals of ethical standards of conduct. He is opinionated, self-assertive and defiant of authority. It is apparent at the outset that these qualities are excellent soil for the development of criminal tendencies if the individual happens to find himself in an environment which is conducive to the fostering of such impulses. If thrown into association with companions who have habits of delinquency, the egocentric person easily falls into such habits himself. Attitudes suggestive of this personality make-up are expressed by many prisoners in penal institutions, who show nothing otherwise abnormal in their mental life.

The epileptic often develops certain egocentric traits in connection with his disease. He is stub-

born, inconsiderate, irritable, selfish and at times cruel. It is a striking coincidence that so much of the behavior of the epileptic should be anti-social and even criminal in nature, when we consider his egocentric personality make-up.

It must not be taken from the above discussion that these personality types always occur as distinct and well marked entities. It is not at all unusual for an individual to possess a personality makeup combining various characteristics. For example, a person may be both emotional and neurotic; or emotional instability may be found in connection with egocentric characteristics, etc. The variations in personality possible by different combinations of traits are almost innumerable.

The genesis of the personality is an absorbing question, and one which has many practical implications. We have stated in the beginning that personality differences have their inception in variations of the physical make-up and in innate differences in the intellectual and emotional endowment. On the physical side, we speak of differences of energy output, for example, and even describe the individual who is markedly lacking in physical energy as a hypokinetic or under-active personality type. To this hypokinetic type we ascribe such traits as slovenliness, lack of ambition and initiative, lack of physical energy, indolence, and a tendency to be easily led. We also speak of a definite personality make-up, the egocentric, as associated intimately with the disease condition of epilepsy.

Other physical conditions give rise to characteristic personality traits. In some instances of disturbance of the glands of internal secretion there is a concomitant development of emotional instability, while other kinds of endocrine disorders cause a picture approximating that of the hypokinetic personality. The neurotic constitution is definitely associated with physical inferiority. Many physical diseases produce changes in the personality. as we have seen in the preceding chapter. The optimism of the tubercular patient and the anxiety of the patient suffering from cardiac disorder are well known to the medical profession.

The personality differences which are predominantly due to emotional reactions have been described at length in the preceding pages. The variations which are to be attributed to the contrast between the person of superior intelligence and perhaps gifted with some particular talent and the inferior or defective mentality are too obvious to need further comment. There remains to be accounted for the vast mass of habitual attitudes and reaction patterns, both emotional and volitional (for want of a better term), which are built up in the early integration of the physical, intellectual and emotional life into the definite personality and character of the individual.

Our interpretation of the personality of a given individual is after all objective, in large measure, and is based upon his behavior as observed by us. We cannot be acquainted with the intimate processes of his mental life, and even if we should ask

him to perform an introspection on these, he would be able to give us only conscious motives and feelings. The inadequacy of such a report is evident when we consider the vast extent of unconscious impulses which find expression in the conduct of the individual in one way or another and which warp his personality to suit their needs. Therefore, if we would understand the problem of personality we must have a certain familiarity with these unconscious mechanisms, and must understand how the habits, ideals, and sentiments are built up in the mental life of the individual, until they finally become an integral part of the character and personality.

Environmental influences begin to leave indelible impressions on the personality of the individual as soon as he is born. The reactions of the parents to each other and to the child tend to create conditioned emotional responses which later in life may control the conduct of the individual. The classic example of the Freudians is, of course, the mother who demands from her son an abnormal degree of affection to replace the waning interest of her husband. The boy who is thus called upon responds by developing a fixation upon the mother which interferes with the transference of his affection to the proper love object when he becomes of marriageable age. In extreme instances, the son who is the victim of this "mother complex" is never able to divorce his love entirely from the mother image. He may have an active sex life, involving prostitutes and

many other women, but he cannot quite reach the point of choosing a wife, upon whom he would be forced to bestow the same reverence and worship that he has reserved for his mother alone. If he does marry, it will be on account of a strong resemblance to the mother image which he finds in some woman, and the element of sex attraction may not be at all prominent in determining his selection.

D. H. Lawrence's novel, "Sons and Lovers," presents an excellent study of the mother complex in contemporary literature. His hero goes through two love affairs, but never succeeds in feeling more than a physical passion for his sweethearts. His mother always remains the center of his hopes and fancies, and when he is robbed of her presence by death, he becomes as purposeless in his existence as a wrecked ship drifting on the ocean.

Conversely to the mother-son association is the relationship between father and daughter. Upon the nature of this relationship, the girl patterns her reactions to men in general. If she has a father whom she adores, and whose attitude toward his family is affectionate and considerate, she is prone to trust men and idealize them. Sometimes, to be sure, her faith is betrayed by some man with whom she comes in contact, but even in this case her feeling toward the other sex does not become so unreservedly bitter as it would but for this happy paternal background.

The daughter whose affection becomes alienated from her father in childhood or adolescence

on account of his misconduct or mistreatment of his family, is apt to develop a suspicious and antagonistic attitude toward the dominant male (as she pictures him). Her antagonism may lead to the complete repression of her sexual interest in men, and incite her to meet them in the business world on terms of free and equal competition. She rebels against the idea of surrendering her freedom into the keeping of this ruthless masculine creature, and if she does fall in love despite her determination, there is a decided ambivalence in her emotions concerning her lover. Often she is torn between the desire to enter into a permanent relationship such as marriage and an equally strong impulse to escape from a situation which in view of her parental experiences can only appeal to her as abounding in possibilities for suffering.

In writing "This Freedom," Hutchinson has given us incidentally a description of a girl who has rebelled against the authority of an unpleasant father, who has sought to carve out a man's career for herself, and has resolved never to fall in love. Although she deviates from this last resolution, her rebellion against masculine standards forms the keynote to her personality and influences all her decisions to the end of the story. In spite of her love for her husband and children, she refuses to give up her business and assume the subordinate position of the woman in the home. While we could hardly agree that the family misfortunes with which the last chapters are filled are the direct outcome of her refusal to follow the tradi-

tions of her sex, we must give credit to the author for his skill in delineating this personality type, and showing the influences by which it was developed.

Another trait in which personalities differ tremendously is in respect to their aggressiveness. They vary from the extreme type in whom there is a determination to master all people and things to the utmost passivity and resignation of circumstances. We all know the blustering individual, who attempts to bully those with whom he comes into contact, just as we can find among our acquaintances the person who is so docile and helpless that not even the utmost provocation can arouse him to aggressive behavior. The golden mean lies between these two types. It is necessary for a well-balanced personality that the individual be sufficiently aggressive to take an active participation in affairs, and exert himself in his own behalf, else he is apt to be submerged in the struggle for existence, which retains its competitive elements however carefully camouflaged by the niceties of modern society, and places a premium on aggression to a certain degree.

The trait of aggressiveness depends to some extent upon the physical and mental make-up of the individual and the strength of the emotional drives inherent within the organism. It also depends somewhat upon the environmental circumstances which have contributed their quota to the development of the personality. Sometimes the child is so repressed and inhibited by stern parents

and teachers that he is never able to throw off the influence, but always feels the impulse to cringe to his fellows instead of reacting with a normal amount of aggression. On the other hand, the habit of over-aggressive reactions may be developed under favorable environmental circumstances or in imitation of some admired older person who becomes the child's model and from whom he unconsciously copies his behavior patterns.

The over-aggressive personality and the too passive type are both liable to become detrimental from the vocational viewpoint. The over-aggressive, blustering individual arouses an antagonism in the prospective employer, while the passive, spineless person causes a doubt as to his capacities and abilities.

The degree of confidence which the person feels in his own powers is also reflected in his personality. Self-confidence or the lack of it is almost entirely dependent on environmental influences. The child who is subjected to constant criticism becomes distrustful of his capabilities, while the boy or girl who is incessantly flattered and continually hears his praises sung by fatuous parents may become abnormally vain and fail to realize that he has any limitations. The over-confident personality is apt to have ambitions beyond the possibilities of realization, or it may have so self-satisfied an attitude that it is content to stagnate upon empty and unmerited praise. On the other hand, the person who distrusts himself may not

aspire to activities which are well within his range of potential achievement because of his lack of confidence in his own abilities. Here, again, the ideal personality is one which has plenty of confidence to attempt to realize its ambitious dreams, but at the same time is not too vain to profit by its mistakes.

We might go on to enumerate the various other habits which are woven into the fabric of the personality by environmental influences in the course of its development. The majority of these habits are not directly involved in the causation of abnormal behavior, however, although they may induce minor idiosyncracies which would otherwise seem inexplicable. The examples thus far presented are sufficient to show the importance of environmental circumstances in the development of the personality. It is particularly desirable that the social milieu be favorable in the impressionable years of infancy and childhood, when most of the habitual patterns of the personality are established.

Upon every rating scale which attempts to evaluate the personality make-up of the individual for practical purposes, such as vocational advice or placement, psychiatric diagnosis, etc., we shall find that attention is bestowed upon the moral and ethical attributes. To anyone who is familiar with the rudiments of sociology, or who has any knowledge of the manners and customs of various races, it should be a commonplace that these standards are largely a matter of environment. It has

been said that " morals are a matter of geography." To the Anglo-Saxon, monogamy is the only ethical form of marriage, but among other races and in other lands, polygamy has met with equal approval. The morality of an individual depends upon the standards of the group into which he is born.

The young child is an unmoral little creature. Until the idea of possession is impressed upon his mind, he sees no reason for not appropriating any article that may chance to strike his fancy. Honesty is largely a matter of having parents and other associates repeatedly emphasize the fact that stealing is wrong. Other ethical and moral traits are gradually stamped upon the personality partly through the efforts of the parents and teachers, and later partly through reading, etc. The gregarious impulses operate to make the individual conform to the moral and ethical ideals of the group. Imitation is a big factor here; the child tends to emulate those with whom he is most frequently associated or whom he admires most ardently.

Although the moral and ethical attributes are thus acquired characteristics, they become so deeply ingrained in many personalities that all kinds of sacrifices will be made for the sake of these ideals. Perhaps this is another aspect of the fundamental longing to be actuated by feelings bigger than those connected with our puny selves, and which is at the basis of religious fervor and of martyrdom for any cause. The individual seldom realizes that this is simply the surrender

of the individuality to the emotion of the herd, and that the psychology of the mob is involved.

The intellectual factors of the personality cannot be changed to any marked extent, but the physical characteristics can be improved under proper care, and the emotional drives can be somewhat modified in accordance with the requirement for an adaptable personality. Particularly can the personality development be controlled within those aspects which depend largely upon environmental influences for their inception and development. Thus the problem of personality is not so hopeless as it might seem upon less careful analysis. We are prone to regard the personality make-up of a given individual as a fixed characteristic, impossible of change. This is popularly expressed in the conception of the " artistic temperament." By building up a healthy physique, exerting conscious control over the emotional drives, and manipulating the environment in harmony with personal needs, we may hope to make sufficient changes in the personality make-up to bring it nearer the standard of normalcy. Such changes can be most effectively brought about in childhood, of course. In so far as we can insure a normal personality development, we can expect to prevent abnormal behavior in the individual, and increase his chances of social adaptation.

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Chapter VI

THE RÔLE OF THE PSYCHOSES IN THE CAUSATION OF ANTI–SOCIAL CONDUCT

Definition of psychoses and allied terms.
Psychogenic and organic psychoses.
Description of Dementia Praecox; cases illustrating its various forms.
The Manic-Depressive Psychoses; cases illustrating their various forms.
Description of Involution Melancholia; an illustrative case.
Paranoia, and its bearing on anti-social conduct.
Senile Psychoses and their relation to abnormal conduct.
Description of psychoses with Cerebral Arteriosclerosis, and cases illustrating their type of anti-social conduct.
Description of Traumatic Psychoses.
Syphilis as a preventable disease.
General Paralysis of the Insane as a cause for anti-social conduct.
Psychosis with Cerebral Syphilis.
Juvenile Paresis; a form of maladjustment.
Alcholic Pyschoses; cases illustrating pathological intoxication and delirium tremens. A description of Korsakow Psychosis and the acute and chronic hallucinoses.
Psychoses following drug addiction.
Psychoses accompanying Epilepsy.
Psychoses occurring among mental defectives.
The medico-legal aspect of insanity.

IT is a well-known fact that insane individuals frequently behave in a way that is definitely anti-social in nature. It is this fact that first prompted society to segregate the mentally

sick from the rest of the community. It is only recently that the humanitarian element has entered into the management of those who are mentally afflicted. In considering the rôle that the psychoses play in anti-social conduct, we are entering into a discussion of the very factor responsible for the scientific attitude that has recently been assumed in dealing with all forms of conduct disorder. It was through the effort at solving some of the mental mechanisms underlying the behavior of the insane that scientific workers became interested in other fields of human conduct, and directed their attention to various other manifestations of abnormal behavior. It is the insane asylum or the hospital in which the insane are received, observed and treated, which is the cradle for the modern scientific attitude assumed in dealing with the diverse forms of abnormal behavior.

What is a psychosis? A psychosis is a disease of the mind; more technically it may be defined as abnormal behavior in which the personality of the individual is completely lost. Usually a psychosis is referred to as an attack of insanity, a mental break or inappropriately, a " nervous breakdown." Strictly speaking, the term insanity should be abandoned, or relegated to legal considerations, as it really implies a legal rather than a medical status of an individual. It means that a certain individual does not know the nature and quality of an act at the time he commits it, or its consequences; therefore cannot be held legally

responsible for it. The term psychosis implies that an individual is suffering from a disease of the mind in a manner analogous to his suffering from a diseased heart, or a diseased lung. It is the more scientific term, and hence we shall refer to it throughout our discussion.

Originally, the term psychiatry was defined as " that branch of the medical science which dealt with the psychoses." Owing to the knowledge gained from the study of the mentally sick, the definition should really be broadened to include all forms of abnormal behavior. A psychiatrist is a physician who makes a specialty of the study of psychiatry. A psychopathic, or more properly, a psychiatric hospital, is an institution exclusively devoted to the treatment of mental diseases. The term observation ward usually refers to a ward in a hospital treating general diseases set aside for the reception and observation of patients suspected of having a psychosis. Since caring for the mentally ill is one of the duties of the state, the term " State Hospital " is generally used, meaning a psychiatric hospital maintained by the state. The term " Insane Asylum " has with the gaining of knowledge of the nature of psychoses, been entirely replaced by the term " State Hospital for the Insane," or preferably, " Psychiatric Hospital " or " Psychopathic Hospital."

In order to appreciate the full significance which the rôle of the psychoses play in the causation of anti-social conduct, it will be opportune to outline briefly the nature of the various types of mental

disorders, and to call attention to the most prevalent types of aberrant behavior in each. While we must bear in mind that the physical and mental processes are interdependent and not distinct, for practical purposes, however, we shall divide the psychoses into the organic and the functional; the former resulting from definite anatomical alterations in the brain, consequent upon chemical, bacterial and many as yet unknown toxins, and the latter resulting from abnormal psychogenic reactions to which there are at present no known pathological changes in the nervous system bearing a causal relationship. Because of the greater frequency of the psychogenic psychoses, we shall discuss them first.

The psychogenic psychoses include those forms of abnormal behavior for which at present no adequate explanations are found in the structural alterations in the brain or the other tissues of the body. In the vast majority of these cases, upon which post-mortem examinations are performed, the nervous system is found to be normal, or if any changes are noted, they are explained on some concomitant disease process. It is true that recently changes have been described in the glands of internal secretion of some of these patients, but as yet this has not been substantiated by other observers, and furthermore, the exact causal relationship which such changes might bear to the mental process has not been elucidated. In the present state of our information concerning these psychoses, they are best explained as reaction

types, resulting from vicious habit formation caused by bad mental hygiene, characterized generally either by reversion to an infantile form of behavior in the Dementia Praecox group, or by the extremes of mood reactions in the Manic Depressive type.

The most serious of all forms of psychoses is Dementia Praecox, since recovery from this disease of the mind is rare, and, many authorities believe, impossible. It constitutes about 60% of the total residents of the New York State Hospitals for the Insane.[1] The individuals possessing the so-called " shut-in personality " described in the previous chapter are the ones most susceptible to this type of psychosis. This personality will be recalled as characterized by sensitiveness, stubbornness, reticence, seclusiveness, inability to make friends readily, or to participate in wholesome forms of diversion, and inability to adapt to new situations. Such personalities live in a world of dreams and phantasies rather than in one of facts and actualities. They are engaged in thought rather than in action, are apt to delve into deep problems, and attempt to solve the riddles of the universe rather than to meet the difficulties in their own immediate environment. They do not meet new conditions squarely, and constantly procrastinate. When new situations demanding unusual adjustments are encountered, an actual psychosis is apt to be precipitated. The new

[1] Thirty-second Annual Report, New York State Hospital Commission, 1920, p. 258.

situation may be physiological in nature such as the advent of puberty or sexual relationship, etc., or it may be an incidental situation such as death in the family, business worries, etc. These patients show defects of interest, gradual blunting of the emotions, increasing indifference and apathy, silliness, serious defects of judgment, development of phantastic ideas, odd and impulsive conduct, dreamlike states, peculiar feelings of being "forced" to do things, of being interfered with by some mysterious influence, etc.

The four types usually described are:

1. The Hebephrenic Form, in which there is a tendency toward silliness, grimacing, laughing, smiling to one's self, peculiar mannerisms of speech and action; absurd and grotesque mental content; uncleanliness and untidiness in person and habit. Occasionally may show the impulsive type of conduct. This form commonly manifests itself in adolescence and even at puberty. The individual is completely absorbed in his own ideas; has no interest in the outside world, and lives a life governed by his own ideas and fancies.

2. The Simple Type is the mildest form. It is characterized by a definite but steadily increasing loss of interest; gradual development of a state of indifference; carelessness about personal appearance, and restricted field of activity.

Patients suffering from the Simple Form of Dementia Praecox are apt to express ideas that people are referring to them (ideas of reference); that people are making slurring remarks about

them (ideas of derogation); that they are being watched and followed (delusions of persecutory type).

3. The Katatonic Type are those cases characterized by resistiveness to care and treatment; the maintenance of a rigid state of limb and body, often breaking into states of excitement silly and purposeless in character, and reacting to various types of hallucinations (false sense perceptions, *i.e.*, react to sensation without any apparent stimuli).

4. The Paranoid Type, in which we have marked delusions (gross errors in judgment); ideas of persecution, imagining that they are being plotted against and followed about, and that their lives are in danger. They respond to various types of hallucinations, especially those of hearing. Because of the fact that the acts of the Dementia Praecox patient are apt to be so often of impulsive character, and are caused frequently by their delusions and hallucinations, and owing to the fact that judgment is so markedly impaired, every conceivable form of anti-social conduct from simple minor delinquency to homicide may be encountered. The following cases illustrate the point·

CASE 26

A young boy (19 years of age) born in the United States, of normal infancy and childhood, who got along unusually well in school so that he was graduated at the top of his class, began to show considerable seclusiveness at the time of puberty. He would not read

the types of books that boys of his age liked; he preferred to read articles dealing with philosophical problems. He became unusually religious; became overscrupulous in his acts, and showed an abnormal sense of justice. The parents thought nothing of these manifestations; in fact they encouraged them, saying that their boy was rather precocious and gave promise of becoming a big man since he liked to read philosophical treatises, and would not run around the street with other boys. At the age of 18, this condition became accentuated; he became more seclusive than ever; he would not shave, or cut his hair; he shunned all companionship; began to laugh and smile to himself; would not change his underwear; and had to be forced to keep himself clean. Suddenly he threw some kerosene on his beard and then applied a match to it.

When examined at the hospital, he was in very good physical condition except for the burn of the face; he showed no evidences of any neurological disorders; mentally, he was dull, indifferent; lay in bed all the time showing no interest in patients lying in adjoining beds. He was very untidy about his personal appearance; was filthy and unclean in his habits; he would not answer when questions were directed at him; he lay in bed, laughing and mumbling unintelligibly. He appeared to be reacting to hallucinations of sight and hearing, and lived in a world created from his hallucinations. His case was diagnosed as one of Dementia Praecox, Hebephrenic Form, and he was committed to a state hospital for care and treatment.

Case 27

A young female (29 years of age) was sent by a city magistrate to the hospital for observation. A long

record from the Domestic Relations Court showed that this patient had frequently appealed for help as a destitute person. The patient strongly objected to being taken to the hospital. Said she was in good physical and mental condition; thought there was nothing wrong with her in any way; that it was the duty of her husband to provide for her and that she was perfectly justified in applying to the Court for means of securing sustenance from her husband. Her father, in describing the patient, said that she was rather studious as a child; would read until late hours of the night; and instead of going out with the other girls she preferred to remain at home and read books, most of them, however, being of a strong sex color. She was always quite stubborn and obstinate, had to have her own way, and insisted upon having things done the way she wanted. She would spend hours before the mirror, and would take great pains in the care of her person.

Three years ago she met a man and married him after a courtship of only two days. She did not tell her parents of this man until after the wedding ceremony. One week after her marriage she became rather excited, came to her people and complained of her husband's refusal to support her. She stated that her husband was trying to do her physical harm; that he was tampering with her food; and he was causing peculiar feelings to creep through her body. At that time she was rather shabbily dressed; her hair was dishevelled and she showed peculiar twitchings of the face. She objected to her father looking at her, saying that it made her very uneasy and fearful. She left her father's home without announcing her departure and evidently returned to live with her husband. Two years ago she applied to the Domestic Relations Court

for support from her husband. The social service worker attached to the court investigated home conditions and was told by the landlady that the patient was definitely "peculiar." She would sit for hours smiling in a silly manner; she would often pour water out of the window at passers-by. She would often go to a corner of her room and talk away for hours; would stuff her ears with cotton. The patient would deny these allegations and it was impossible to get her to come for examination at the mental clinic. Six months ago she was finally brought to the mental clinic on the pretext of having her heart examined. It was impossible to interview the patient at that time, as she immediately became very abusive, saying that she was brought there for immoral purposes. She ran out of the clinic, and finally it was deemed advisable to have her sent to the observation ward by a city magistrate.

Physically the patient was very well developed; rather an attractive individual; very well nourished. Heart and lungs were negative. There was no evidence of any neurological disorder.

Mentally, the patient was very suspicious; was not coöperative; was very evasive. For a period of six days it was impossible to get her to admit any of her peculiar ideas. When eating, she would cautiously taste the food before eating it, refusing most of the dishes offered to her. When these acts were brought to her attention she would refuse to discuss them, or denied them. Finally one of the nurses succeeded in gaining her confidence and to her she admitted her ideas of strong sexual nature and her hallucinatory experiences. She informed this nurse that she was being followed by men on the street, who desired to have immoral relations with her. She believed her food was

being tampered with and that a plot was on foot to have her poisoned. She said " I went into a restaurant and ordered some coffee and apple pie; that made me sick. There was a soapy taste to it. Wherever I go now that same taste is present in all the food. Here, too, there is that taste. I must not sleep nights, because men come here and abuse me. Can you blame me for being careful? etc."

This patient was diagnosed as a case of Dementia Praecox, Hebephrenic Form, and was finally committed to a state hospital. She represents the type of person who so often is a source of trouble not only to her immediate family, but also to those with whom she comes into contact, as well as the social service worker, the court and the physician who might be called upon to help her solve her difficulties. It is quite obvious that such a person cannot possibly live a normal marital life.

Case 28

A young boy (16 years old) was brought from the City Prison being charged with grand larceny, having confessed to stealing a horse and carriage. The boy was of normal birth and good development. He was graduated from public school at the age of 13 and was rated as a superior student. Following his graduation he was employed as a messenger boy. At puberty he began to show a slight but obvious change in his personality; he became rather unsociable, would not play with the boys living in the same neigborhood; would sit for hours buried in thought. He refused to discuss things with other members of the family, so that it was quite difficult for him to get along in his home and in his place of employment. Two years ago

he suddenly became rather excited, stating that life had too many riddles and too many difficulties in it; that the world was against him; that there was no use to go on further in this life. He was taken to the observation ward from which he was committed to a state hospital. During his entire residence of a period of three months he showed a rather silly and impulsive attitude; at times he was very quiet and apparently absorbed in his own ideas and then again he would break out into purposeless overactivity. His mood reaction was entirely inadequate to the stimulus. He was finally discharged as an improved case.

On his return to his family he could not secure employment readily. His people were quite poor, and the boys with whom he was thrown into contact possessed delinquent tendencies. Five months ago he was thrown in with a group of young boys who suggested to him that he go into a store and take something from the counter, so as to secure some pocket money. This he proceeded to do, but his mode of procedure was of such nature as to make his apprehension quite certain. He was taken to court, where, however, his case was critically studied by the presiding magistrate, and he was discharged with a warning as to the consequences of such future acts. He was walking along the streets about a month ago when a group of men approached him and asked him if he would not drive a horse and carriage for them, giving him a dollar bill and promising him a five dollar bill at the end of the day. This he did, but he was arrested and charged with grand larceny. A detective asked him to sign a confession which he immediately did without knowing the content of the paper which he had signed. The exact status of the case was that the horse and carriage had been taken by these men from a neighboring stable, and used for

transporting stolen goods. When the case of the patient was brought before the presiding justice, its very simplicity and the apparent indifference of the boy aroused the suspicion of the magistrate as to the prisoner's mental status, and he was sent to the hospital for observation. At the hospital the patient's physical examination was negative; he was somewhat undernourished but he showed no evidences of any neurological disorders.

Psychometric examination showed that he had an Intelligence Quotient of 73 and a mental age of 11 years and 9 months on the Stanford Scale while he had an Intelligence Quotient of 84 and a mental age of 13 years and 6 months on the Short Performance Series. The psychologist stated that the patient was of normal intelligence and the rating on the Binet Test was undoubtedly too low to represent his actual intelligence level. It was doubtful if he gave full attention to the problems presented on the Binet as his attitude was dull, indifferent and lacking in affective reactions. The uneven performance was also indicative of some interference with attention and association processes. On the Performance Test, which made less severe demands on his attention, the patient made a higher score. The type of reaction to the psychological examination therefore indicated other conditions than primary mental deficiency.

Psychiatric examination showed an indifferent, inattentive individual, childish and foolish in attitude and demeanor. He smiled in a silly fashion while discussing the seriousness of his situation, and failed to show any insight into his condition. He showed an inadequate emotional reaction. Mood was that of indifference, and poverty of affective responses. He was returned to court with the recommendation that he be

sent to a state hospital, diagnosis being Dementia Praecox, Simple Type.

Case 29

A young male (32 years old) was sent by his parents to the Red Cross, asking that he be taken care of in a hospital as there was something wrong with his mind. He spoke about big things but was unable to take care of himself. This boy was born in New York City, had a public school education and following his graduation from school he worked as an office boy. He showed no conduct disorder of any type until his discharge from the army was insisted upon by his people. He was drafted in 1917 and was put in the medical corps as an orderly. It was noticed then that this orderly was rather officious, disobeyed military rules and discipline, paid no attention to warnings of his superiors, and disregarded any advice given him. He was therefore transferred to another post but there, too, he interfered with the other men's duties, complained of the treatment he was receiving, was careless about his personal appearance and about the condition of his clothing. He finally was put in a military hospital for observation and there his condition was diagnosed as Dementia Praecox, Simple Form, and he was discharged on a surgeon's certificate of disability.

Following his return to civil life, he could not secure employment although at that time there were many vacancies in various fields of occupation, for an interview with any of the managers of the place would result in a conviction that the applicant was not in full possession of his faculties, and he would not be employed.

He spent his time on street corners discussing with

anyone willing to listen to him all current historical topics; boasting of his own participancy in the war and blaming his superiors for not securing any promotion. His clothes were shabby and his personal appearance was quite uncleanly. At home he was rather meek though at times excitable and would fly into fits of temper whenever crossed by his parents. He was referred to the War Veterans' Bureau where vocational training was recommended. Several types of vocational guidance were suggested for him but he had no particular choice. He was placed at tailoring, but he showed no interest in the work; later he was transferred to carpentry, but there too he failed to show any interest. His attitude and manner drew the attention of the man in charge and was finally recommended that he give up training and be placed under psychiatric observation. It was quite obvious that this man was suffering from a Dementia Praecox, Simple Type. His dull, listless attitude and manner; his mood indifference; his impulsive traits; the emotional inadequacy and his inability to secure any employment or to maintain any interest in his vocational training were definite symptoms of his disordered mind. It was therefore recommended that he be committed to a psychiatric hospital maintained by the Veterans' Bureau.

Case 30

A man (38 years of age) was brought from the police precinct by an ambulance, the arresting officer stating that this man had struck an innocent man in Wall Street. That this prisoner had never seen this man before, and that he could not give any adequate explanation for his act. He was brought before a

magistrate, but there he acted so peculiarly that the magistrate had him sent to the hospital for observation.

At the hospital, the patient showed a very well-developed, well-preserved physical condition. He showed no evidences of any disease of the central nervous system. He said that for the last eight or nine years people had been watching him; they were following him wherever he went. He could hear them talking about him and making disparaging remarks concerning his character. He could not keep any position because people would tell his employers that he was an "indecent individual." He finally secured a position in Wall Street taking care of a building (janitor), but here, too, he was being followed by people who prevented him from doing his work properly. He went out of the building and heard a man calling him names. A voice within him immediately told him to attack that man, and this he did for his own defense. He showed a very impulsive, irritable attitude and manner, expressed ideas of persecution, and reacted actively to hallucinatory experiences. He was committed to a state hospital, diagnosed as Dementia Praecox, Paranoid Form.

CASE 31

A young man (25 years of age) was brought from the City Prison being charged with "unlawful possession of firearms." This history of this patient revealed that he had been born in Italy and was brought here by his parents when he was a boy five years of age. He had gone through school and had reached the last grade at 14 years of age. He was then taken from school in order to help support the family, and he was always rather suspicious, somewhat stubborn and difficult to manage. He had complained of the neigh-

boring people because they "were interfering with him" and on one occasion he had struck one of his friends because the latter was forcing women to look at the patient in a peculiar way. He was discharged from the army because of some mental trouble.

At the hospital the patient showed a very well-preserved physical condition. There was no evidence of any disease of the central nervous system.

A psychometric examination was performed, but the result was unsatisfactory as he showed a suspicious, rebellious attitude stating that the examiner was trying to influence his mind. He said that the reason for his possessing a revolver was that people were persecuting him and following him; that wherever he went they looked at him in a very peculiar way. The reason for their action was that he was very much liked by his officers in the army and since then they were all jealous of him. Lately the lady with whom he was boarding was in the habit of looking at him in a peculiar manner. He thought she probably had sexual designs on him but that it was an immoral thing to do; therefore she was trying to poison him. He believed she had influenced all the other men of the neighborhood so that nobody would now look at him. Furthermore, they were preventing him from securing any decent employment. They were making threats and were going to harm him; his food was now being tampered with and electricity was being put into his body. He therefore bought a revolver, in order to protect himself. He took a trip from New Jersey to New York and on the ferryboat people were making disparaging remarks about him, and had some secret code as evidenced by the whistling of the boats in the river, all of which was with the intention of doing away with him. He therefore took the revolver and flashed it

before the other passengers, " to frighten them " and prevent them from possibly harming him. His condition was diagnosed as that of Dementia Praecox, Paranoid Type, and he was sent to the hospital for observation and treatment.

CASE 32

A young man (26 years old) was brought from home by an ambulance. His father stated that there was no nervous or mental disease in the family or its collateral branches; that the boy had a good public school education and was apparently quite studious. He worked in a tailor shop as a cutter, and was quite industrious and of good habits. The patient was drafted in 1917, but the father was informed about one month after his enlistment that the boy was in a base hospital for observation as to his sanity. He was discharged from the army and it was necessary to have him sent to a state hospital where he made a temporary improvement. The father insisted upon the boy's discharge from the state hospital and the boy was removed to his home against the advice of the physician in charge. He showed a definite seclusiveness. Was unusually quiet, had no friends, refused to make the acquaintance of anybody, would not go out of the house, grew a beard and said that he was a chosen prophet; that God was speaking through him and that he was going to solve the difficulties that were now confronting the universe. He would do no work and maintained a superior, haughty attitude, laughed at the rest of the family, and would not converse with anyone except at certain times. A social service worker from a neighboring settlement house repeatedly urged the parents of this patient to have him re-

turned to the state hospital as his condition was becoming accentuated and he might become a menace. This his father refused to do claiming that he was willing to look after his own child. On the day preceding admission, patient acted in an irritable fashion, did not sleep the night before, said that God was talking to him, and prophesied a catastrophe would happen to the world. On the day of admission he grabbed his sister, a 20-year-old girl, and threw her from a window, shouting that he was making this sacrifice in the name of the Lord.

During his residence in the hospital the patient showed a definitely deluded state. He actively reacted to auditory hallucinations and his entire mood reaction was governed by these false sense perceptions. He said God had told him to make a sacrifice like he had told the prophet Abraham; that he had read the Bible recently and that the Lord had told him to make a similar sacrifice; that he was chosen to lead the people of Israel; that his sister looked at him in a hypnotizing way which meant that God gave him the signal to make the sacrifice. He said that he was the Jewish Messiah, and that no one was going to live, but all would perish soon; that those were the sayings of the Lord. He was committed to a state hospital as an insane person, diagnosis being Dementia Praecox, Paranoid Form.

In brief, then, the abnormal behavior and antisocial conduct of the Dementia Praecox patient is of a very diverse nature, varying from simple difficulties encountered in home life or place of occupation to the widest range of crime. They respond actively to their false sense perceptions and are

dominated and governed by their hallucinations and delusions.

As in Dementia Praecox, so in the Manic-depressive Psychoses there are as yet no definitely proven pathological changes found in post-mortem examination, nor are there as yet any definitely established pathological findings from other sources which bear an undisputed relationship to this disorder. We must bear in mind, however, that there is an extensive group of scientifically inclined medical workers, who are utilizing every modern method of diagnostic procedure in their endeavor to solve the causes underlying these disorders. However, while we are anticipating results that may prove a boon to humanity, yet in the present state of our knowledge no data are available that could explain the mechanisms involved in these cases other than psychogenic ones. We therefore must regard this group also as a type of reaction to a situation on the part of individuals possessing a distinct mental make-up. Individuals of such make-up were described in the previous chapter as either the manic or the depressive type of personality; the former manifesting it by being over-active, vivacious, high-strung and enthusiastic, inclined to overdo things, participating in many fields of endeavor, but finishing few of their undertakings, and the latter by displaying a tendency to worry over insignificant matters, brooding over trifles, being subject to frequent blue spells, rather slow and deliberate in their physical activities, and hardly ever happy, but rather fault-find-

ing and discouraging. Whenever any situation arises which requires considerable tact, judgment, and increased capacity for adjustment, an attack of psychosis may result. Such demands for unusual adjustment may be physiological in nature, occurring in such crises as puberty, adolescence, puerperal state (child-bearing), menopause (change of life), etc. Diminished physical endurance following illness, business troubles, unhappy family incidents and at times an unexpected happy occurrence, may precipitate an attack. The types usually mentioned are:

1. The Manic Phase: This is characterized by elation (extreme happiness), flight of ideas (rapid ideation, one idea suggesting another) and marked motor activity. (The patient is constantly in a state of extreme physical activity.) Occasionally he is irritable, rather than happy. Owing to the fact that their ideas come so rapidly to them, they have no time to select from a group of situations the proper mode of reaction, and their judgment therefore appears markedly impaired. They lack control of their instinctive reactions, which results frequently in many anti-social acts such as sexual indiscretions, assault, minor crimes and misdemeanors.

2. The Depressed Phase: In this phase, the individual is depressed, ideation is quite retarded and his physical activity is inhibited and slow. Depressed patients express feelings of insufficiency, being unable to cope with any situations. They often express ideas of sin and culpability,

and commonly express hypochondriacal ideas (ideas referring to physical ailments and pathological conditions of their organs for which there is no apparent ground). Suicide is the most serious danger in this disorder, and suicidal attempts are very common. Occasionally, because of the gloomy attitude these individuals have towards the world in general, they inflict serious injuries upon members of their immediate family in their attempt to relieve them from their imaginary troubles.

3. The Mixed Phase: In the mixed phase of this mental disorder, we have a combination of the symptoms exhibited in the manic and in the depressive phases. In this condition one must guard against homicide.

In the Manic-depressive Psychoses we really have a benign type of psychogenic mental disorder, which is fundamentally marked by emotional oscillations and a tendency to recurrence of attacks. The duration of this disease is apt to be anywhere from a few hours to several years. Usually, one figures from four to eight months as the average duration of attack. In the recurrence of the attack, a similar type or reaction may occur, (i.e., a manic attack may follow a manic attack, or a depression may recur in a patient who has already had a depressive phase). On the other hand, a depression may occur in one who has previously had a manic attack, and vice versa (alternating type) or a depression may follow immediately upon an excitement (circular type). These

various types of manic depressive patients comprise about 10 to 11 per cent of the inmates of the state hospitals.

The following cases represent types of abnormal conduct usually encountered in this mental disorder:

CASE 33

A female (35 years of age) was brought to the observation ward from the New York City Prison, being charged with forgery. The family history of this patient reveals the fact that two sisters have had similar attacks and have had residences in state hospitals. This patient was born in New York City, was very precocious in her development; had a public school education; was very lively and cheerful; had many friends; liked company; and was greatly admired by members of the opposite sex. In social gatherings she was very popular because of her wit and physical attraction. She had many admirers and was finally married at the age of 19. Immediately following the birth of her first child, the patient became overactive, overtalkative, could not sleep, talked incessantly and would not nurse her child; she went out of the house and had to be sent to a private hospital where she remained for five months. Following the recovery from this attack she apparently got along satisfactorily, looked after her child and was able to resume her former fields of activity. She again became rather tractable and manageable, participated in many social functions and regained her former reputation of being a good wife and a charming hostess. Six years later, following an abortion, she became somewhat irritable and unreasonable at home; left her husband without

any apparent reason, took up with some man and was finally located by her family living with that man under a different name. She was apprehended and at that time was dressed in very expensive gowns having bought them with the money that she had secured by pawning her jewelry and other household furniture. She was quite boastful, talked loudly and incessantly, kept on the go all the time, and complained that she could not control her mind, words and actions. She had no conception of the seriousness of her acts, and laughed at them, regarding them as merely insignificant and trifling experiences. She could see no wrong in going with this man; in fact she said that her sexual desires were uncontrollable. She was committed to a state hospital where after a residence of eighteen months she gained full insight into her condition, spoke in a heart-broken fashion about her going away with a strange man and of the sorrow that she had caused her devoted husband and family. She returned home, looked after the house, and was apparently in a state of good mental and physical health. Three months ago (before her present arrest) one of her sisters was committed to a state hospital because of an attack of excitement. The patient became rather depressed, worried a great deal, and finally disappeared from her home taking her jewelry and other valuables. She made the friendship of a man who took all her jewelry and valuables and pawned them, toured through the United States and Canada and finally they were traced to one of the hotels in New York City. While in Canada she had forged the signature of a prominent society lady and was therefore able to cash a check for several hundred dollars.

When apprehended, she spoke very lightly of her situation; she was quite elated, overactive, overtalkative, kept on the go all the time, and was in a happy mood in spite of the situation in which she found herself. She spoke very lightly of the sorrow she had inflicted upon her husband, saying that he should have gone out and made love to some other woman.

She was finally committed to a private institution for the care and treatment of the insane, her mental condition being diagnosed as Manic Depressive Psychosis, Manic Phase.

Case 34

A young man (22 years of age) was brought from the City Magistrate's Court being charged with disorderly conduct. A complaint was lodged against him for annoying a young lady. This boy was born in the United States, of normal birth and normal development. There were no nervous or mental diseases in his immediate or collateral family. He was graduated from school and worked as a book-keeper. He has always been of a cheerful, enthusiastic, ambitious type, and made many friends. He would undertake many things but somehow never did produce satisfactory results in any of his undertakings. He changed positions very frequently but always managed to secure a better job. He was popular with the girls because of his happy disposition, his wit, and entertaining qualities.

About six weeks before his arrest, patient complained of being unable to sleep well. He could not stay long in his office, and his erratic acts caused his discharge. He did not seem to be much concerned over the loss of his position. He called upon every one of his friends, talked in the streets, and made him-

self a general nuisance. He finally met a young lady who was at first attracted by his attitude, as he boasted of his achievements and of his bright prospects. She encouraged him at first but when it became evident that his conduct was definitely peculiar if not abnormal, she rejected his attentions and her parents prohibited him from calling on their daughter. This seemed to be of little consequence to him and he persisted in forcing his attentions on the girl. He became so annoying that threats of his arrest were made. This did not seem to deter him, and a warrant was eventually taken out for his arrest.

At the hospital, the patient was somewhat elated, quite overactive — he was very officious, interfered with the visitors of the other patients; at times he would become rather irritable, and when interfered with would threaten to strike the nurses and orderlies. On the whole, however, he showed a rather cheerful, optimistic attitude; was quite pleasant and agreeable; helped the nurses and orderlies occasionally; but slept very little, was overtalkative and boasted of his abilities and at times was quite rambling. He spoke lightly of his love for the girl, saying that there were others whom he expected to woo and win. He had no insight into his condition. He was diagnosed as a case of Manic Depressive Psychosis, Manic Phase, and was committed to a state hospital for care and treatment.

Case 35

A young man (28 years of age) was brought from the New York City Prison, committed by the presiding justice of the Court of General Sessions, charged with forgery. The history of this case revealed the following:

He was born in Austria, of Jewish parentage, and was brought to America when four years of age. He attended public school and following his graduation took a business course in one of the preparatory schools. He secured a position as a clerk in a business house and was rapidly advanced so that he was earning about $75 a week when he was 21 years of age. He helped to support his family and sent his younger brothers and sisters through school. He participated in civic activities, and was an officer of the local political club. He also joined the police reserve. He was very well liked, and participated in all sorts of social activities.

The first difficulty in which this patient found himself was at 22 years of age, while returning from a drill of his local police reserve organization. He had taken a few drinks and on his way home he happened to pass a street car barn and pulled a lever sending a car on the wrong track. When the motorman called his attention to what he had done, the patient struck the motorman in the face. He (patient) was arrested and taken to the night court, where he was very restless and overtalkative, boastful and threatened to strike the magistrate. He was sent to the psychopathic ward for observation. At first he was quite overactive, somewhat vivacious, and rather officious, but after three days' residence he quieted down, spoke fairly coherently and felt sorry for his act, and he was discharged at the end of ten days' observation with the diagnosis of Manic Depressive Psychosis, Manic Phase (recovered). He returned to his work, got along quite satisfactorily in life, and was on one occasion nominated for the State Legislature.

At the outbreak of the world war, he enlisted in the

army, falsifying his place of birth, as naturalized citizens of enemy alien countries were at that time not accepted. He apparently got along satisfactorily in the army and reached the rank of sergeant major. In August, 1918, while overseas, he suddenly felt somewhat depressed, could not sleep, found that he could not get along with his work, and that he was "not up to the job." He was reported sick and sent to the base hospital for observation. There he felt very much worse, said that he had led an unworthy life, that he had repeatedly sinned against God and society, and that he had committed serious sexual offenses. A Red Cross worker gained his confidence and after confessing to that officer that he had sworn falsely about his birth in the United States, he felt somewhat relieved, and continued to improve so that at the end of two months' rest he was able to return to his outfit. He could not, however, continue with his work, for he soon became very restless, overactive, scolded his men, and disregarded all rules of military discipline so that he was returned to the United States and finally was sent to a state hospital where he came under the observation of one of the authors. During his residence in the state hospital he showed the characteristic attitude and manner of the Manic Depressive, being flighty, restless, excitable at times and overactive, somewhat destructive, annoying patients and visitors, and showing the general elation characteristic of his disease. After one year's residence he was paroled from the hospital as a recovered case.

In May, 1921, one year after his discharge from the state hospital, he was committed to the psychopathic ward by the justice of the Court of Special Sessions, being charged with "petit larceny." He then showed a very well developed, well nourished

physical condition; there were no evidences of neurological disorders, nor of syphilitic infection. Psychometric examination was unsuccessful as it was impossible to estimate his intellectual status because coöperation could not be obtained. He paid no attention to questions except to retort with counter-questions. Continual flight of ideas about the loss of democracy in the United States — the question of marriage, of rights of women, etc., resulted from the many questions asked him. He told all sorts of stories about his work as a lawyer, his political affiliations, his relations with women attorneys, etc. The responses to the stimuli were absolutely irrelevant. Each stimulus seemed to start a train of loosely associated ideas which had no reference to the solution of the problem.

Mentally, the patient showed an irritable, disagreeable disposition; threatened to blacken one of the attendant's eyes. At times he became elated, talkative, restless, interfering and fault-finding. He said in part:

"What do you want? I don't know what happened; I was in the City Prison. What do you want me to do? Give you a lecture? I will see you in church — good-bye. What do you want me to do — commit suicide? I remember you from Ward's Island; you are a good guy. I'll put you up as candidate for senator in my district. I am just a little nervous; have headaches. I don't know why they sent me here. They said I took something from a store; I never touched anything. I am not a thief. I am a law abiding citizen. I served my country and was wounded, too. I was no slacker; that's the way they treat me."

He was committed to a state hospital, where at the end of three months' residence he regained considerable insight, and was again paroled. Diagnosis, Manic Depressive Insanity, Manic Phase.

Two months following his parole, he was returned to the psychopathic service, being sent by the Court of General Sessions, charged with "forgery." This time the patient appeared very quiet, depressed, sat apart from the other patients, answered questions very slowly, and for about a week would not speak to anyone, but asked to be let alone as he was not feeling well. At the end of a week he became very playful and facetious, indulged in constant witticisms, and was in a state of moderate motor activity; insisted upon helping the nurses polish the floors, look after the other patients, etc. He could not sleep, and had to be constantly on the go. He seemed to be under constant psychomotor tension. When questioned, he would become rather irritable and somewhat ugly, but on the whole was quite manageable. He was returned to the Tombs with the recommendation that he be returned to the state hospital. The patient did not seem to know anything about the forgery, — he said that he had been out with a group of friends and had some drink; that he did sign a check he would not deny, but he could not tell whether it was his own name or somebody else's that he had signed to it.

Case 36

A man (42 years old) was brought to the psychopathic ward after being rescued from drowning. He had jumped into the East River and was rescued by a policeman. The history revealed that the patient

had had a former attack of depression at the age of 25 years, and was ill for about one year. Since then he has been getting along quite satisfactorily, was working steadily, had married, and was the father of three children. About a week ago he showed some uneasiness, complained to his wife that people in the neighborhood did not like him; that he was not getting a " square deal " in the shop where he was employed. He felt that he had been a failure in life, that he had not given all his attention to his work and that his family had not been provided for properly. He refused to return to his place of employment, left his home without telling his wife, and after being absent for five days was finally located in the psychopathic ward.

On the ward the patient showed a somewhat undernourished physical condition. His heart and lungs were negative. There were no neurological disorders. The blood Wassermann was negative. Mentally, he was somewhat uneasy, expressed ideas of insufficiency and inefficiency, spoke in a low, hardly perceptible voice, and moved about in a slow manner. He would sit for hours deeply absorbed in thought and often he would be seen weeping. He said:

> " I have been sad and downhearted. I lost my job because I was a bad man. I have no money. I neglected my wife and my children. My stomach does not work; my heart has stopped beating. Why did they pull me out of the river? I wish I were dead — I want to die."

He was committed to the state hospital with a diagnosis of Manic Depressive Psychosis, Depressed Phase.

CASE 37

A man (33 years of age) was brought from the New York City Prison being charged with "unlawful possession of firearm." The patient was apprehended in a city park after drawing his revolver in an attempt at suicide.

Physically, the patient was a well developed and well nourished individual. His heart and lungs were normal; there were no neurological disorders. There were no evidences of any blood disease. Patient said:

> "I wanted to kill myself. I tell you there is no use in living. People don't like me; they don't want me. Everybody seems to avoid me. They shun my company — what is there for me to live for?"

Mentally the patient was very sad; definitely depressed; he spoke in a very slow, retarded manner. Showed moderate difficulty in concentration. He would sit for hours in the same place, and expressed ideas of insufficiency. He had no insight into his condition. His memory was good. His attention was somewhat defective. Orientation was intact. He was committed to the state hospital for treatment, diagnosis being Depressed Phase, Manic Depressive Insanity.

CASE 38

A young female (25 years of age) was brought into the psychopathic ward in a state of excitement, after having thrown two of her nieces out of the window, killing one and seriously injuring the other. The history showed that she was born in Russia; had but little schooling, and was considered generally bright

and attractive, having many friends, and being quite popular with everybody with whom she came into contact. During the late war, she had undergone many privations, and had witnessed many acts of cruelty, for she lived near the fighting zone. She had to spend many days in cellars and was forced to go without food for long periods. After the peace treaty was signed, the family emigrated to America, but they experienced unusual hardships in getting here and on one occasion while waiting in line to have her passport viséed, a riot broke out and many people standing near her were killed. On reaching this country, she found her brothers (who had emigrated to America before the war) in very good financial condition, and she received a very cordial welcome. For a few months she appeared quite content and happy. Then she became somewhat dissatisfied with conditions. She had secured employment in a clothing factory, but she could not keep at it. She also had trouble with her teeth and had several of them drawn. While in the dentist's chair she suddenly became ugly, insulted the dentist, and returned to her home appearing quite excited. She could give no account of her actions. She went to the bedroom where the children were playing and threw them out of the window.

On the observation ward she was very impulsive and excited. Spoke incoherently and incessantly; bit one of the nurses; expectorated on anyone coming near her; tore her linen and bit her own fingers. She would cry a good deal and appeared to be very depressed. She was finally committed to a state hospital where for a period of four months she was very excited, assaultive, had to be placed in restraint, and was kept in the ward for the violent patients. At the end of that time she gradually became quieter. Gained in-

sight into her condition; spoke relevantly and gained considerable weight. She discussed her difficulties very freely, and apparently made a complete recovery from her psychosis at the end of ten months. She was diagnosed as a case of Manic Depressive Psychosis, Mixed Phase.

From these typical cases it may be realized that the abnormal behavior of the Manic Depressive embraces almost every conceivable form, ranging from mild eccentricities to the most serious anti-social conduct.

Related to the Manic-Depressive Psychoses is a type of mental disorder called Involution Melancholia. It occurs about middle life, is characterized by increasing worry, uneasiness, anxiety, agitation, marked ideas of sins and culpability, motor overactivity, and suicidal attempts. This condition is more common in the female. The duration of the attack is much longer than that of the Manic Depressive Psychoses, and lasts from one to two years. The following case illustrates this type of mental disease:

Case 39

A female (48 years of age), widowed, suddenly became very uneasy, complained to her children of her inability to sleep; would not take much food; continually paced the floor and finally tried to jump out of the window. The history of the case revealed that she had had a normal childhood and adolescence, was considered a rather bright and attractive personality,

had married at the age of 19, and had two children. Her husband died leaving her destitute. She was supported by her brother. At the death of her husband she was 25 years of age and was still fairly attractive. She met a man whom she allowed liberties, finally becoming impregnated by him. They were then married. After the birth of the child the second husband also died. She then went to work as a seamstress, and was able to give her children a good education. She spent all her time in raising her children, and apparently was making a satisfactory adjustment.

At the onset of her mental trouble, she kept on referring to the immoral act that she had committed, thought that she was going to be killed, that horrible tortures were in store for her and that her children were going to be injured. She was very suspicious, would not allow any strangers in the house, and finally attempted suicide.

She was committed to a private sanitarium. There she was in a continual state of agitation, pacing up and down the floor, groaning and moaning, begging for protection, stating that her children were being held prisoners and were being subjected to all sorts of cruelties. She resisted all care and attention and had to be watched carefully because of her suicidal attempts. She continued in this state of restlessness and agitation for eight months; she gradually regained her poise, and at the end of a year was discharged to the custody of her son. At the time of her discharge she was rather downhearted, though not actually depressed; showed moderate anxiety, kept away from the neighbors and spent most of the time indoors. She apparently had fair insight into her condition.

Amongst the most interesting types of mental disorders are the paranoid conditions commonly referred to as paranoia. It is this type of patient who impresses the layman as being subjected to constant maltreatment, because of the logically elaborated and systematized delusional trends which appeal to one's sympathy. Paranoia is a rather infrequent type of mental disease, and some authorities regard it as being quite rare. It is characterized by logically elaborated delusions based upon false premises. Paranoid patients are logical in thought, and their emotional reactions are quite adequate. The train of thought is apt to be coherent. They show fixed suspicions, persecutory delusions, and logically elaborated grandiose trends. They are litigating in nature and become involved in many legal battles in their efforts to avenge the wrongs done by their imaginary persecutors. It is not always easy to detect the nature of this disorder, and one has to observe the patient for weeks and months before his psychosis is detected. It is natural for an individual showing logical thought and adequate emotional reaction to win the sympathy of those who are ready to listen to his narrations of wrongs at the hands of his persecutors. The following case will illustrate this type of mental disorder:

Case 40

A married woman (aged 55 years) was sent to the psychopathic service for observation, having annoyed many prominent people with letters of complaint

about her husband and her children and a certain physician, who had been her family doctor. Her family history revealed no mental or nervous diseases. As a young girl she was quite suspicious and very sensitive. She admitted several homosexual episodes. She married at 22 years of age. Because of her suspicious nature her marital life was never happy. On one occasion, while visiting a friend, she approached this friend with homosexual intent and was strongly rebuked by the latter. She then began to make disparaging remarks about this friend, stating that she was very jealous, and that she was an immoral woman. When she was about 30 years of age, she burst out into a state of excitement, stating that her husband was being influenced by this friend, and was making efforts to get rid of her (his wife). However, she continued to live with him, and raised a family of six children. At the menopause, she again became somewhat excited; stated that her friend was again influencing her husband, and that the latter in turn was poisoning the minds of her children; that the reason why she was not liked by her children was due to this friend's animosity; on one occasion she tried to enter a theatre, but as all seats had been taken, she was obliged to stand. She then created a disturbance stating that her friend was back of this. At the age of 47 she became quite unmanageable. She stated that her food was being poisoned by her husband; that she was being watched wherever she went. She sent a letter to the district attorney. She was finally committed to a state hospital. In the state hospital she was readily adaptable, and at first easily managed, but later, when she requested a privilege which could not be granted, she accused the ward physician of being in league with her family and her friend. She

said that she was far more attractive than her friend; was much more clever than any of the nurses on the ward, and that everybody was jealous of her. She kept writing to the various state officials voicing her grievances against the hospital authorities so that the ward was subjected to several investigations. She was transferred by her family to a private hospital for the care and treatment of the insane and from there was released to the custody of one of her daughters. She secretly, however, kept on sending letters to prominent citizens so that it was necessary to have her recommitted to a state hospital. During her entire residence, the patient showed logically arranged thought. Her delusions were of a systematized nature, each event bearing a causal relationship to the preceding one. It is quite obvious, however, that the friend who repulsed her in early life could not have been at the bottom of all her troubles.

The organic psychoses are those forms of mental disorders in which there are definite anatomical changes in the brains of the patients. These changes may be due to degenerations caused by senility, hardening of the arteries, bacterial or drug poison, or injury to the brain tissue.

It is a well known fact that individuals approaching senescence are expected to show slight lapses of memory, poor perceptions, failure of attention, irritability and somewhat blunted judgment. They are apt to speak of events of their childhood laying greater stress on these than to occurrences of every-day life, in which they display very little interest. The brains of these individuals when examined show reduction in weight, and moderate

atrophy and an increase in the supporting tissues.

Patients suffering from Senile Psychosis show increasing impairment of retention, failure of memory especially for recent experiences, defective orientation, lack of concentration, self-centering of interests, irritability, marked stubbornness, and a tendency towards reminiscences and falsification of memory. They may even show paranoid trends, states of confusion, depressions, and periods of agitation. Very frequently these patients may show marked states of excitement, and express persecutory trends with a deep sexual background. Occasionally, they may even make an absurd accusation of immoral acts against the members of their immediate family. On post-mortem examination, the brains present marked degeneration of the nerve cells and fibres with the formation of small areas of degeneration technically referred to as senile *claques*. Because of the age of the patient, they are not often sent to hospitals for the insane, although commitment to a state hospital is imperative in many instances. These patients represent about three and one-half per cent of the total population of the New York State Hospitals. The following cases represent some instances of the abnormal behavior of these patients:

CASE 41

An old woman was found wandering on the street, being unable to give her address or the name of any relative. She could only mention her own name. She asked to be taken to her grandparents whom she

said lived around the corner. She was taken to the hospital. The physical examination was negative except that her heart showed poor action. Cranial nerves were intact. Mentally she was childish, rather playful, though irritable, misidentified the doctors and nurses claiming them as her relatives; was disoriented for time and for place; said she was 18 years of age; that she was born in 1850 and that now it was 1870, said that Lincoln was President — asked to have her grandparents brought so that they might take her for a ride. She would dance, and would go over to the piano and sing in a childish manner. She was told the name of the physician and also the date, but she immediately forgot same. Through the Police Department her family finally located her in the hospital. The history obtained from her relatives showed that for the past three years she had displayed increasing forgetfulness, irritability, childishness; had wandered away from home on several occasions; was restless at night, and would misidentify members of her own family. She was allowed to be taken home as the family could well take care of her outside of an institution.

Case 42

An Italian, 70 years of age, was brought from the magistrate's court being charged with felonious assault. He attacked his wife with a hatchet and inflicted serious injuries. Family history was negative for nervous or mental diseases. His son stated that the patient first began to show evidences of mental disorder about four years ago. He then complained to his children that his wife (who was at that time 65 years of age) was unfaithful to him. On one occasion he created a disturbance on the street, openly

accusing her of having immoral relations with a neighbor. He became increasingly irritable, inclined to fly into fits of temper and would strike anyone coming near him. At the hospital the patient showed an emaciated physical condition; pupils were irregular and reacted somewhat sluggishly; his teeth were in poor condition. His abdominal viscera were negative. The blood Wassermann was negative. Mentally the patient showed quiet, rather seclusive attitude and manner; at times, however, he was easily excited and would become assaultive; he expressed a number of delusions of a sexual coloring which dominated and controlled his conduct and into which he showed no insight. His memory was poor, especially for recent events, and his judgment was markedly defective. He voiced his grievances against his wife, bitterly asserting her immorality and claiming that he had witnessed her acts of infidelity. He was committed to a state hospital as a case of Senile Psychosis, Confused and Agitated State.

In the psychosis with cerebral arteriosclerosis the condition results from the disease of the vessels of the brain. Hardening of the arteries is frequently found among old people, but in these cases, the vessels, especially of the brain, are unduly thickened. In many, the vessels are apt to be plugged, causing a softening of that part of the brain which is nourished by that particular vessel. These patients present, besides their mental condition, many physical signs such as dizziness, headaches, fainting spells, paralysis, weakness of one or more extremities, thickening of the peripheral vessels, occasionally high blood pressure, and

tremors of the head and extremities. The mental symptoms are characterized especially by their incapacity to think quickly and accurately. They lack the power to concentrate and to hold their attention for any length of time; they become readily fatigued. They are unable to control their emotions, weeping and laughing alternately. Occasionally they display marked irritability. They are unable to retain newly acquired information, and there is a general defect of memory, especially for remote events. They may display pronounced psychotic symptoms in the form of depression, paranoid ideas and episodes of marked excitement and confusion. Often this condition may be associated with senile changes in the brain. In many cases there are co-existing diseases of the kidneys and heart. The following are illustrative cases of this disorder:

CASE 43

An old man (65 years of age) was brought from a police precinct where he had complained that he knew of a man who had wronged a 17-year-old girl and asked for a policeman to help him find that man. While in the precinct he telephoned to several people and acted irrationally. The wife of the patient stated that he had been mentally upset for the past two years. He at first confided in her that detectives were following him and were going to have him arrested for no cause whatever. Later he complained of people annoying him with electricity. He stated that he was getting radio messages calling him bad names. On one occasion he caused the arrest of an innocent man,

accusing him of ruining a young girl. Physically, the patient showed markedly thickened arteries, irregular pulse, enlarged heart with evidences of disease of the valves; senile changes in the eyes. His speech was somewhat thick and he often used incorrect words to express his ideas. Mentally the patient was definitely confused; he wandered aimlessly about the ward; got mixed up in his statements, contradicting himself repeatedly; his memory especially for remote events was definitely defective; he could not concentrate nor could he tell a straightforward story; he would tire easily, become irritable and excited when questioned; expressed a number of delusions of a persecutory nature with a deep sexual coloring; he had no insight into his condition and his judgment was impaired. He was finally committed to a state hospital with a diagnosis of Psychosis with Cerebral Arteriosclerosis.

Case 44

A man 70 years of age was brought by the ambulance having had a " fit " on the street. On examination patient showed evidences of an old left hemiplegia (paralysis of the left side of the body), thickened arteries, an enlarged heart; irregular, unequal and sluggish pupils; hemorrhages in the eye-grounds, tremors of the face and fingers, thickened speech, and difficulty in speaking, using incorrect words. Mentally at first he was confused, unable to give any account of himself; he was disoriented for time and place. Later he cleared somewhat, but showed marked speech defect, irritability, and memory defect. He expressed ideas of derogation directed against his sons. A careful history of the patient's illness revealed that he had always been a hard worker, a faithful husband

and father, and a law-abiding citizen. About ten years ago he began to show increasing irritability, would fly into fits of anger, insisted upon his children doing exactly as he dictated, slept very little at night, and showed wandering tendencies. Five years ago he suddenly fell on the street and it was shown that at that time he sustained paralysis of the left side of the body. Four years ago he made a will in which he disowned members of his family and left an estate worth several thousand dollars to a neighbor, who had a shady reputation. He then stated that this neighbor was the only friend upon whom he could depend, although on investigation it was found that his children were very loyal to him. He made disparaging remarks about the morality of his daughters, and about the honesty of his sons. This man was finally committed to a state hospital with a diagnosis of Psychosis and Cerebral Arteriosclerosis.

From the study of the cases presented under the heading of senile and arteriosclerotic psychoses, it is apparent that there is a considerable justification for litigation over wills drawn by old people. Furthermore, one can easily appreciate the reason for many lawyers refusing to accept old people on juries, where the safety of their client is in danger.

Traumatic psychoses are diseases of the mind resulting from injury of the brain. Brain injuries may occur without any apparent injury to the scalp or the skull, though the latter frequently coexists with the former. One must bear in mind that an attack of manic-depressive psychosis, dementia praecox, General Paresis, etc., may be

precipitated by an injury of the brain. The amount of damage done to the brain may vary from mere concussion to extensive destruction of brain tissue. The clinical types differ in accordance with the extent of the injury. In traumatic delirium, the individual may show confusion, disorientation and excitement, which may last for only a brief period, and the patient may ultimately make a complete recovery but usually with a loss of memory for events that have occurred for a day or two preceding the injury.

Frequently the individual is left with a change of disposition, described as traumatic constitution and characterized by headaches, fatigability, emotional instability, hysterical outbreaks, oversensitiveness to alcohol and other stimulants, and instability of the vaso-motor system (flashes of heat and cold). Occasionally they are left with an epileptic condition. In the more serious cases there is resultant a real dementia often referred to as post-traumatic mental enfeeblement. In this condition there is definite loss of concentration, memory and retention defects, lack of interest and emotional deterioration. The patients presenting traumatic conditions are chiefly of medical interest, and are usually best managed by neurological rather than psychiatric treatment.

Perhaps no other types of mental disorders are as readily preventable as those caused by syphilis, yet owing to the misguidance of well-meaning but narrow-minded individuals, we are daily meeting patients who are afflicted with these

serious mental diseases, which not only incapacitate them, but cause indescribable agony to the members of their families. Syphilis itself is a preventable disease. During the late war, when the very existence of the nation was at stake, every soldier received definite and explicit instructions in the methods for avoiding contraction of venereal disease. At present, it is illegal to teach these methods; for the prevention of venereal disease is so intricately bound with birth control, that they are often confused, and bigoted, hypocritical individuals, often themselves subjects of mental disease in its broadest psychiatric meaning, persecute anyone trying to ameliorate human misery due to venereal diseases.

In General Paralysis of the insane, we have a condition in which there is a degeneration of the parenchymatous structure of the brain tissue, and an inflammation of the interstitial supporting tissue, resulting from the successful invasion of the brain by the *treponema pallidum,* the organism causing syphilis. The symptoms are both physical and mental. The physical symptoms are characterized by tremors in the facial muscles; changes in the responses of the pupils to light stimulation; irregularity and inequality of the pupils; disturbances in the reflexes; ataxic gait; defects in speech varying from mere slurring to omissions of letters, syllables and words; and cranial nerve involvement such as paralysis of the muscles moving the eyeball, drooping of the eyelids, deafness, optic atrophy, changes in quality of the voice, difficulty

in articulation, irregular movements of the tongue, and facial asymmetry. Convulsions are frequent in the later stages. Disturbances in the control of the bladder and rectum are also common in advanced stages. Examination of the spinal fluid and of the blood give positive Wassermann reactions, and other evidences of the presence of syphilis.

The dementia is characterized by the deterioration of the response of the individual to ethical, esthetic, intellectual and conventional standards which have hitherto governed his conduct. There is a failure on his part to curb his aboriginal instincts and to subordinate his individual desires to the demands of society. There is marked failure of memory, poor retention, markedly impaired judgment, and absence of insight.

The paretic is proverbially supposed to be grandiose in his mood, that is, unduly elated to the extent of imagining himself to be ruler of the universe, owner of boats built from rubies and emeralds, and having at his command unlimited wealth and power. On the other hand, there is a group of cases who are markedly depressed, but the depression is of a silly, demented nature, to the extent of making one immediately grasp the demented and deteriorated background into which are woven the patients' delusions. The course of this disease is chronic and progressive and the average paretic hardly lives more than five years after the onset of distressing symptoms. The disease is, however, characterized by remissions, and many a paretic is able to return to his former

sphere of activity, but sooner or later he again shows a relapse.

With the institution of proper prophylactic measures, this disease could be made a medical rarity. As stated before, prophylaxis has proven efficacious in preventing the occurrence of syphilis among the soldiers and sailors during the late war. Its efficacy is no longer a matter of speculation. We have sufficient scientific data at our command to enable us to combat the contraction of syphilis. The amount of unhappiness and real misery it causes is incalculable. It is indeed pitiful to behold a man of standing in his community, a faithful husband, a devoted father, a loyal citizen, suddenly lose all sense of ethics, and enter into relations with some designing, immoral woman, causing many a heart to break. Many an individual who has worked hard all his life will suddenly squander away his life's savings, leaving those dependent upon him in dire straits. The following cases illustrate some of the types of abnormal behavior caused by this disease:

Case 45

A man (35 years of age) was brought to the hospital by his wife who stated that the patient became depressed one month ago; and showed lack of interest in his business, following business reverses. On examination patient presented the obvious physical signs of general paralysis of the insane. These were corroborated by examination of the blood and spinal fluid. Mentally he was somewhat confused, dull, un-

stable emotionally, crying at the least provocation. His speech was definitely slurring in character, and he would drop many syllables. A careful history revealed that the patient had known his wife from childhood; that they were married when he was 19 years of age; his wife had miscarried six times. He worked his way up from a clerk in an importing house to the presidency of a large concern. Six months before being brought to the hospital, the patient extended his business interests and invested every available dollar, borrowing heavily from his banks. The investment was made against the advice of the other members of the firm, and resulted in the resignation of a few. The investment proved to be a failure and he was completely wiped out. The wife did not suspect that the patient was in any way erratic. When the nature of the disease was explained to her, she protested strongly against such a possibility, being at first even insulted by the mere suggestion that her husband might suffer from a blood disease. She insisted that they had been lovers from the very first meeting, and that there was no question as to his fidelity. Little did she know that the organism of syphilis has no regard for race, creed, sex, color, or station of life, and that it may be contracted in other ways than by illicit sex relationship. The patient was committed to a state hospital, leaving his wife destitute.

Case 46

A young woman (30 years of age) was brought from a city park where she was found wandering late at night and unable to give an account of herself. In the hospital she appeared dull, stupid, unable to speak clearly, was unable to give any account of

herself. She showed definitely irregular and unequal pupils which were fixed to light and accommodation. She had bilateral ptosis of both eyelids. There were tremors of the face, tongue and hands. The elbow jerks were unequal; the other deep reflexes were absent. Her gait was definitely ataxic and her station was unsteady; the Wassermann of her blood and spinal fluid was strongly positive, and the other tests performed on the spinal fluid pointed to undoubted syphilis of the brain of the paretic type. In two days she became very expansive, saying that she owned the Brooklyn Bridge; that the hospital was her palace; that she had a carriage made of gold. She could not tell the name of her husband nor could she tell her residence. Her husband finally traced her to the hospital and he insisted that she be discharged to his care. Three weeks later she was brought to the hospital in a taxicab by a young man who stated that she was in his friend's rooms and that she had given herself up to anyone who approached her. This time she showed increased signs of syphilitic destruction of the brain and it was necessary to commit her to a state hospital for the insane.

Case 47

A man (45 years of age) was brought to the hospital by a worker attached to the Domestic Relations Court. The history stated that for the past six months patient refused to support his wife, spent his money lavishly, entered into relations with women of the streets, and struck his children without apparent cause. On examination the patient showed definite signs pointing to syphilitic destruction of the brain. He was unsteady on his feet; his speech was definitely slurring

and he omitted many syllables. His knee jerks were markedly accentuated, his pupils were unequal, irregular in outline and reacted very sluggishly; he was partly deaf in one ear. His blood Wassermann and spinal fluid Wassermann were strongly positive, so were the other tests of the spinal fluid. Mentally he was very elated, said that he was the strongest man in New York City, that he owned all the gold mines in the world and that all the girls were in love with him. He stated that his wife was too old fashioned and he decided to take a girl from one of the New York musical comedy shows. He admitted having spent all the money that he had saved, but said all the banks of New York were his and therefore he could spend as much as he desired. His wife, he said, was not worthy of him and naturally he struck her when she interfered with him. He admitted having contracted syphilis 20 years ago. He was committed to a state hospital, diagnosed as a case of general paralysis of the insane.

CASE 48

A man (40 years of age) was transferred from the Tombs Prison, charged with grand larceny in the first degree. His brother stated that the patient had had a normal infancy and childhood; had had two years college training; and was quite successful in his business. The patient was quite aggressive sexually, and contracted syphilis at 25 years of age. Three years ago a definite change was noted in the patient's personality. He became very careless about his personal appearance; he did not work steadily and when reproached by his mother struck her. He then got into difficulties with his employer because he drew money from the treasury without any reason. He then began

to take women into his own home disregarding his mother's presence. He ordered many articles from various department stores and ran up bills into the thousands. He forged his employer's name to a check and was then arrested and charged with larceny in the first degree. Physical examination showed unequal, irregular pupils which reacted sluggishly both to light and accommodation. There were tremors of the muscles of the face, tongue and fingers. His deep reflexes were accentuated but more active on the right side than on the left. His speech was indistinct. The blood Wassermann was four plus. He refused to submit to a spinal fluid examination. He was irritable in attitude and somewhat flighty in conversation. Mentally he was very restless, facetious, meddlesome, expressed a delusional trend of a changeable character; fancied he was wealthy, and was capable of performing great deeds. He showed moderate memory defect and his judgment was definitely impaired. He had no insight into his condition. He was diagnosed as a case of general paralysis of the insane.

Occasionally the syphilitic germ limits its field of involvement to the uppermost layer of the brain, the membranes lining the brain (meninges) and to the vessels nourishing the brain (endarteritis), giving the disease picture commonly referred to as cerebral syphilis. The mental disorder resulting from it is known as psychosis with cerebral syphilis. In this type of mental disease, we have physical signs in which there is involvement of the cranial nerves, and a mental picture of dullness or confusion and excite-

ment. Often there are paralyses and convulsions. Frequently there are paranoid trends, blunted ethical sense, defective judgment and moderate mood variations. In these cases Wassermann examination of the blood is positive, and the tests of the spinal fluid point toward syphilis. Occasionally, individuals of a manic depressive nature will react very strongly to the knowledge that they are victims of syphilitic disease and may become depressed to the extent of committing suicide.

Case 49

A young man (27 years old) was brought from the Tombs Prison charged with robbery. Family history showed that father had deserted the family 22 years ago. One brother died in a hospital (suicide). Patient was apparently a normal and well adaptable individual until discharged from military service in October, 1919. He then became very shy, would not meet people; he appeared somewhat depressed and nervous; he could not get adjusted to things; he began to dislike everybody and everything; he would wake up his family in the middle of the night for no apparent reason. He became very impulsive; he went on a subway station and asked for a cigarette, then tried to enter the booth, chasing the ticket agent, and he was arrested and indicted for robbery. On the ward patient was rather sullen and depressed. Physically he was well developed and well nourished. Elbow and knee jerks were equally exaggerated; pupils were equal, irregular; the right reacted promptly and the left did not react. Blood Wassermann showed 3 plus reaction; the spinal fluid Wassermann was neg-

ative but showed 54 cells and 2 plus globulin (pathological fluid). One week after his admission, the patient pushed his right hand through a pane of glass receiving lacerations of thumb, palm of hand and forearm; he said: "I felt something strange in me; something loose in me. My head feels dull. I am bad in memorizing; I can't sleep. The strain was too much. I gave up work three months ago because I lost confidence in myself." He was committed to a state hospital with a diagnosis of Psychosis with Cerebal Syphilis.

Juvenile General Paresis, or General Paralysis of the Insane occurring in childhood is perhaps the most pitiable of all types of abnormal behavior resulting from infection by the syphilis germ. In this condition the patient suffers from infection either in early infancy or while still in the mother's womb. These children apparently develop very well until about five or six years of age, or more, when they begin to show changes in their reactions as manifested by outbreaks of temper, inability to learn at school, sleepiness and convulsions. When taken to the psychiatrist, his examination, especially when aided by blood examination, will readily detect this condition. It is one of the causes for educational maladjustments at school. This condition is a progressive one, and the patient hardly ever lives to full maturity.

Among the most interesting types of mental disorders are those due to alcohol. While the entire problem of alcohol with relation to abnormal conduct will be discussed fully in Chapter IX, it is

relevant to mention a few of the types of disorders of behavior which result from psychoses caused by this drug. In its mildest degree, alcohol causes a condition known as *pathological intoxication* which is characterized by excitement, confusion, and hallucinations of sight and hearing. This is the reaction of a delicate nervous system to the imbibition of alcohol in large or even small amounts. The duration is but a few days, and there is a complete loss of memory for the events that have taken place during the "drinking spree." The following case illustrates this type of abnormal reaction to alcohol:

CASE 50

A young man (28 years of age) was brought to the hospital by a policeman, whom the patient approached begging for protection. The history revealed that this individual was a rather bright and adaptable person, although quite tense emotionally. He had frequently had such attacks following several hours' drinking. The present attack was preceded by a drinking spree which lasted three hours during which the patient imbibed about two quarts of whiskey. He then began to accuse his friends of trying to harm him; said that they were plotting against him, and struck one of them. He then ran out of the house and asked a policeman to be taken to a place of safety as his enemies were going to kill him. On the ward the patient showed definite and striking fear reactions; said that he knew that his friends were going to harm him; that he had seen them talking to each other and heard them formulating plans for his execution. His face

was flushed; his heart was beating very rapidly; his pupils were widely dilated and his reflexes were very active. He received the necessary medical attention and was given a sedative to induce sleep. On the following day the patient showed a clear consciousness, was correctly oriented and did not express any of the hallucinations which had dominated his conduct while on the outside of the hospital. He could give no account, either of the drinking bout or of the events that followed it.

In delirium tremens, we have a real injury to the brain substance by the alcoholic poison. This condition results from the prolonged use of alcohol. It is characterized by marked visual hallucinations in which the individual imagines snakes, and peculiarly distorted animals are on the walls and ceiling. The pulse is very rapid; the face is flushed, and there is a temperature of 103 to 104 degrees. The durability of this attack is about a week and the individual has a complete loss of memory for events not only during his delirium but also for happenings of several days preceding the onset of his sickness. Death occurs in at least one-third of the cases. The following case is a good example of this type of insanity caused by alcohol:

CASE 51

A young business man (35 years of age) was brought to the hospital by his wife who stated that the patient was always a heavy drinker and had had one former attack of the "horrors" (a term commonly used by the laity to describe delirium tremens). He

had been drinking heavily for the last four weeks and had eaten practically nothing for the past two weeks. The preceding night he got out from his bed, got his cane and began chasing imaginary things from the wall. He acted in an irrational manner; did not answer questions and did not sleep all night long. Upon advice of the physician his wife had him brought to the hospital in a taxicab. On the ward patient was completely disoriented for time, person and place; he talked incessantly to imaginary people; said there were snakes creeping all over his bed, and asked for weapons to chase them and kill them. He addressed the nurses and physicians as though they were his friends; he showed temperature of 103, pulse of 130; his face was flushed; there were fine twitchings in the muscles of his face and fingers. He had to be placed in restraining sheets to prevent injury to himself and others. At the end of six days the temperature gradually came down to normal; the pulse became slower, he gained considerable lucidity and finally recognized that he was in a hospital, that he had been ill. He admitted drinking heavily but could not describe, except for a few minor details, his hallucinatory experiences.

The most serious type of reaction following the indulgence in alcohol is that commonly known as Korsakow's Psychosis. In this type there is a serious and permanent injury to the nerve cells of the patient, as well as to the nerves going to the muscles of the extremities. He is completely disoriented as to person, time and place. He fabricates, imagining that he has been out a moment before, transacting business, etc. He is

easily suggestible and misidentifies people. The duration of the attack is about eight to ten months and recovery is never complete, the patient being left with a marked defect of memory and retention and possibly with moderate disuse of his extremities.

Among the most distressing types of diseases caused by alcohol, are the acute and chronic types of hallucinoses which follow the use of this drug. In these cases we have a clear sensorium, the patient being well oriented, but he shows marked fear and a tendency towards systematized persecutory ideas in which he sees himself plotted against and actually pursued by his enemies. In order to escape the imaginary tortures in store for him he may resort to suicide.

The conduct disorders that result from psychoses following chronic drug addiction will be best described under the chapter dealing with the entire drug problem. Suffice it to say that they are characterized by emotional deterioration, with a tendency towards formation of delusions of persecution in the opium group, by marked visual as well as tactile (touch) hallucinations in the cocaine group, and by marked confusion and disorientation in the bromide group.

Psychoses accompanying epilepsy and the resultant abnormal conduct will be fully discussed in the chapter on epilepsy. The general physical diseases such as diseases of the heart, kidneys, etc., are often accompanied by outbreaks of psychoses but they are so purely medical in nature

and are so comparatively rare in the causation of abnormal behavior that they will not be mentioned here; furthermore, reference has already been made to them in Chapter IV.

Inflammation of the brain, or encephalitis, often results during the active phase of the disease, in confusion, disorientation, various hallucinatory experiences (especially those of vision) and in excitement. Following recovery, the patient is usually left with moderate memory defect, irritability, and diminished power for sustained action.

Epidemic encephalitis, or sleeping sickness, which ravaged the country during 1918 and 1919, is characterized by tendency to drowsiness, prolonged lethargy, and various manifestations of paralyses of the eye muscles and other cranial nerve disturbances. The duration of the active period of the disease may be from one week to several months. In the acute period, there often may be present maniacal excitement and periods of confusion.

Following recovery from the acute phase of the illness, there ensues very often a more or less incapacitating stage. This, in the adult is manifested by restlessness, irritability, lack of concentration, impulsiveness, and inability to maintain sustained action. Often these patients show a striking change in their sexual life, becoming promiscuous.

In children who have recovered from this disease, there often occurs a most incapacitating after-effect. This is characterized by marked

irritability, restlessness, emotional instability, precocious sexual development and activity, and a change from nocturnal to diurnal sleep. These symptoms are for the most part due to the mechanical effect of the healing scar tissue upon the brain. Specific cases will be cited in Chapter XI in connection with the subject of educational maladjustments, since a great deal of the abnormal conduct of school children can be traced directly to the after-effects of this disease.

The mental defective occasionally is subject to insanity. Acute, usually transient episodes of excitement, irritability, depression, persecutory ideas and occasionally hallucinatory trends characterize the psychoses accompanying mental deficiency. Because of the general lack of feeling on the part of the mental defective, his lack of control and his inability to appreciate the consequences of his acts, many brutal acts may be perpetrated during his period of insanity.

It will be seen that the rôle played by the psychoses in the causation of abnormal and anti-social conduct is an important one. It must be remembered that while the definitely psychotic states that are characterized by marked fluctuations in the motor or emotional fields of individuals, or in which there are present gross hallucinations, are easily detected even by the layman, there is a group of psychotic conditions which baffle even the expert in psychiatry. The legal aspects in these cases often necessitate the consultation of the psychiatrist to determine the exact mental status of the

individual. Since the boundary line between health and disease is not a definitely delineated one, there is opportunity for marked variation of opinion as to the person's sanity. There should be attached to every Court of Justice a group of well trained, properly qualified, and adequately paid alienists, who would pass an unbiased opinion as to the sanity of the person brought before the Court.

The authors have met too many so-called examiners in lunacy whose sole qualification for deciding questions bearing upon a patient's commitment to a state hospital, etc., was a period of three years elapsing from the date of their graduation from medical school to the time when they applied to a Court of Record for appointment as examiner in lunacy. Many of these so-called examiners in lunacy openly confess ignorance of the finer points of psychiatry which are so essential for the determination between normal and psychotic states. Furthermore, it is the belief of the authors that kinship to a judge or political leader, or affiliation with a political organization, are, by themselves, insufficient qualifications for a physician to serve as a medical member of a commission appointed for the determination of the sanity of an individual charged with a felony.

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Chapter VII

BORDERLINE MENTAL DISORDERS AS CAUSES OF ABNORMAL CONDUCT

Boundary line between normal and abnormal behavior not clearly demarcated.
The problem of the psychoneuroses.
The personality of the hysterical individual.
The Freudian conception of hysteria.
Physical manifestations of hysteria.
Cases illustrating hysterical conversion mechanism.
Janet's conception of hysterical dissociation.
Suggestion and hysteria.
Hysteria amongst troops during the World War.
Various methods of management of shell-shocked soldiers.
Lessons learned from management of shell-shocked soldiers.
Spiritualism as applied to hysterical people.
Auto-suggestion.
Discussion of psychoanalysis.
The problem of psychaesthenia, or compulsion neurosis.
Freud's classification of the psychoneuroses.
Neurasthenia and its symptoms.
Anxiety neurosis and its manifestations.
The problem of traumatic neurosis.
Various methods for the management of different psychoneurotic patients.
The problem of the borderline mental deficiency cases.
Cases illustrating anti-social behavior in borderline mental defectives.
The constitutional psychic inferiority states.
Cases illustrating abnormal conduct in the constitutional psychic inferior.
The problem of masturbation.
Abnormal sex indulgences — sadistic and masochistic traits — homosexuality — exhibitionism.

IT is fairly easy to appreciate the influence of psychoses upon anti-social conduct. The insane man, because of the disease from which he is suffering, is unable to behave in a normal fashion. His conduct is expected to be abnormal. He is suffering from the disease of the very faculty which enables him to get along in life, hence in diseases of the mind where the malady is of a definite psychotic type, abnormal behavior is the logical result.

In passing from definitely psychotic states to normal conditions we are confronted by an intermediate group of individuals whose conduct, while not definitely psychotic, is obviously abnormal. These are the cases of borderline mental disorders. In general, they are individuals who are suffering from definitely abnormal mental states, but whose personality as a whole is fairly intact. Authorities differ as to the exact nature of the disorders from which they are suffering. These cases form the bulk of medico-legal contentions, for there is a considerable difference of opinion as to whether or not they should be held responsible for some of their anti-social conduct. Legal responsibility on the part of these individuals often is denied to them from a medical viewpoint while the law exacts a thorough accounting for all their acts.

There are three definite groups constituting borderline mental states. They are the psychoneuroses, constitutional psychic inferiority states and borderline mental deficiency. This last named class lies between the definitely defective indi-

viduals and those who are of normal intelligence (although possibly rather dull).

Psychoneuroses is the most interesting of the three groups. More has been written about the psychoneuroses than about any other group of medical conditions. Furthermore, there has been a greater difference of opinion about the exact nature of this malady than about any other. The psychoneurotics have been imposed upon by charlatans and quacks to a greater degree than any other group of sick people. The failure of most medical men to understand the psychoneurotics has been the chief factor in the creation of many sects of practitioners such as the Christian Scientists, chiropracters, etc.

What are the psychoneuroses? They are technically best described as certain types of abnormal behavior in which the personality of the individual is retained. This definition is perhaps somewhat broad but so are the mental states which we are now discussing. Furthermore, we have scanned through the literature and have become familiar with most of the definitions offered not only by outsiders meddling with medical affairs but also by physicians who have spent a lifetime on the study and management of the psychoneurotics and none have offered a more workable definition.

There are several types of psychoneuroses. Hysteria is the most common and the most widely known of this group. The ancients fully appreciated the sexual background into which this mental disorder is woven, and attributed it, because of

their ignorance of anatomy, to a roving uterus; hence its name. Until comparatively recent times, hysteria was regarded by most medical men as a type of reaction on the part of a peculiarly disposed individual whenever confronted with a painful situation. In order to avoid it he reacts in a classical and characteristic manner well known to those who are used to dealing with hysterical people. The peculiar personality of these hysterics may be described as one in which there is undue craving for sympathy and attention. They are apt to be utterly selfish, disregarding the welfare of others, and viewing life with an outlook which circumscribes only that which will afford them the greatest amount of pleasure. They show an early tendency to lean upon other members of the family, and to avoid anything which requires of them an expenditure of energy.

A perhaps more elaborate theory is offered by the Freudian school of psychology. This school confines itself primarily to the individual case instead of dealing in generalities. It traces the various hysterical symptoms to mental traumata which the patient cannot consciously recall. Under proper methods of investigation, these traumata can be brought to consciousness. These mental or psychic traumata, or their memories, act on the mind like irritating foreign bodies to a wound. Most of these psychic traumata were found to be sexual in nature, and to have occurred in infancy. The original emotional color tone could not be given free play because of its painfulness,

and hence was strangulated. The Freudian technique consisted of recalling to consciousness the trauma and the painful affect associated with it, and thereby liberating the strangled emotion and effecting a cure.

Freud showed that the psychic trauma which these individuals had sustained usually carried with it a sense of shame and reproach and a feeling of guilt. The patient wished to know nothing about the experience which caused the trauma, and tried to forget it, or, technically, to repress it. To completely forget it was impossible, and the experience constantly strove to come to consciousness. The so-called psychic censor, on the other hand, tried to repress it still further. This resulted in a struggle of two opposing forces which finally compromised on the basis of a conversion of these forces into an hysterical symptom. Each force participating in this mental struggle yields some of its original demands, and finds expression in the mutually accepted hysterical manifestation.

These hysterical manifestations may be manifold in nature, and are of innumerable sensory and motor expressions. We find in the hystericals, paralyses of one or more extremities, difficulties in swallowing, sensory disturbances of various sorts, twitchings of various parts of the body and even convulsive phenomena. These paralyses and sensory disturbances are not accounted for by anatomical changes. They are expressions of the compromise between the painful experience striv-

ing to come to the surface and the psychic censor trying to keep it back.

The following case offers an illustration of this mechanism:

CASE 1

A young girl 25 years of age was brought to the hospital complaining of loss of sensation in her lower extremities. This girl's history revealed that she had been rather sensitive in her make-up, craved attention and always wanted more sympathy than any other member of her family. She had left high school at the age of seventeen and was employed by a man to whom she finally became attached. She permitted him to take a few liberties without actual sex indulgences. He would frequently show his affection by caresses and by expressing great admiration for the shape of her legs. Most of his gifts were in the nature of hosiery. Their friendship ripened to the extent of attracting the attention of the wife of her employer, and the patient was obliged to leave her employment. On the following morning while dressing she found that her legs were insensitive. She could walk perfectly well but she could not feel any sensation in her extremities.

The mechanism in this case is quite obvious, even to the uninitiated. The experiences with her employer were trying to come to the surface, but were constantly associated with a feeling of guilt, and the psychic censor was trying to repress them. A compromise between these two forces resulted which found expression in sensory disturbances in the extremities, and which was the complaint

which brought her to the hospital. It is interesting to note that the hysterical symptoms affected her legs, with which many of her guilty memories were associated. Analysis in this case was easily accomplished and effective of a cure.

The conversion of the psychic energy along a more acceptable line of expression is elementary in people of simple intelligence. The higher we ascend in the intellectual scale, and the greater the power of conventions over the individual, the more complicated are the methods for conversion of this psychic energy. The following cases are illustrative.

Case 2

A man 35 years of age was sent by the presiding officer of the Court of Domestic Relations to determine his physical condition, as he claimed that he could not work because his arm was paralyzed. The history revealed that this man was a Russian, carpenter by occupation and had always been of good habits. He was eight years in this country and spoke only broken English, finding it difficult to express himself clearly. He married a Russian who spoke English fluently. She was quite immoral in her habits; would drink to excess and neglected her home and family. He had reproached her on several occasions for her conduct but she would not heed his warnings. He then left her and she brought action against him for non-support. He had no lawyer and he could not express himself clearly but had to state his case through an interpreter. He was ordered to pay his wife $15 a week. Over this he brooded and felt that instead of

getting justice he was the victim of the entire transaction. He felt that he had always been faithful to his wife and he knew that she was unworthy of him. He knew of her misconduct with other men. He then began to suffer from various ailments, first a cold in the head, then inability to talk, and later he felt that his arm, which had been broken when he was a child, was now losing strength. He went to a dispensary where some electricity was prescribed. After the first treatment he found that he could no longer move his hand. He lost his job and was brought to court for failing to pay his wife her weekly allowance. His case was then carefully investigated and the social service worker found sufficient evidence of his wife's infidelity and of her gross misconduct. The court's attitude towards the man was naturally different from what it had been at first and he no longer had to give his wife money. His arm, which had previously resisted all sorts of treatment, now yielded to therapy, and at the end of a month's treatment, mostly in the nature of suggestion, was restored to its full function.

Case 3

A woman 33 years of age was brought to the ward suffering from inability to completely open her eyes. The history revealed that she had been married for 12 years to a man who was rather inconsiderate of her feelings and somewhat selfish. She had two children by him. He would neglect her and would stay away for several days claiming that his business required considerable travel to other cities. On one occasion she went to a theatre party with her sister and returned home, meeting her husband as he was leaving a maid's room. There was no doubt of her having

been mistaken, although the hallway was rather dark. She pretended not to have seen him, however. On the following morning she asked him where he had spent the previous night and was told that he had been playing cards with some of his friends. Immediately she complained of headache and found that she could not open her eyes widely.

In both of these cases we have painful affective situations in which the memory of the original psychic trauma is so distressing that consciousness is constantly endeavoring to repress it by means of the psychic censor, while the experiences themselves are, on the other hand, endeavoring to emerge to the surface. A compromise results in each case: in the first, in paralysis of the arm; in the second, in the dropping of the eyelids. The entire mechanism was a subconscious one. The cure in the first case was effected in a subconscious fashion purely on a basis of suggestion, the remedy itself resulting from the redress which he received at the hands of the Court. In the second case, in which the patient was highly intelligent, a cure was effected after an exhaustive analysis of the case.

While the Freudian mechanism is the one which is now being so widely discussed, it must be remembered that hysteria was a manageable condition even before the days of Freud. Janet and his school, utilizing the principle of dissociation of personality, obtained remarkable results. Neurologists of eminence all over the world fully realized the part played by suggestion in these cases.

Many of them still maintain that suggestion is the basis for this disorder and that all the symptoms of which the patients complain have been suggested to them either by their friends or by those under whom they place themselves for treatment. They believe that since these symptoms have been suggested to the patient, the method employed to establish a cure should be based upon suggestion. Hypnotism has long played an important rôle in the management of these people, and it is really one of the various methods of suggestion. With this as a cue, many clever people have undertaken to cure hysterics and the literature has been flooded by books and articles varying all the way from simple charlatan and quack discourses to writings bearing a certain semi-scientific stamp in the effort to advertise their cures.

The late war has offered considerable opportunity to study hysteria in its various manifestations. At first this malady received a general appellation of " shell-shock," a term which later was utilized to describe all mental states, not only hysteria but also insanity. Careful analysis of these cases, however, revealed that these individuals behaved in a way that would insure their removal from a place of immediate danger to one of relative safety, although this motive was subconscious. It was found that an hysterical outbreak among these soldiers usually showed itself in marked tremors all over the body and even in real convulsions, which, however, differed from the convulsions ordinarily encountered in well-known medical diseases.

Often a soldier would complain of paralysis of one or more extremities; of inability to walk; of speech disturbances, etc.

It was noticed that those soldiers who had an actual medical or surgical condition necessitating their removal to a place of relative security never came down with any of the " shell-shock " manifestations. This resulted in a change of attitude on the part of most medical men towards the hysterical soldier. While at first they were sent home, and were granted their discharges and petted and cajoled by those doing social service work, it was found that the cure was never accomplished. Later, however, when these soldiers were sent to the rear of the fighting line, but within sounding distance of the cannon, and kept under rigid military discipline, cures became relatively frequent. Reasoning from these experiments in the management of the hysterical soldiers, a few able neuropsychiatrists effected cures by bluntly stating to the soldier the facts underlying his malady, and squarely facing him with the alternative of either getting well by assuming a manly and soldierly attitude towards his disease or to remain an invalid for the rest of his life by assuming a childish and cowardly attitude towards the danger which was confronting everyone.

A few, and amongst them very able psychiatrists, contended that an analysis of the mechanisms governing the conduct of these soldiers led to the conclusion that hysteria is not only akin to malingering but in many instances identical with it.

The result was that in dealing with these hysterics they assumed a strict military discipline which, in their hands, at least, accomplished remarkably favorable results. In other words, it was the experience of everyone engaged in the problem of managing the hysterical (shell-shocked) soldier, that too much sympathy and attention not only was ineffectual in bringing about a cure but in the vast majority of instances tended to intensify and prolong the disease. On the other hand, the various methods employed either by frank discussions with the patients regarding their ailments, or even by the utilization of strict military measures in the treatment, gave satisfactory results in the hands of the men who had advocated this particular method of therapy. All, however, agreed that in general the hysterical manifestation is a method, conscious or subconscious, utilized by the soldier in an effort to secure a place of greater safety.

Applying the lessons learned from the experiences with shell-shocked soldiers to every-day manifestations of hysteria, our methods of handling the hysteric have been somewhat changed. It is true that psychoanalysis in the Freudian sense is effectual in many of the cases, but the patients amenable to such analysis are limited to those of fairly high intelligence and comfortable financial position. Furthermore, after having intimately known the men using psychoanalysis, we are becoming more convinced that it requires a certain type of personality to conduct an analysis, and this personality type is rather limited in number. We

have seen effectual results obtained from an understanding of the individual's instinctive cravings and an evaluation of the situational conditions in so far as his environment offers opportunity for gratification of his desires, and open discussion of these various factors entering into the patient's behavior. In brief, it is essential to make the hysterical individual realize that it is expected of him to face painful realities of life as readily and openly as others. It is imperative for him to appreciate that sacrifices are expected of anyone who is to lead a biological existence.

In this connection, it may be opportune to digress about the waves of Spiritualism, auto-suggestion, and lay psychoanalysis that are sweeping the country. The late war has disillusioned many. Many entertain a feeling of the utter futility of the sacrifice of so much human life and the amount of unhappiness and misery that this war has brought to others. Religion, laying too much stress on dogma and ceremonials, has failed to bring consolation equal to that held out by those who have been instrumental in spreading Spiritualism. Many who have lost dear ones in the war have been enabled to get into such a state of emotional tension and credulity as to be absolutely deluded and illuded in " seeing " their departed ones. To these people, Spiritualism perhaps offers greater release from painful reveries than anything else. Often, a frank and open discussion with these people and acceptance by them of the brutal truth would not be as helpful and wound healing as these emo-

tional states which are induced in them by Spiritualism. Their spiritualistic belief assumes the nature of a protective mechanism, and perhaps prevents the development of a frank psychosis.

However, one must not lose sight of the unscientific and false attitudes of the Spiritualists, or be deceived by the statements of these deluded sufferers. We have seen many frank psychoses precipitated by lectures delivered by well-known Spiritualists who have recently toured this country. Thus one case of Dementia Praecox in a state of remission, who was able to lead a fairly satisfactory life, was again thrown into active excitement after listening to one of the lectures. He there and then again began to see his sweetheart who had died several years before. It was necessary to have this patient committed to a state hospital because of his excitement.

Regarding auto-suggestion, much might be said. It must be remembered that mental and physical processes are not distinct. They are interdependent. We have pointed out in Chapter IV how psychic processes influence physiological and pathological states. By maintaining a spirit of optimism and by disregarding painful emotional conditions, normal physiological processes are enhanced, and disease conditions more easily combatted. For a long time religion has tended to infuse that spirit, and to inculcate these very emotions which were conducive towards good health. It must be admitted that there is sufficient evidence to believe that many are going away

from the influence of religion and are losing much of the benefit derived from it. Utilizing the power of suggestion, a few people have been instructing others in this practice, which to some extent fills the gap created by loss of religious faith. It is remarkable how many of these people will cleverly spread their teachings, through books and pamphlets, and commercialize their wares.

Psychoanalysis as a method for therapeutics has proven efficacious in the hands of those who have been properly trained and qualified in its use. Psychoanalytic principles are applicable to every field of human endeavor. There is no doubt that there are trained people who can profitably utilize these principles in the vocational pursuits in which they are interested. It offers rich rewards in scientific research. Its use in the treatment of nervous and mentally sick people should be restricted solely to the medical profession, however. Psychoanalysis is a method bearing the same relationship to certain types of nervous diseases that analysis of the secretions of the gastro-intestinal tract bears to diseases of that system, and that the Wassermann test bears to syphilis. No one would tolerate a state of affairs where the analytical chemist would treat gastric ulcers, intestinal putrefaction, etc., or where the technician performing a Wassermann test would treat one suffering from some type of syphilis. We must admit that there are a group of lay people who are skilled and well trained in the technique of psychoanalysis. It is equally admitted that

there are but a few medical men who are able to conduct an analysis. But it must also be admitted that the technicians performing Wassermann tests far outnumber those medical men who can properly perform such a test. The physician requires the technician to interpret his findings, and employs these findings in his adequate treatment of the disease in question. There is no doubt that lay analysts under certain conditions may be profitably employed by well-trained psychiatrists in managing their neurotic patients. But to allow lay analysts to treat the neurotics without the supervision of the physician is a gross imposition upon the sick.

Owing to the sex element underlying the neuroses, which must be brought out in the process of analysis, a group of morbidly inclined people are attracted to this phase of human ailment and to the methods employed in its treatment, from which they derive undue satisfaction and gratification.

Because of the lucrative rewards offered in dealing with such morbidly inclined people, there has arisen a group of clever individuals who, because of skillful tongue and pen, have digested the essence of psychoanalysis and have been conducting lectures, not only in their own homes and offices but also in institutions which were erected for the purpose of disseminating learning and knowledge. They are also giving private treatments, charging exorbitant prices. They escape the legal penalty prescribed for practicing medicine without a license

by concealing their acts under the guise of giving their victims "psychological advice." When one closely analyzes not only their writings but also the lectures they deliver, one easily finds their ignorance of the true nature of psychoanalytic technique and the disorders for which it is indicated. Furthermore, one wonders how these people can possibly manage the phase of transference [1] which the patient must undergo in the process of analysis. The physician by virtue of his training and by his constant association with the sick is in a position to manage that phase. The lay analyst, however, must be regarded with extreme suspicion because he is not held to the strict code of ethics, by which physicians are bound.

The influx of lay analysts has presented considerable hindrance to the progress of a method of therapy which has relieved many people of mental anguish and misery. Analytical principles should be utilized in every field of human endeavor by those properly trained and interested in them. The application of these psychoanalytical principles in the treatment of the medically sick should be limited to physicians interested in mental diseases.

Psychaesthenia, or as it is called by the Freudian

[1] In transference the patient transfers all his repressed love emotions to the physician. In other words, the patient actually falls in love with the analyst. Such state of affairs requires considerable tact and skill in guiding the patient through to the next state of analysis, in which he is able to sublimate this emotion and utilize its energy in socially adapted activities.

school, Compulsion Neurosis, is characterized by peculiar fears (phobias) and fixed ideas and beliefs (obsessions). People suffering from this condition have difficulty in making up their minds to do anything, are afraid to mingle with crowds or to walk in vacant spaces, to look out from the window, etc. They are never sure whether they have locked the doors or barred the windows or turned off the light on retiring. They sometimes are seized with undue fear of impending death, of some harm being done to those in whom they are interested, of danger lurking in their vicinity, etc. Occasionally they perform all sorts of impulsive acts, suffer from various (tics) twitchings or convulsive movements of certain parts of the body, etc. Freud found the genesis of such disorders in sexual indulgences in childhood. The obsessions he regards as transformed reproaches which result from repression. They always refer to pleasurable sexual acts performed in childhood. Analysis, and an understanding on the part of the patient of the psychic factors causing such acts are the methods for cure used by the Freudian school of psychiatrists.

Freud regards the neuroses as composed of (1) the Psychoneuroses, which are mental disorders resulting from pure psychogenic causes primarily psychosexual in nature, and (2) Actual Neuroses, which are abnormal mental states caused by somatic sexual injuries having also a psychosexual background. The Psychoneuroses he divides into Hysteria and Compulsion Neurosis. The Actual

Neuroses he subdivides into Neurasthenia and Anxiety Neurosis.

Neurasthenia is an old medical term which has been used by most medical men to designate and condition which baffles their diagnostic skill and for which condition they have no explanation to offer on the basis of anatomical pathology. Lately there has been a tendency to limit this term to exhaustive states of the nervous system following disease processes. The Freudians still further limit it to exhaustion following excessive sex indulgences, or whenever the adequate sex action or unburdening is replaced by a less adequate one. In Neurasthenia we have a condition in which there is an undue degree of fatigability and a lack of emotional control. It is a medical condition, and should be managed according to the best established medical principles.

By Anxiety Neurosis we mean a condition in which the individual suffers from general irritability, periods of anxiety, fear of impending danger, feelings of cardiac distress, disturbances in respiration, excessive sweating, trembling and shaking, peculiar disturbances of sensation, and occasional dizziness. This condition results from disturbances associated with the completion of the sexual act. Coitus interruptus (withdrawal) and premature ejaculation are the chief cause for it. They are medical conditions, readily recognized by the trained psychiatrist, and easily managed by him.

Traumatic Neurosis is a condition resulting

whenever an individual has been in an accident and has been trying to recover damages but has been unsuccessful either in recovering such damages or the amount which he thinks is due to him. Such people complain of all sorts of physical and mental signs and symptoms which are out of proportion to the amount of damage caused them at the time of injury. Usually most of the symptoms are gradually built up in the process of litigation. The various insurance companies have recognized this condition, and because of the fact that most of these people present such pitiable sights before the juries, the insurance companies and others held responsible for such injuries, prefer to settle the claims rather than to litigate them. Often some other psychological mechanisms play important rôles in this disorder, and are analyzable in the hands of those competent to do so. Much has been written about this phase of abnormal behavior. Much medical testimony of conflicting nature has been given in trials of people suffering from this disorder. To describe this fully would require a book in itself.

It will thus be seen that the various forms of psychoneuroses and allied conditions such as Traumatic Neurosis, etc., are ingrained in a peculiarly disposed personality and are expressions of methods of adaptation to situations on the part of this peculiarly disposed individual. Psychoanalysis in the hands of trained psychiatrists is the method par excellence in managing these conditions. It must also be admitted that recognized

authorities have dealt with these conditions in other ways and have obtained equally brilliant results. In general, the latter have used methods by which they would so manage the patient as to make him appreciate his mode of facing a trying situation, and to instill in him a spirit of adequacy enabling him to manage these painful situations in a more frank and efficient manner. They have led him from a puerile attitude towards conditions to a more mature and manly one.

It must be remembered that many methods must be followed in the management of the psychoneuroses; that no two patients can be handled in the same manner. What auto-suggestion will do for the one, psychoanalysis will do for the other. Religiously inclined individuals can receive great benefit from Christian Science, but the highly intellectual individual, skeptical of religious matters, can best be treated by psychoanalysis, or frank discussion of his difficulties. Ignorant persons might yield to suggestion and hypnotism, but would receive no benefit from psychoanalysis.

Borderline mental deficiency [1] is a condition in which the individual cannot be properly called a mental defective as judged by the rating obtained from the standard psychometric examinations.

[1] Although included in the same chapter, this condition must not be confused with psychoneurotic tendencies or constitutional psychic inferiority. It is a *borderline mental disorder*, if we make the term inclusive, but it has to do primarily with intellectual defects, while the other conditions described in this chapter are more intimately connected with the emotional life and its aberrations.

These cases usually have a rating under 13 years but above 11 years. In these patients, the ability to select the proper method of conduct from several alternative possibilities is lacking. Furthermore, they are unable to exercise sufficient control of their instinctive and emotional reactions. They are easily influenced by others and cannot exercise proper self-reliance. While they are readily managed by those who are skillful in appealing to their instinctive and emotional cravings, they are resistive to ordinary discipline. They cannot withstand temptations, and they yield to them easily. Furthermore, they are not able to forego present pleasures for the sake of future more valuable ones. Because of their great suggestibility they are often used by designing persons in carrying out their schemes in all sorts of plots. Frequently they get into conflict with the law by failing to appreciate the finer points of conduct. They drift into occupations for which they have no special aptitude or ability. If properly guided, they become law-abiding citizens. Occasionally, however, they fall under the influence of agitators and become a real menace. The following cases illustrate some of the ways in which such individuals may behave in an anti-social manner:

Case 55

A young girl (17 years of age) was brought from a Magistrate's Court charged with incorrigibility. Her mother stated that the patient was a full term child;

chicken pox during infancy, but no other illness. At school the mother stated that the patient was never as bright as the other children, and left the 7A grade at the age of 16. As soon as she left school, the patient became unruly, would run around with men, pick up strangers, and her conduct was such as to cause her arrest six months ago. She was then placed on probation, but she continued to follow the wayward path as she did before her probation. She was then arrested and the Magistrate sent her to the hospital for observation as to her actual mental state.

At the hospital the patient showed a well developed, rather attractive personality. She showed no evidence of any neurological disorders. Her Wassermann reaction was negative. Her psychometric examination revealed that the patient reached a mental age of 11 years and four months with an I. Q. of 70, which would give her a rating as a borderline case intellectually.

In personality she was rather quiet, pleasant and agreeable. She at first denied all the charges brought against her by her mother. Later, when her confidence was gained, she admitted various immoralities, and stated that she had met some young men with whom she became quite intimate; that she could not resist temptations placed in her way, especially along sexual lines. She admitted having taken money for intercourse "because her friends wanted her to go with the boys."

This case represents one of borderline mental intelligence where her abnormal behavior manifested itself along lines of precocious sexual development and immorality. She appeared to be a facile, suggestible type, and could not resist the

temptation thrown in her way. Furthermore, she could not evaluate the consequences of her act, nor could she withstand any improper suggestions on the part of her friends. Such individuals, if their condition is detected early, can be made to follow a path of proper conduct and can become industrially productive and self-supporting if placed under the guidance of one who has an understanding of the mental mechanisms of these people.

Case 56

A young man (19 years of age) was brought to the observation ward being charged with burglary. The history of this boy revealed the fact that his mother was alcoholic and died in an insane asylum. The patient was of normal birth, and developed normally in infancy and childhood. Owing to the fact that his mother was away from home because of her illness, the patient did not receive the proper supervision while in his developmental period. He would play truant most of the time, and would stay out nights without accounting for his absences from home or from school. When 12 years of age he was arrested on the charge of petit larceny. He was placed in a reformatory and allowed to go home after six months' residence. At the age of 14 he was arrested for playing truant from school and he was then returned to the protectory, but was allowed to go home at the age of 15. At 16 years of age he was arrested once more, being charged with vagrancy, and once again he was allowed to return home. For the last two years the patient would not work, and would not give an account of his whereabouts, but always seemed to have

sufficient money to keep himself comfortably fed and dressed.

On the observation ward, the patient showed a well nourished and well developed condition. His heart and lungs were negative; he showed no neurological disorders to account for his conduct. On a psychometric examination he reached a mental age of 12 years and 2 months with an I. Q. of 76, which would give him a rating of borderline intelligence. Mentally the patient appeared somewhat indifferent and careless about his future. He was superficial in his general attitude and manner; quite boastful about his accomplishments; he did not seem to possess any ethical or moral standard. He showed a somewhat unstable emotional reaction and would not lend himself to reason. However, he was at times rather suggestible and would help out those nurses to whom he became attached. He admitted that he was a member of a group who had robbed several places, but he would not give the names of any of his associates. He boasted of the manner in which he could outwit the police, and of the rapidity with which he could accomplish his job. He stated that he liked the leader of his gang and would do anything for him.

This case illustrates the manner in which people of borderline intelligence are apt to commit anti-social acts because of the influence which designing individuals may exert on them. This patient was incorrigible in his childhood, lacked the proper supervision of a mother, and committed various anti-social acts. Instead of being constantly kept under adequate supervision he was allowed to leave the protectory after a relatively short resi-

dence. If the handicap under which such individuals labor is detected early, and they are placed in an environment where proper modes of conduct may be established, it is quite possible to make them law-abiding citizens. Owing to the fact that they are unable to discriminate between what is right and wrong in the finer points, and because of the fact that they are so easily suggestible and led by those to whom they become attached, they can just as easily be influenced to follow a socially approved path of conduct as to pursue a delinquent career.

There are a group of individuals whose conduct is definitely anti-social and cannot be explained on the basis of deficiency in native intelligence. Neither can their behavior be accounted for on the basis of a mental disease or physical disorder. Analysis of the manifestations of behavior difficulties of these people reveals their primary defect in the emotional and volitional fields of their mental life. Often these people are even of high intelligence, and may have had excellent schooling. Physically they may be attractive, and utilize this asset in securing many of their anti-social desires. Their anti-social conduct may be manifested in every phase of human activity. Their emotional instability makes them an easy prey for inebriety and drug addiction, and causes unhappy marital relationship. Furthermore, they become involved in all sorts of sexual offenses and perversions. Because of their inability to forego present pleasures for more ultimate but greater rewards, they be-

come involved in all degrees of illegal and even criminal acts. Many of them are so untruthful as to stamp them as pathological liars. They are industrial misfits, and they become a burden upon the community. Often these people are revolting against the existing social and civic institutions, blaming them for their own inadequacy.

Analysis of the mental mechanisms of these patients reveals many deeply seated complexes which unconsciously govern their conduct. They may become antagonistic to existing laws and customs as an expression against a domineering and possibly tyrannical parent. A strong mother fixation or antipathy may make them marital misfits and drive them to form attachments with immoral women.

Many of these people manifest a failure of normal development of their instinctive and emotional tendencies, for example, they may become homosexual whenever there is a failure to pass to the heterosexual phase of normal sexual development. Occasionally they may develop tendencies to exhibitionism. Sometimes they manifest intense masochistic or sadistic traits, and may find sexual expression only along such lines. When brought before the court for any of their antisocial acts, it is not always easy to determine their legal responsibility. While many ethical psychiatrists may regard such states as manifestations of insanity in its strictest psychiatric meaning, there are others equally ethical who regard them as sane from a legal point of view.

For these cases are the purest examples of borderline mental conditions where sanity so imperceptibly merges into insanity as to make the marking of a boundary line an almost superhuman task.

The technical term for designating the condition of emotional instability which results in so many varied types of abnormal behavior is Constitutional Psychic Inferiority (or, less preferably, Constitutional Psychopathic Inferiority). The following cases are examples of the various manifestations of this group of disorders of behavior:

Case 57

A young boy (22 years of age) was brought to the hospital for nervousness and irritability. The history of the case revealed that he was an only child, and had been brought up by a governess. Later he attended school and was graduated from high school with honors. Following his graduation from high school he entered a military academy, but owing to the fact that the financial condition of his parents at this time necessitated the removal of the patient from school, he entered a business house where he made fairly rapid progress. He was somewhat timid, and rather backward in his attitude towards members of the opposite sex, but he was not of a definitely seclusive type, as he had quite a few friends amongst members of both sexes. For the last six months he had been keeping company with a young lady and plans were being made for their wedding. About one month ago he began to complain of dizziness, weak spells, and

irritability. Furthermore, he had been seen masturbating quite often and it was decided to follow the advice of the family physician to send him to the psychiatric clinic.

On examination, the patient showed rather a well-developed, fairly well-preserved physical condition, and showed no evidences of any physical disease. Mentally he was rather quiet, somewhat reticent, but as a whole a rather pleasant and agreeable personality. At first he was rather reluctant to discuss his difficulties. Later his confidence was gained and he was fairly accessible. He stated that from an early age he had acquired the habit of masturbation. This was first induced by watching his governess masturbate. Furthermore, she would also manipulate his genitals which would give him considerable sexual pleasure. At time of puberty he began to masturbate very actively and continued to do so. He had had intercourse with prostitutes and other women, but he would be left with a feeling of guilt and reproach so that he later confined his sex activity to masturbation. When he became engaged to his sweetheart, he would often get sex feelings from which he would get relief by masturbation. As the time for his marriage was approaching, he began to dwell upon his habit, and brooded over it to the extent of being unable to get proper sleep. He then began to imagine that his parents and his sweetheart were aware of his shortcomings and he began to shun them. At the same time he was seized with the feeling that he was going to become insane. After the patient's condition was freely discussed with him, and after he had gained insight into the entire situation, he became composed, more cheerful and was able to be discharged from the clinic at the end of a month.

This case will serve as an introduction to the discussion of masturbation. Much has been written about this condition, and the evils which are supposed to accompany it. The quack literature is replete with various imaginary evils and tortures to which the victim is supposed to be subjected as the result of his act. Even general practitioners in medicine are sometimes apt to regard masturbation as a horrible evil. The older textbooks of psychiatry speak of it as a cause for insanity. Many a parent will come to the doctor terrified, upon having seen his child masturbating.

As a matter of fact, masturbation may be one of the various phases of normal sex development in men, and possibly in women. Many eminent psychiatrists believe that it is universally prevalent amongst boys, and to a lesser degree amongst girls. Frequently it is resorted to by adults whenever opportunities for proper sexual expression are unavailable. Masturbation is no more harmful, if moderately indulged in, than normal sex relationship. If excessively indulged in, it is apt to cause a neurasthenic condition.

The real harm that masturbation is apt to cause is its tendency to unconsciously prevent the individual from seeking normal friendship amongst members of the opposite sex. It is apt to be accompanied by a feeling of remorse, and it tends to make the individual rather shy and backward. As a whole its dangers are rather limited and mild in nature. One must assume a sensible and scientific attitude in dealing with

people brought for treatment for this habit. It is important to assure the parents that no real harm can result from this condition. It must be remembered, however, that it is a symptom found amongst the more serious types of mental diseases, and especially amongst Dementia Praecox patients. A normal outlet for the play instinct of children, the prevention of manifestation of seclusive traits, and a normal hygienic regimen of life are the methods usually followed in checking this habit.

Case 58

A young woman (18 years of age) was brought to the hospital by the worker of one of the charity organizations, with a history of incorrigibility. The history stated that the patient's people were of moderate means, and law abiding. The father was rather strict with his daughters and would prevent them from going out. The patient was of normal development; she attended school at the age of 6 and was graduated at the age of 15. She attended a trade school but found nothing attractive or interesting to hold her there. She then began to go about with girls of whom her parents disapproved and her father whipped her when she refused to give up their friendship. She had masturbated from the time of puberty. At the age of 16 she ran away from home and became a member of the chorus of a musical comedy show. Her family then had her apprehended and she was placed on probation, but ran away on the next day. She was then found dancing in a cabaret, and her parents caused her arrest for incorrigibility. She was again placed on probation and a social service worker was

placed on her case. The patient was physically attractive, and quite pleasant in her manner, but she was unable to resist the company of men, and the social service worker found it necessary to have her sent to the hospital for observation.

At the hospital the patient was found to be well developed, well nourished and physically very attractive. A psychometric examination gave her a mental age of 12 years but the exact mental age and intelligence quotient could not be obtained because of the emotional instability which the patient showed at the various stages of the examination and which influenced her rating. It was obvious, however, that she was not feeble-minded.

Mentally the patient was very pleasant and agreeable, and accessible for examination. She spoke freely of her difficulties. She said that her father had been strict towards her and she could not receive from him the sympathy, attention and petting which she had always craved. She said that she often wished she could talk with her people freely and pour her troubles out to them, but she was prevented from doing so as she knew that she would meet with reproach rather than with sympathy. She was quite popular amongst her girl friends, and they introduced her to men who gave her all the attention and petting which she desired. She said that she found it impossible to resist the temptation of men because she was sexually so tense. She realized the seriousness of her act, but she fully appreciated her inability to cope with the situation.

Case 59

A woman (28 years of age) was brought to the hospital from the New York City Prison after having

made an attempt at suicide, following her arrest for prostitution. She was native born, and had had a high school education. Her parents were very strict about her association with other girls and especially with boys. She was never allowed to go to the library unaccompanied by some other member of the family. She was never permitted to be in the company of boys of her age. At high school, she was not permitted to speak to the boys in her class. She had invited one of her classmates to accompany her to the "Junior Prom" and when he called at her home to escort her to the affair he was asked by her father to leave the home. When she was graduated from high school she wished to enter a university where her other friends were planning to go, but her parents insisted that she attend the normal school which they had selected.

She always showed a deep emotional reaction, and would often go into ecstacies of joy or sorrow, exaggerated in comparison with the situations evoking these responses. She craved attention and praise; but she never received it in her home. She received strict religious training. She was taught to regard every man with suspicion.

When she was sent to normal school she was given a weekly allowance. She then found herself suddenly in possession of sufficient funds to enable her to leave her parents. She left her school and came to New York. She entered a restaurant and there made the acquaintance of a man who offered to take her to his home, telling her he was single and that he would introduce her to his sister. That same evening he aroused in her all her sex emotions and she finally yielded to him. She frankly admitted that she willingly offered herself to him and later could not resist

temptations offered to her by other men. She then began to capitalize her weakness and entered into a life of prostitution.

One of her male friends finally became so infatuated with her that he offered to marry her, after she had promised to reform. When they were married, however, she found that she could not get adequate sex satisfaction from him. She therefore sought and found it in the company of other men. Although married to him for at least six years, she was able to consort with other men without her husband's knowledge. She was arrested, and in order to escape the shame and disgrace which she had brought upon herself and her husband she tried to swallow poison.

These two cases illustrate sexual aberrations in emotionally unstable individuals. Both were denied proper emotional outlets in the form of ordinary parental affection and playmate associations. Where sympathy and attention in the home might have enabled them to become happy individuals, unjustifiable criticism and punishment led them to seek emotional outlets elsewhere. Their undue desire for sex indulgences was an additional factor in leading them into prostitution.

There are many sexual offenses committed by those coming under the caption of Constitutional Psychic Inferiority. They are discussed at length in most of the books dealing with sex and its abnormalities, and need but briefly be referred to. Some sadistic individuals can obtain sexual gratification only by subjecting the love object to all sorts of physical punishment. A few masochis-

tic people are sexually gratified only by receiving physical punishment at the hands of their paramours. Such cases are, however, not as numerous as one is led to believe, from reading the different books on sex matters.

Homosexuality results whenever there is a failure of the normal sex instinct to develop properly. It is a condition in which sex gratification can best occur when indulged in with a member of the same sex. It is often resorted to whenever there is no opportunity for adequate normal sex expression. Such practice is frequently acquired in boarding schools, in jails and in reformatories, and under any other conditions where there are congregated a group of the same sex, and where there are no facilities to meet members of the opposite sex. Homosexuality may coexist with heterosexuality; often, however, it is the only method of securing sex feeling and sex gratification. The danger of homsexuality is that it often initiates into its practice the very young and those in whom normal sexual feeling might have been developed if they were not introduced to this habit. Homosexuality has played an acknowledged part in the different arts and in literature. It may occur as one of the manifestations of an attack of insanity, especially of the manic-depressive type.

Exhibitionism, or the desire to display the genitals in public places, is not a very common sex deviation, but it is fairly prevalent amongst the insane. Voyeurs, or persons who attain sexual gratification by looking at sexual objects, are not

as numerous as many others would lead us to believe. They do, however, form a rather distinct group of sexual perverts. These have been so fully discussed in many books of psychopathology that we shall not consider them in detail in this chapter.

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Chapter VIII

EPILEPTIC MANIFESTATIONS IN BEHAVIOR DIFFICULTIES

The epileptic as a social outcast.
Definition of epilepsy.
The occurrence of convulsions in other diseases.
Heredity and epilepsy.
The rôle of the glands of internal secretion in epilepsy.
Researches on epilepsy.
Epilepsy as a life reaction.
Pragmatic conception of epilepsy.
The frequency of epilepsy.
Feeling of inferiority induced by epilepsy.
The epileptic make-up.
Clinical types of epilepsy:
- Grand Mal
- Petit Mal
- Jacksonian Type
- Epileptic Equivalents.

Psychoses in epileptics.
Cases illustrating maladjustment in school due to epilepsy.
Cases illustrating types of sexual offenses committed by epileptics.
Cases illustrating assaultive traits in epileptics.
Cases illustrating minor anti-social acts, such as indecent exposure, and disorderly conduct.
Case illustrating religious trend.
Scientific management of epilepsy and cases illustrating results obtained.
Epilepsy as a manageable disease.

BARRED from the public schools, and thus deprived from securing any education; excluded from the large majority of vocational pur-

suits, and thereby prevented from being self-supporting; shunned by most people because of the horror attached to his illness, and therefore deprived from reaping the advantages obtained from social intercourse, and often neglected even by the members of his own family because of the chronicity of his ailment, the individual suffering from epilepsy ought to receive the utmost consideration whenever presenting any behavior difficulties. Yet, but for a few glaring exceptions, very little is being done for those suffering from this disease. There are no special classes in the school system that are designed especially for the epileptics. There are no special places where the epileptic may be sent to work under proper supervision, so that he may be at least partially self-supporting. There is absolutely nothing in the nature of diversion to which the epileptic may turn and not be excluded because he happens to have had a convulsion. Indeed, there are but few families who do not become discouraged and finally apply to some civil authority to remove the burden of an epileptic member from their hands. It is indeed pitiful to watch the epileptic going from one clinic to another trying to secure relief. The so-called colonies for epileptics, or the places where an epileptic may be sent for care and treatment, are too few in number and are too crowded to accept all their applicants.

What is epilepsy? To the layman, it means an individual suffering from frequent attacks of convulsions. The medical profession is divided, as

to what really constitutes epilepsy. One group maintains that epilepsy is a manifestation of several conditions, just as shortness of breath, swelling of the feet, etc., might be due to any one of several physical diseases. On the other hand, there is a group which claims that epilepsy is a definite disease process, just as pulmonary tuberculosis (consumption), or typhoid fever are distinct types of disease.

Picture an individual, who apparently has been able to get along fairly satisfactorily for several days or weeks, suddenly wake up in the morning feeling grouchy, complaining of headache, being somewhat irritable, fussy and picking on everything, and unable to perform his work. His eyes are dilated, his face pale, his tongue somewhat coated. Suddenly he screams, falls, loses consciousness, stiffens out and then shakes with every muscle in his body, froths at the mouth, bites his tongue, and perhaps wets and soils himself. Finally, after a few minutes, ceasing to shake, he gets up from the floor, wanders aimlessly around the room, and finally falls into a sleep from which he awakens complaining of a headache and again is apparently able to assume his former station in his little circle. One cannot help but feel that we are dealing here with an accumulation of some harmful agent, be it some toxin or other as yet unknown noxious agent, which seems to set in action the entire motor mechanisms of the body, but which appears to be neutralized during the

" fit." This would seem to stamp it as a definite disease entity.

To the layman, the most distressing symptom is the convulsions. In fact, it is the one condition for which the majority of the patients and most of the family seek medical assistance. It must be clearly understood that the convulsion itself is one of the many, although perhaps the most distressing, of the links in the entire disease process. Convulsions are encountered in many other diseases, and are met with in diseases of the kidney, in certain forms of heart disease, in cases of hardening of the arteries of the brain, in many diseases of the nervous system, in certain types of syphilis of the nervous system and in a few diseases of the membranes lining the brain. One often meets convulsions in poisoning from strychnine or alcohol and in direct injuries to the brain from trauma, heat-stroke and sun-stroke and in many other connections. In epilepsy, however, the convulsion is entirely different from that encountered in other conditions, and when observed by a trained physician, is readily recognizable as distinctly epileptic in nature. In fact, the epileptic convulsion can hardly be imitated, although epilepsy is the most simulated of all diseases.

There are various theories offered in the endeavor to explain the cause of epilepsy. Heredity has invariably occupied a prominent place among these theories, especially in the writings of the older school of physicians. However, more accurate data fail to reveal any truth in that claim, and

direct transmission of the disease from parent to the offspring is an exception rather than the rule. These accurately gathered statistics, however, do seem to show that an unstable nervous system as manifested by the presence of other nervous diseases is usually found in the family of the epileptic. This is of tremendous importance from a sociological view-point, in that many workers who are interested in the field of eugenics are clamoring either for the segregation of all female epileptics during the child-bearing period, or for the sterilization of all epileptics. They insist that epilepsy is directly transmissable, and offer ingenious diagrams illustrating the Mendelian law to prove their contention. Accurate clinical observation and modern scientifically gathered statistics fail to reveal any evidence to corroborate their claim other than proving that there is some neuropathic strain in the families of the epileptics.

Of late there has been evidence produced by a group of medical workers that might tend to direct one's focus of attention to the glands of internal secretion as the probable causative factor in producing epilepsy. They have quoted several cases in which medication directed to counteract the internal gland disturbances was administered with apparently beneficial results. Still the group of cases in which such treatment has been efficacious is entirely too small to justify such deductions. Furthermore, there are many cases, in fact the greatest majority of all epileptics, in whom the internal glands are apparently in normal condition.

Recently intensive studies in the chemistry of the blood and various secretions and excretions of the body conducted by very skilful observers, have thrown some light on the metabolism of the epileptic that might be utilized in the general management of the patient, but so far they have failed to give any lead as to conclusive evidence about the real cause of this disorder. The structural changes in the brain and various other tissues of the body as studied on post-mortem examination have failed to reveal any uniform findings. Indeed they would tend to point to many causes rather than to one as responsible for this disease.

A most fascinating theory is being offered by the psychopathologists which regards epilepsy as an expression of behavior in an individual of a definite mental make-up. To quote from the chief exponent of this theory: " There exists a more or less definite type of constitutional make-up in epileptics which has long been recognized by many able neurologists and psychiatrists, and this defect accounts in no small part for the so-called ' predisposition ' to the disease, a term in common use to-day. The essential defects of instincts are egocentricity, supersensitiveness and emotional poverty, and an inherent defect of adaptability to normal social life in its broadest significance. The main defect is an inheritable one. This make-up is the primary or original mental endowment of the potentially epileptic individual. It is accentuated and made the more obvious by the further advance of the disease only when the seizures develop. It

is then often spoken of as the ' mental stigma ' of the disease. The attacks are not solely responsible for the epileptic deterioration, but the seizures are themselves symptoms and exhibitions of the deteriorating disorder." [1]

The psychopathologist regards epilepsy as a specific life reaction disorder. Even the very seizure he regards as a manifestation of the inability of these patients to subordinate their own individualistic tendencies to social demands, and considers the loss of consciousness as a representative of their withdrawal from reality. This theory while rather intriguing in its psychological implications is hardly practical for general application.

The truth of the situation is that for the present there is no definitely established cause of epilepsy. In the light of our present knowledge, it might best be regarded as the result of an increased irritability of the cerebral cortex, and the convulsion is to be interpreted as the response of this highly sensitive cortex to stimuli. These stimuli may come from poisonous products of metabolism, emotional complexes, or from various other sources. Such an assumption is the most feasible one and for practical purposes the most valuable one in the management of these patients. For epilepsy is a manageable disease, and the proper application of well-established therapeutic principles, and the utilization of adequate medicinal agents in the hands of a properly trained medical man have

[1] L. Pierce Clark

enabled many epileptics to lead a fairly normal existence.

Epilepsy is a rather frequent disease. While it is generally estimated that .2% of the population suffer from this disorder, no less an authority than Spratling, who for years was the superintendent of the Craig Colony for Epileptics, states that from his studies he has become convinced that if all cases of epilepsy could be counted, one would find no less than one epileptic to every 300 of the population at large. Epilepsy may remain unrecognized for years. Many of its victims have "fits" only during the night. Others have such mild attacks that the true nature of the disorder is not recognized. It is essentially a disease of early life. More than 80% of all cases occur before the age of 20 years. The sexes are about equally affected.

In a few individuals, epilepsy induces a feeling of inferiority, for which the patients tend to compensate by increased application and concentration in the field of endeavor. Sometimes they attain a degree of perfection which makes them very successful individuals. One meets with many rather brilliant epileptics who lead normal biological existences, are married, have children, conduct their businesses successfully, and take active interest in civic affairs. Historical evidence even leads us to believe that such figures as Mohammed, Caesar and even Napoleon were epileptics. It must be admitted, however, that the average epileptic is working under a great handicap, and his chances

for success in life are less than those of normal persons. Mental deficiency is found in greater numbers among epileptics than in the rest of the population. The epileptic is apt to become rigid in his mental attitudes, restricted in his field of interest, and to show with increasing age moderate intellectual deterioration.

In order to appreciate the various forms of anti-social behavior caused by epilepsy, it will be opportune to describe the different forms of epilepsy, and to call attention to the most frequent types of anti-social conduct apt to occur in the different periods of this disease process.

The epileptic makeup is rather unique. From early childhood, he shows a stubbornness which is apt to bring him into conflict with members of his own family and with others with whom he happens to come in contact. He is quite obstinate, and insists upon having his own way, disregarding the privileges and rights of others. He is extremely self-centred, looking upon life from his own narrow range of vision. He displays a lack of interest which narrows him considerably. His emotional reaction is exaggerated, considering the stimulus eliciting it. He flies into fits of temper at the least provocation. Such a personality is indeed a disagreeable one, and one that is apt to be unsuccessful at school, unpopular at home and a vocational misfit. Epileptics often become fanatics along religious and political lines and thus tend to incur the enmity and ill-will of the community in which they may reside. Frequently they become

so unreasonable and objectionable as to get into legal difficulties. Their disregard for the opinions and welfare of others make their marital lives unhappy ones. They are apt to be inconsiderate wives and husbands and stern parents.

There are several clinical types of epilepsy. The most common form is the Grand Mal. Usually the individual, preceding his attack, shows general irritability, peevishness, and uneasiness. The attack is generally ushered in by an aura (warning), such as a flash of light before the eyes, or a sour feeling in the stomach, etc. Immediately there is a scream, and the patient loses consciousness, falls, remains rigid from a few seconds to a minute, then shakes with all the muscles of his body from two to five minutes or longer, froths at the mouth, bites his tongue, often wets and soils himself, and breathes irregularly. Then he either gets up from the floor and wanders about in an aimless manner, finally falling into a heavy sleep, or immediately after the convulsion goes into this sleep, which lasts for several hours. On awakening, the patient complains of a terrific headache, but seems, however, generally relieved from that feeling of tenseness which has preceded his attack. He has no knowledge of events between the warning, or aura, and his awakening later.

The Petit Mal attack is ushered in by a momentary loss of consciousness with a loss of balance, and immediate regaining of consciousness followed by moderate headache. Many involuntary acts

may be committed during this brief lapse of consciousness.

The Jacksonian type is one in which there is convulsion of some part of the body, but without any loss of consciousness.

The most interesting types of epilepsy are those which come under the heading of Epileptic Equivalents. At these times, the individual may perform many peculiar acts, some being of marked antisocial nature. He may find himself in a strange city, he may have contracted many responsibilities, and all this he may have done without being cognizant of it. When these acts are called to his attention he is surprised and unable to account for them. He may find himself in the clutches of the law, charged with some crime which he has committed but of which he has no recollection. He may have transacted business without knowing it. Sometimes gross sexual iniquities are perpetrated in these states.

During the confusion following the epileptic convulsion, the individual is apt to commit various criminal acts. Especially he must be guarded against committing sexual assaults, or injuries to persons. Epileptics seem to possess supernatural strength during their period of confusion, and the crimes they commit are sometimes of the most brutal nature. Often they commit suicide. Occasionally they develop a paranoid trend, and thus become a great menace.

Outbreaks of insanity in epileptics are characterized by marked states of excitement, mental

dulness, slowness of associattion of thinking, impairment of memory, mood deterioration, irritability or apathy; often there are many periods of confusion, bewilderment and anxiety, violent and assaultive outbreaks, hallucinations and delusions. Occasionally there may be states of abnormal happiness in which religious exaltation exists.

The following are some of the instances of epileptic manifestations in behavior difficulties:

Case 60

A young boy (14 years of age) was brought to the hospital from school after having attempted suicide by strangulation. The family history revealed that the parents were born in this country and were in good health. There were nine other children in the family. The patient was of normal labor and infancy. He developed properly and was considered very bright. At 12 years of age, he began to lose interest in his school work and would play truant. At the same time he became somewhat nervous, easily irritated and at times somewhat excited. He was therefore sent to a truant school. A note from that school which accompanied the patient stated that he had made several attempts to commit suicide by cutting himself with a piece of tin and by strangulation. He had been irritable, impulsive and depressed.

On examination, the patient at first appeared rather fearful and apprehensive, and somewhat inclined to be reticent and evasive. He would not tell his story willingly, and it had to be gotten in several interviews. He then said that there was absolutely nothing wrong with him. He complained that the

head-master of the school would whip him and beat him with drum-sticks. He also complained that on several occasions he was "put on the line" by which the patient meant that he was subjected to running barefooted for several hours on the hot pavement. He also complained of being sent to the "coop," by which he meant a small room in the attic, which was used for the purpose of segregation and where the patient was fed on nothing but bread and water.

For the first few days the patient apparently was adapting himself readily to the ward routine. At the end of a week he suddenly became very restless, began to cry, became confused, shouted at the top of his voice and wrung his hands, exclaiming, "Take him away — For God's sake save me — Don't let him kill me — " At the end of five minutes he became very quiet, mute and would answer no questions; appeared dazed and definitely bewildered; struck anybody coming near him, and it was necessary to place him in partial restraint. On the following morning after having been restless the entire night, he was still rather dazed and confused, and insisted that the truant officer had been near him and had struck him with a rod. He complained of headache. He gradually cleared and became more composed, and on the following day seemed to have no knowledge of his outbreak. He continued to get along fairly satisfactorily for three days, when once again he became very suspicious, fearful, could not sleep; he stated that he saw the head-master, and that he was again being beaten; thought he was at school; complained of his head being dizzy. At the end of 24 hours he again became quieter and composed, but once more he had complete amnesia (loss of memory) for the outbreak, although he insisted that the head-master was in the hospital.

The psychometric examination at this time resulted in a mental age of 11 years and 3 months with an Intelligence Quotient of 76. The patient appeared rather indifferent in general attitude and was rather seclusive, and not inclined to give much information about himself.

Physically, the patient appeared rather of heavy set features; tongue was coated; pupils were widely dilated but he showed no evidence of physical disease. Blood Wassermann was negative, and X-ray examination of the skull revealed nothing pathological. At the end of two weeks' residence the patient was discharged as a case of epilepsy of the epileptic equivalent type.

He was referred to the mental clinic, to which he reported three days later. At this time he appeared alert and interested, and a psychometric examination then resulted in a mental age of 13 years and 5 months with an Intelligence Quotient of 90. One week later the patient had a general convulsion; became very much excited and assaultive, and had to be readmitted to the hospital.

On admission he was ugly, irritable and excitable and had to be placed in partial restraint; he was quite confused and apprehensive. He was placed under proper medication and gradually cleared so that he was able to leave the hospital at the end of a week.

This case illustrates the difficulty in which epileptics often put others. His complaint against the head-master caused extreme uneasiness in his family, and his parents were contemplating a lawsuit. In the hospital, the patient at first gained

the sympathy of the examiners, until his period of excitement, when it became apparent that the alleged mal-treatment to which he had been subjected was really a product of his mental state. It is also of interest that the first psychometric examination gave him an Intelligence Quotient of 76, which was far below his real intelligence rating, as was shown by a later psychometric test performed by the same psychologist in which he reached an Intelligence Quotient of 90.

Case 61

A man (50 years of age) was brought from the magistrate's court for mental examination. Family history revealed the fact that his mother had died in an insane asylum; one brother had been committed on two occasions to state hospitals. The wife stated that the patient was of an unusually deep religious nature, being almost a fanatic on that subject. He frequently would get into fits of anger and would often strike her and her child. He frequently would have spells of wandering away from home and finding himself in strange cities. Occasionally he would get into spells of religious excitement in which he would run up and down the floor, drop on his knees and pray in a loud tone of voice. Often he would have outbreaks of sexual excitement, during which he would make his wife submit to abnormal sexual acts. He also showed a homosexual trend, and would frequently bring men to the home feeding them and clothing them, and appearing during these periods in a state of mental confusion. When regaining his senses, he would have no knowledge of his acts.

On the ward the patient showed a dull, seclusive attitude; would not associate with any of the other patients, and showed considerable emotional deterioration. He appeared slow in comprehension and moderate retardation in association of ideas was present. He gave a retrospective account of lapses of memory, which suggested states of epileptic equivalents. He said that he was arrested being charged with prostitution, but he did not deny that he had been in a compromising situation with another homosexual individual. He was committed to a state hospital with a diagnosis of episode of excitement accompanying an epileptic equivalent state.

Case 62

A young female (23 years of age) was brought to the hospital having taken bichloride of mercury. Patient stated that her mother died when she (the patient) was only five years of age. She had always been of a rather artistic nature; liked music and drawing, and took part in all dramatic performances during her normal school residence. Following her graduation from normal school, she joined a stock company and participated in many Shakespearean rôles. She stated that for the past four years she had frequent periods of loss of memory during which she performed many acts of which she later had no knowledge. She often found several articles in her room for which she could not account. She would find herself visiting people without knowing how she had ever gotten to their homes. On one occasion she found herself reciting before an audience in a theatre and could not tell how she had ever gotten there. On several occasions she found herself in rooms with strange men, and would

become very much terror stricken at this. She became engaged and planned to get married, but was prevented from doing so because her conscience bothered her, and she could not gather enough courage to tell her fiancé of her ailment. Several months ago she found herself in a room with a strange man and she became so depressed that she attempted suicide by inhaling illuminating gas and was saved by a friend who called on her and found her in a dazed condition.

On the morning of her admission to the hospital she found herself in bed with a stranger, and she became so depressed and discouraged to find herself with a strange man in a strange room that she swallowed several tablets of bichloride of mercury. The patient showed evidence of bichloride poisoning, mercury being recovered from various secretions and excretions of the body. All medical help failed and she died at the end of five days from bichloride poisoning.

Case 63

A man (28 years of age) was brought from the Tombs Prison being charged with compulsory prostitution. He had a general convulsion while in the City Prison and was therefore sent to the hospital for observation. On the ward the patient showed a well developed, well nourished physical condition; he showed a rather female type of body development; very fair skin and very few hairs on the body. He said that from the age of 13 he had been having epileptic attacks varying in nature from transitory states of forgetfulness to marked generalized convulsions. He admitted homosexual traits, and also admitted having made several sexual assaults on women. This was accounted for by his inability to control his instinctive

reactions, by his lack of knowledge of the act, and because of the confusion that followed his convulsions.

These three cases illustrate some of the types of sex offenses committed by the epileptics. The more obvious type of sex offenses such as assaults upon women and young girls are quite common in the state of confusion that follows convulsions.

Case 64

A man (37 years of age) was brought from the City Prison being charged with assault, having struck several people on the street without any apparent provocation. A physical examination of the patient showed an incomplete fracture of one of the bones of his forearms and scars on his tongue; otherwise his physical condition was good. He had several scars on his scalp and forehead.

Mentally the patient was somewhat dull, rather irritable and impulsive; said that he had been subject to epileptic seizures from childhood, and that he had been arrested on several occasions because he had struck people. This time he said he had been arrested for having a fight with a policeman but he does not really recall what had taken place. He said that often instead of having a convulsion he would run about as if in a dazed condition.

Case 65

A colored man (27 years of age) was brought from the Tombs Prison charged with murder in the first degree. It was alleged that he had brutally killed a person. Nothing could be learned of his personal or

family history. Physically the patient showed unequal and irregular pupils, scars on the tongue, face, and scalp. His blood Wassermann was negative.

Mentally he appeared dull, very evasive and suspicious. He stayed by himself taking no interest in his surroundings; associated with no one. He appeared somewhat confused and showed considerable fear reaction. He expressed a paranoid trend of a persecutory nature. At times he would become markedly agitated and excited. He had a general convulsion while under observation. On one occasion he complained that his food was being poisoned, that every night somebody put something in his stomach to poison his stomach; he claimed that a lawyer was responsible for that, and tried to choke his lawyer while the latter was pleading his case before a judge. He was committed to Matteawan State Hospital for the Criminal Insane, being diagnosed as an epileptic psychosis.

The last two cases illustrate extremes in the assaultive tendencies of the epileptics. Many an innocent person is seriously hurt by an epileptic without any apparent reason.

Case 66

A young woman (28 years of age) was brought from a magistrate's court being charged with indecent exposure. She was found disrobing in one of the city parks. Her history revealed that she had been subject to epileptic spells since puberty, having convulsions every two or three weeks. She frequently would disrobe while coming out from a convulsion.

She showed the characteristic dulness, emotional indifference and irritability and had two general convulsions while under observation.

Case 67

A man (30 years of age) was brought from a magistrate's court with a charge of indecent exposure pending. He was found on the street exposing himself to passers-by. It was found that he had been suffering from epilepsy since the age of 20 and that he had been arrested on several occasions for indecent exposure. He carried in his pocket a statement from a physician that he was suffering from epilepsy.

Physically this patient was rather under-nourished, pale, and showed scars on his tongue, on his face and extremities which indicated healed bruises sustained during his attacks.

Case 68

A young woman (26 years of age) was brought from a magistrate's court with a charge of disorderly conduct pending. This patient had had five previous admissions to the same ward, and was diagnosed on each occasion as epileptic. Two years ago while in a street car she broke a window, was arrested and finally committed to a state hospital with diagnosis of excitement accompanying epilepsy. This patient was known to the police of the neighborhood where she resided, and whenever found in a state of excitement the officers who knew her would return her to her home. Whenever she had a convulsion in a strange neighborhood, she would invariably get arrested because of her marked restiveness, irritability

and impulsiveness. She would throw abuse at the policeman or anyone who would try to help her. She would express a mild paranoid trend and would use the most obscene and profane language. Her present attack followed an altercation with a policeman whom she accused of being a robber and a murderer.

The patient showed a well-developed, well-nourished physical condition. Mentally she was very ugly, restless, disagreeable, irritable and impulsive. She was quite officious, interfering with the nurses, complaining against the treatment she was receiving at the hands of the police, and in the hospital. She had several convulsions while under observation and it was necessary to have her committed to a state hospital for further care and treatment.

Case 69

A young man (24 years of age) was brought to the hospital from a church where he had become very excited, insisted upon becoming a Catholic, and called for a priest. The history revealed the fact that the patient had been having seizures or fits for the past four years; that he had gone to church following a convulsion and had created a disturbance. He showed a well-developed, well-preserved condition; his tongue showed several scars. Mentally the patient was restless, confused, and deluded He said that he had a golden touch and that he owned several hospitals in New York. He expressed a number of delusions of a religious character and of an absurdly fantastic nature. He said: "I am Christ; I own the world. I have just been up to the sun where God has been. I am a doctor to clean you up. God told me he was

going to go home. I feel great. Why am I here? Because I own this place, don't you know — etc."

He was committed to a state hospital for care and treatment.

CASE 70

A young woman (21 years of age) was brought to the hospital from a magistrate's court being charged with petty larceny, having taken some articles from a department store counter. The arresting officer stated that the girl showed no emotion when arrested and acted in such a fashion as to make him suspect that she was in some way mentally affected, and he asked the presiding magistrate to have her sent to the hospital for observation.

At the hospital the patient appeared dull, somewhat uneasy, rather tense emotionally, quite irritable at times and showed a moderate mood deterioration. She had several convulsions while under observation. Her mother stated that the patient had been having fits at night for the past three years. For the past six months she had had several convulsions during the daytime. She would often become inattentive, apparently in a state of mental aberration during which she would take things from the house and sell them for insignificant sums. It was quite obvious that this patient, when she took the article from the counter in the department store, was in a state of epileptic confusion. She was diagnosed as a case of epilepsy.

On reading these cases, one is apt to gain the impression that the epileptics are hopelessly lost, anti-social creatures for whom nothing can be done. Nothing is so far from the truth as such a belief,

for the epileptic lends himself to proper treatment, but only a very few properly qualified and trained physicians are able to successfully manage such individuals. To successfully treat epilepsy one must have a thorough knowledge of the mental mechanisms underlying human conduct, an appreciation of the peculiar make-up of the epileptic, a familiarity with the common types of psychoses, and a thorough training in general medicine.

Perhaps one might obtain a more optimistic view-point if we were to relate some of our own experiences in the management of these patients. We have had an opportunity to treat the female epileptics at the Manhattan State Hospital under a modern scientific régime. In May, 1919, there were recorded 502 convulsions on the ward. In May, 1920, after the institution of the modern accepted scientific standard of treatment, there were only eight recorded seizures, in this same ward. Many of these patients were enabled to leave the state hospital and to return to their families and resume a normal life. The following are two of the cases which have come under our personal observation:

Case 71

A young female was committed to the state hospital after having attacked her sister in one of her states of confusion following a convulsion. In the hospital, the patient showed a rather dull, irritable, sullen attitude. She would strike the other patients and

would break the furniture. She would talk in a somewhat disconnected, incoherent manner and occasionally would express a persecutory idea. She would have as many as five to six convulsions a week. With the institution of proper therapy, she became clearer in her mental processes, became more amenable to care and treatment, helped the nurses on the ward and finally was paroled to the care of her sister. She was properly supervised, and was able to get along and make proper adjustments. She met a young man who was informed of her ailment, and who still wanted to marry her; they finally married, had a child, and the patient was free from convulsions for two years following her discharge from the hospital. She has had one attack since, which was precipitated by a family disagreement.

CASE 72

A female epileptic, 30 years of age, who in her early life was quite charming and attractive, but who was quite stubborn and wilful, married quite a prominent man and was apparently very happy until two years after her marriage when she became subject to epileptic fits. On one occasion she was found in the house with the gas jet open. She was then in a state of coma, partly due to gas inhalation and partly due to the stuporous state following her convulsion. She was committed to the state hospital for care and treatment. For three years the patient was having on the average of two to three convulsions a week. Preceding her attacks she would become very ugly, irritable and assaultive, and would have to be placed in full restraint. Following her attacks she would become very much agitated and excited, and it was dangerous to be near her. After a month's treatment by the modern

methods she was gradually losing her marked irritability and her assaultive traits; gained a good deal of insight into her condition, became easily manageable, and it was possible to parole her to the care of her mother. She was carefully supervised, and was free from convulsions for a period of eight months following her discharge from the hospital until she moved into another state and she has not been heard of since.

The last two cases are cited simply to illustrate the possibility of properly managing these cases. They could be supplemented by many others of similar nature.

It will be seen that epilepsy is manifested in diverse manner in behavior difficulties. Minor acts of delinquency, various sex offenses, and major crimes of all description may be committed by the epileptic. It is a manageable disease, and the utilization of scientific principles is imperative for the successful control of this condition. To properly treat epileptics, supervision should be instituted very early. They should be given proper schooling in special classes, and opportunity should be afforded for suitable vocational training. There should be sufficient hospital facilities for those cases which cannot be managed outside of an institution.

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Chapter IX

THE PROBLEM OF DRUG ADDICTION

Plants as medicinal agents.
The poppy plant and its products.
Opium smoking, and its resultant peculiar mental state.
Morphine addiction.
Heroin and its physiological effects.
The deteriorating effects of opium, morphine and heroin addiction.
Sexual impotency caused by drug addiction.
Cocaine and its physiological effects.
Cocaine addiction.
Withdrawal symptoms.
Morphine poisoning.
The relative infrequency of habit-formation resulting from legitimate use of drugs.
The personality types of the drug addicts.
Sociological implications of the drug addiction problem.
Mental deficiency and drug addiction.
Exaggerated reports of sufferings on the part of the addicts.
Frequency of drug addiction.
Environmental factors chief cause for drug addiction.
Legislative measures to check drug addiction.
Drug pedlers and opium dens.
Heroin as an unnecessary drug.
The experience of New York City Board of Health with drug addiction.
Physicians prescribing for drug addicts.
Cases illustrating various phases of the drug addiction problem.
Veronal as a habit-forming drug.
Inebriety and the personality of the inebriate.
Prohibition and its effects.
The relation of the physician to habit-forming drugs.

FROM time immemorial, various forms of plant life have been utilized by man in combating disease. The ancient Medicine Man would carry his herbs about, and feed them to his patients, or else make a watery solution of them, and make those who were ill drink it. Later, with the introduction of more accurate and well established scientific principles, the chief remedial agent of the plants was removed and administered to the patient not only by the mouth, but also by inhalation, by injecting the drug under the skin or directly into the muscles, by rubbing it into the skin, and by inhaling the smoke of the burning drug.

Amongst the most valuable plants is the poppy. This plant exudes a milky secretion when its unripe capsule is cut, and this milky fluid is known as opium. Modern medicine regards opium as amongst its most valuable and indispensable medicinal agents in its attack upon disease. Very few doctors indeed would be willing to give up this drug. The most active ingredient of opium is morphine. Morphine is used by doctors extensively, to allay severe pain, and to overcome restlessness and anxiety associated with sickness. It is used in many types of heart disease, several forms of lung diseases, in some of the diseases of metabolism, and in surgery. Indeed, there are many physicians who regard it as the most important of all drugs. Curiously enough, the ancients did not use the poppy as a medicinal agent, although Hippocrates, the father of medicine, speaks of it in his earlier teachings. It was used more for smoking,

in order to obtain a peculiar mental state.

The poppy plant and its qualities were known throughout the Mediterranean Basin at a very early period. The use of the pipe and the custom of chewing this plant was at first confined to India and China. The soil of the former country has been peculiarly adapted to the growth of the poppy so that most of it is now grown there and the British Government practically has a monoply on it. The Chinese, however, are the ones who are usually associated with opium smoking. With the spread of commerce, however, other peoples have been using this drug in order to obtain a peculiar mental state. A most remarkable feature connected with the use of this drug is the fact that whenever an individual uses it a few times, he becomes addicted to it, and finds it very difficult to dispense with it. This peculiar characteristic of the drug has given rise to the most serious problem of drug addiction, for the continuous use of the drug so undermines the physical, moral, and ethical status of the individual as to make him not only a burden to himself and society, but also a real menace at times.

In order to fully appreciate the entire problem of drug addiction, it will be best to describe the different drugs used, and the effect that they have upon the individual. The poppy plant itself is used only by natives of India and possibly, but to a very much lesser extent, in China. In the more civilized countries, it is not used.

Opium, or the crude drug obtained from the

poppy, is usually employed in the form of smoking through pipes. As a rule, a group of people of similar tastes congregate in a specially selected place and smoke together. This drug in a semi-solid state is placed in a pipe, ignited, and smoked. The sensation is that of general relaxation and well-being which releases many of the inhibitions, and offers relief from stressing states of anxiety and tension. This form of drug addiction is perhaps the least habit forming. The general atmosphere of the place, the sociability which it offers to certain peculiarly disposed people and the fascination that it holds for them, are often factors in the addiction besides the physiological and psychological effect obtained from the drug itself. Occasionally the addiction to its use becomes quite strong, and people may becomes real fiends at it. In brief, such smoking stimulates the imagination, and often infuses in the smoker a spirit of self-contentment and euphoria or general well-being in which all cares, griefs and sorrows are entirely forgotten. There are many people who for years have been " smoking the pipe " with apparently no bad after effects. In the vast majority of cases, however, the continual use of this form of opium results in a general weakening of the power of control, blunts the judgment, undermines the moral and ethical senses, upsets the digestion and lessens the physical vitality.

Morphine, one of the most active constituents of opium, is the next in the extent of its habit-forming capacity. While it is occasionally taken

by mouth, it is most commonly employed by means of a hypodermic syringe. At first small quantities of it are taken. Two or three doses are sufficent to establish the habit. By this we mean that after the individual has used the drug on two or three occasions, he feels quite restless, and uneasy, and has a peculiar craving which can only be appeased by taking another dose. Furthermore, the more frequently the person uses the drug, the more of it is required to appease this peculiar craving for it.

After the drug has been used for several months, the skin becomes more or less sallow, the bowels become constipated, the appetite is diminished, and the general strength impaired. Intellectually the patient shows a slowing of his reaction time, his interest is lessened, his capacity to accomplish work is somewhat reduced. Morally and ethically the victim shows increasing deterioration.

After a while, the entire interest of the patient seems to be centered upon ways and means of securing sufficient drug to satisfy his peculiar craving for it. Everything else is of secondary importance to him. If adequate funds are available to secure sufficient quantities of the drug and the person feels that he will be able to get all that he wants of it, he is able to continue to lead an otherwise law-abiding and even a productive existence. If, however, his earning capacity is limited, the prime interest of the individual will be to secure enough money to enable him to procure the desired amount of the drug.

Heroin, a manufactured product, made from

opium, has been introduced on the market only in the last dozen years. It is the most potent as a habit-forming drug. It is used either by snuffing, or by the hypodermic needle. It has a much firmer hold on the individual than opium or morphine. Its deteriorating effect is more intense and more rapid than that of the others. The heroin addict is a greater menace than the opium smoker or the morphine habitué. When snuffed, heroin is apt to discolor the mucous membrane lining the nostrils and may cause erosions and ulcerations of the cartilage of the nose. It causes marked wasting of the tissues, loss of weight, digestive disturbances and general weakness. To the trained eye, this drug addict is easily detectable amongst a group of people. With the continual use of this drug, there is a general loss of moral responsibility. It is almost impossible to get a truthful statement from heroin addicts. The physical resistance becomes so lessened that they readily succumb to wasting diseases such as tuberculosis. An acute infection carries them off very quickly because of their diminished power to fight it.

It is a well-known fact that the extent of physical and mental deterioration differs in the three drugs. Opium, if smoked, has the least harmful effect. Many individuals indulge in its use for years, and are able to retain their physical and mental powers. Furthermore, they can stop using the drug without great difficulty. Morphine forms a stronger habit, causes a greater loss of weight, upsets the digestion to a greater degree, and tends

to impair the moral and ethical senses. To give up the use of this drug is rather difficult, and the patient suffers from distressing symptoms. Heroin is the most deteriorating of the three. It causes a rapid loss of weight, undermines the entire personality of the individual and destroys all sense of moral and ethical responsibility. Furthermore, heroin so lowers the resistance of the person to disease that he readily succumbs to it and life is thereby shortened considerably.

One of the interesting effects of these drugs is their disturbing influence on the sexual functions of the individual. Heroin especially lessens the desire and impairs the power. While under the influence of this drug, and to a lesser degree while under the effects of morphine or opium, the individual has no desire for sexual congress, and in men the physical side becomes impossible. The menstrual function in women is markedly impaired, so that some may not menstruate for years while others are very irregular.

Another drug which is commonly used, and which is habit-forming in nature, is cocaine, which is obtained from the coca shrub, cultivated in some of the South American countries, Mexico and the East and West Indies. Cocaine is extensively used in medicine because of its anaesthetic effect when injected into the tissues. Furthermore, it is used extensively for applications to the mucous membrane lining the body cavities and in certain diseases of the eye. It has a remarkable effect on the brain of the individual, and when taken in exces-

sive doses, it stimulates cerebration causing talkativeness, excitement and wakefulness, though smaller doses frequently cause deep sleep. It seems to remove feelings of fatigue and sense of exhaustion. When used by the addict it is a most vicious drug for it is the most potent of all drugs in undermining the intellectual, moral, ethical and physical status of the individual. It is taken in the form of snuff or it may be injected hypodermically. These cocaine habitués are recognized by their widely dilated pupils, their shining eyes and twitchings and jerkings of the body.

These drugs are often taken in combination. Heroin may be taken in conjuncttion with morphine and cocaine. Rarely is cocaine taken in conjunction with opium. Cocaine may be taken in order to counteract the effects of morphine or heroin. One hardly meets a drug addict who does not smoke cigarettes, and in fact the use of tobacco seems to be very prevalent among the addicts. It is a very common observation that they will beg for a cigarette with the same fervor as they do for their drugs. Alcoholism, however, is not very common amongst them. In analyzing 3,362 cases, Copeland found amongst them six who used cocaine only, forty-one who used heroin in conjunction with morphine, 42 who used morphine and cocaine, 305 who used heroin and cocaine, 690 who used morphine alone, while 2,176 used heroin alone.

Whenever the individual is deprived of his drug, there results a chain of symptoms commonly

spoken of as withdrawal symptoms. The withdrawal symptoms of the opium group of addicts differ from those of the cocaine addicts. In the former the individual first becomes restless, uneasy, complains of general aches and pains all over his body, stating that his muscles are drawing and pulling, and complains of great weakness. He yawns constantly, and there are tears in his eyes. He retches and often vomits yellowish-green fluid. Diarrhoea is very common. He complains of cramps in his abdomen, and a sense of impending death. He constantly runs from one room to another, in and out of bed, but finds no relief. His pulse becomes rather rapid and his blood pressure falls. A cold sweat comes over his body. To the untrained eye the person appears to be in a state of great danger. These symptoms disappear in a few minutes after the patient receives a sufficient amount of the drug. Despite statements to the contrary, however, there is no real authentic case reported in medical literature where death resulted from sudden withdrawal of the drug from the patient.

It is true, however, that because these drug addicts cannot withstand any wasting disease, sudden withdrawal of the drug may thus indirectly jeopardize their lives, not because the drug is removed from them, but because of the general weakness that follows such withdrawal, and this increased lowered vitality makes the individual an easy prey for disease.

The sudden stopping of cocaine is not apt to

cause such symptoms. Persons deprived of this drug simply appear somewhat irritable, nervous, restless and complain of a sense of fear; they jump from one subject to another; they cannot concentrate their attention; their muscles twitch; they constantly rub their noses, and pick their skin. An overdose of cocaine is more serious in its manifestations than is the stopping of the drug. When the person takes an excessive amount of cocaine, he becomes extremely restless, very overactive and is apt to become delirious. He imagines that there are distorted figures on the wall and peculiarly formed human beings as well as animals. He complains of annoying sensations in his skin and may even complain of insects crawling out from his skin. Often he may have ideas that he is being haunted and persecuted. He may climb the fire escape or jump from a window in an attempt to evade his imaginary persecutors. Several such addicts have met an untimely death by jumping from the roof or the window.

Occasionally the opium, morphine and heroin addict may take an overdose of that drug. The morphine overdose is characterized by markedly pin-point pupils, and a very slow respiration (as slow as one or two per minute) and a tendency to fall asleep. If left alone, these patients will die. Besides specific medicine, it is important to keep them in action and prevent them from falling asleep. By so doing their lives may be saved.

After reading what has been said about the drug addict, one cannot help but pause for a moment,

and reflect upon the danger that lurks in the use of these drugs even as medicinal agents. In other words, one perhaps may ask whether or not it is dangerous for the physician to administer such a drug to a patient, lest that patient contract a drug habit. As a matter of fact, the danger of drug addiction resulting from the legitimate use of such a drug is very limited indeed. Despite statements from people who are interested in the subject of drug addiction, physicians in general, especially those who are handling drug addicts, agree that the danger is very slight indeed. The question of drug addiction begins primarily with the personality of the drug addict, and the cure from drug addiction ends with the personality. In other words, there are only certain types of individuals who are prone to become addicts, and those individuals acquire it usually through association and not through a physician's prescription. There are two definite types of individuals who are apt to become drug addicts. The first is the Manic-Depressive type of personality who because of his marked fluctuations in his mood reaction is apt to fall a victim to this habit. The second is the emotionally unstable constitutionally psychic inferior individual who is readily influenced by his friends and cronies because of his inability to exercise self-control. It is remarkable indeed how many of these people who apparently are earnest and sincere in their intention to be cured of this habit, will take the cure and on the very day of their discharge from the hospital will resume the habit simply because

one of their friends asked them " to be a good fellow " and to " take a shot." These individuals are distinct types of personalities, they cannot withstand temptation, and are unable to foresee the consequences of their acts.

The sociological implications of the drug addiction problem are manifold. Industrially, the addicts may become a burden, in that they are unable to continue at their work; furthermore, they become increasingly dependent upon others for support. In order to obtain funds to secure more drugs, they will resort to larceny, assault and robbery. They are very cunning and deceitful, and will resort to all sorts of falsehoods in order to obtain their desired end. They seem to have a circle of their own, and a code understood only by members of their own group. They recognize one another when detection would baffle the most skilful detective. Prostitution is very common among the women, as it affords them an easy way for securing the necessary funds to buy the drug. While their natural sexual desires are diminished by the use of the drug, they often resort to all sorts of perverted sexual acts that will afford them pleasure and gratification. They will constantly look for new victims to initiate into their fraternity, offering the first few doses gratis, and assuring them that the drug leaves no after effects.

One often comes across statements in the literature to the effect that the drug addict is mentally deficient. This is due to failure in properly interpreting the results obtained from the ordinary

mental tests employed. Because many of the addicts are emotionally unstable individuals, and because of the fact that the state of the patient's mental efficiency varies with the amount of drug that he has taken, several tests must be performed before an accurate measurement of the intellectual endowment is obtained. This has been pointed out by Jewett and Blanchard in their paper on "The Influence of Affective Disturbances on Responses to the Stanford-Binet Test." The average drug addict is not below the average in intelligence. It is true, however, that a continual use of the drug does impair the intellectual capacity after a while. Many professional people and fairly successful business men are victims of this disease. Primarily, there is a definite personality defect which makes them susceptible to the habit, and this defect is not along the line of inherent intellectual endowment, but rather in the emotional and volitional spheres.

One often hears of the torture which the drug addict undergoes either when taking the cure for his addiction or when suddenly deprived of his drug. As a mattter of fact, the consensus of opinion of physicians who have had the responsibility of administering cures or general treatment to drug addicts, is that most of the suffering is imaginary rather than real. We have personally seen addicts who were pitifully begging for a dose of drug, complaining of cramps, diarrhoea, vomiting and sense of impending death, and who, on receiving an injection of sterile water, were immedi-

ately relieved of all the distressing symptoms. Of course, they thought that the solution which they received was the drug. The most reliable and best qualified medical men either suddenly take the patients off the drug, or else withdraw the drug from them gradually so that they no longer receive it at the end of two weeks. It must be clearly understood that neither the continuous use of the drug nor its sudden withdrawal, cause any pathological change in the tissues of the person which would jeopardize his life.

Another point of interest that must be constantly borne in mind is that in the vast majority of cases the victims of this habit do not really want to be cured of it. Most of the cures which they take are the result of instigations either on the part of friends or others interested in them, or because they have gotten into difficulties with the law, and prefer to take the cure rather than be sent to jail. Various estimates reveal that from ninety-five to ninety-eight per cent of the addicts who have taken the cure return to the drug at the earliest opportunity.

Authorities differ as to the number of drug addicts in the United States. It is variously estimated that there are from 200,000 to 2,000,000 people who are victims of this habit. The real number probably lies somewhere between the two, about 800,000 approximating the correct figure. Ninety per cent. of the addicts are under 30 years of age because the span of life is much shorter, owing to the relatively diminished resistance of

these people to disease. Pulmonary tuberculosis and kidney diseases carry them off at an early age. It is very interesting that infants often become addicted through the mother's milk as the drug is present in it.

As to the direct cause for the habit, all authorities agree that bad association is the greatest factor. In other words, environment is the chief cause for this habit. The uninitiated receives a cordial welcome in the circle of the addicts, and in the spirit of sociability participates in taking the drug. Any unpleasant after effects resulting from the first few doses are minimized by his friends, so that he continues to take the drug until the habit is established, and he then can no longer do without it.

One often hears of the physician being a cause for addiction. When one considers the number of diseases in which morphine is given, and the relatively few people who acquire a habit from the legitimate use of the drug, it is safe to say that its prescription during illness is hardly ever the cause for a habit. A chronic and incurable disease associated with great pain such as cancer, etc., will at times make the individual an addict. But it is really cruel to designate these chronically ill, suffering people as such, because the drug makes their remaining few months of life tolerable, and they should be given all the drug required to deaden the pain regardless whether they will become addicted to it or not. Many a drug addict, in order to gain sympathy, will claim that

his addiction resulted from a dose administered by a physician in pursuit of his professional duties. As a matter of fact, if his confidence is gained, the same addict will admit that he lied, and that he really acquired it through association.

Until 1914, drugs were easily obtainable. In an effort to check the spread of this vicious habit, and, at the same time to prevent the abuse of professional privilege by physicians, the Harrison Law was enacted. This law provided for the registration of physicians, dentists, veterinary surgeons, pharmacists, and chemical houses imposing a certain tax for the privilege of prescribing and dealing in these narcotic drugs. This law forbade all sales, or other disposition of the drugs to consumers except by a pharmacist when filling a physician's prescription or by a physician in the course of his professional practice. This resulted in some confusion and misunderstanding among physicians when the law first came into effect on March 1, 1915. Many of the better type of physicians refused to prescribe opium and its derivatives, and quite a few voiced their indignation explaining that their medical ethics had been questioned. Furthermore, while they would not voice their sentiments openly, many physicians resented the registration, the paper work, and the so-called additional "red tape" which this law entailed. A group of unscrupulous physicians, however, formed a rather discreet circle and prescribed freely to all who had sufficient money to pay. For a while, this evil was rather serious in

nature, but it was soon checked by the ruling of the United States Supreme Court which limited the prescribing of these drugs.

Many states passed additional legislative measures in their effort to restrict the use of narcotics and habit-forming drugs to definite medical conditions, making it more difficult for the addict to secure his drug.

With the introduction of Federal and State legislation intending to make it impossible for the addict to buy his drug openly, there came a vicious practice of underworld traffic in these drugs. Smuggling the drugs from neighboring countries and stealing it from chemical houses, the underworld secured a sufficient amount to supply the victims. The most vicious element engaged in this underworld traffic is commonly known as the " dope peddler." This person obtains drugs in an illegal manner, and sells them to customers who are well known to him. The peddler not infrequently is himself a victim of this habit. In most instances, however, he is a cunning individual who leads a parasitic existence upon his victims. He resorts to all sorts of deceit, cheating and defrauding his customers by diluting the drug, usually with some sugar or milk powder, and charging them most exorbitant prices. Often he drives his victims to prostitution, theft and to other crimes, knowing full well that they must obey his command in order to obtain their drug from him. Usually these peddlers are well organized into cliques, thereby enhancing the power which they

exercise over their victims.

The activities on the part of the Federal agents revealed many specially furnished apartments which were real dens where the addicts would congregate and take their drug. These places were conducted by people who " reaped a harvest." Often these places were luxuriously furnished and were frequented by people of wealth and social standing. Many a fortune has been squandered in these dens. Men and women would congregate there, and would disregard all conventional standards, participate in all sorts of sexually perverted acts, and indulge in their favorite drugs. Occasionally these dens were found to be meeting places for gangsters, where all types of crimes were planned. The actual participants in the crime would receive extra " shots " or " sniffs " of the drug in order to " get up their courage." Information obtained from the gangsters caught in their anti-social acts would often result in the raiding of such places, where thousands of dollars' worth of drugs would be found.

There are many instructive reports in medical and sociological literature that are of interest. They all agree that only ten per cent. of the drugs consumed in this country are for legitimate medical purposes. The amount of opium imported is far in excess of that needed. It is the consensus of opinion of the best physicians that there is no need for heroin because morphine will replace it for any therapeutic measure. Heroin is the most vicious habit-forming drug of the opium group.

Approximately ninety-five per cent. of all addicts use heroin.

While the problem of drug addiction is really an international one, stringent Federal laws could control it in this country. The poppy plant could be grown in this country in sufficient quantity to produce all the morphine needed for medical purposes. It is quite feasible for the Federal Government through the Public Health Service to establish stations in different localities where the various chemical houses, pharmacists and physicians, could secure their necessary supplies, and make it almost impossible for those engaged in illegitimate traffic to obtain any of it. With the establishment of such a procedure, the importation of opium and its derivatives could be dispensed with. It is also felt by those who are treating drug addicts that the only way to cure the drug addict is to make it impossible for him to secure the drug.

An interesting experiment by the New York City Board of Health originating in an emergency precipitated by a raid by the Federal authorities under the Harrison Act gave remarkable and instructive results. Through this narcotic clinic, passed, from April, 1919, to March, 1920, more than 7,700 registered drug addicts. It was found that bad association and vicious environmental factors were the chief causes in producing addiction. Ninety-six and five-tenths per cent. were heroin addicts and only three and five-tenths per cent. were morphine addicts. Eighty per cent. were young men and young women just out of

their teens. Those occupations that demanded irregular hours and irregular meals and where stress and tension and irritations were frequent, were conducive to the acquisition of the habit.

It was found that only 55 out of 8,100 registered physicians were in the ring who prescribed for the addicts. Ninety per cent. of the cases sent to the hospital from the clinic returned to the drug upon discharge from the hospital. It was discovered that there was no real available institution where these addicts could be received and treated, so that after the various city hospitals closed their doors and refused to take relapsed cases, the workhouse and penitentiary alone were available for their care and treatment. It was proven that the clinic *per se* was a failure, and that confinement in a hospital followed by proper after care and treatment were the only means for treating these addicts.

The following cases will illustrate the various phases of the drug addiction problem, and some of the behavior difficulties involved:

Case 73

A man 32 years of age was brought to the hospital, being found on the street in a state of coma. The ambulance surgeon noticed pin-point pupils, very shallow breathing (three per minute), and peculiar small hard lumps in the arms of the patient, which immediately aroused his suspicion that the patient was a drug addict. The patient was immediately admitted to the ward and was forcibly moved from one place to an-

other until he regained consciousness. He then was made to walk the floor and was prevented from falling asleep by being kept moving about. Besides this he was given proper medication, and other treatment. At the end of three hours his respiration improved, being 12 per minute, and the patient was able to sit up without falling asleep. He then admitted that he was using morphine and heroin, that he had taken too much of the drug by a hypodermic injection, and became unconscious. Later the patient gave the following history:

He was born in New York City; attended school regularly until twelve years of age, when he began to play truant and fell back in his studies. He left school at the age of fourteen and went to work as an errand boy. His people were poor and the home surroundings were not congenial. He would "hang around the corner" with his boy friends; kept late hours, and was rather a disobedient child at home. At the age of 18 years he first used the drug. He at that time was in the company of boys who were using opium by smoking, and he was asked to participate in it. After the first indulgence he felt somewhat nauseated and had a headache, but this, he was told by his friends, would not happen again. He again smoked a pipe on the following night. After four days he found that he could get a sense of relaxation from the use of the pipe and that he could forget all his cares and troubles.

For two years he used only opium by smoking. He then began to use morphine by hypodermic needle. At first he got it from the drug store on a doctor's prescription. For the past six years he got it from a peddler. For the last four years, he snuffed heroin. He stated that heroin had the greatest effect on him,

and that he could not do without it. He learned to use heroin by hypodermic injection two years ago. He said that if he could not get the drug he would feel restless, weak, his eyes would water, he would suffer from cramps in his abdomen, and he would have diarrhoea; his limbs would feel as if they were drawn up. One dose of the drug would remove all these sensations.

He spent five dollars a day for the drug. Occasionally he would resort to petty thefts and petit larceny in order to get the money to buy the stuff. He was arrested on two previous occasions and in order to escape jail he pleaded for a cure, which he was given. On discharge from the workhouse, where the cure was given, and return to his former circle of acquaintances, he again resumed the use of the drug. He stated that it deadened his sexual desire and that he could not indulge in the act while under its influence. On the other hand, following a cure, in fact as soon as he was beginning to lose the effect of the drug, his sexual desire was very strong.

He also stated that he could not keep a position for any length of time.

This case illustrates the effect of an over-dose of the drug. It also shows the industrial maladjustment, the sexual incompetency, and the futility of " a cure " in drug addiction. This individual had an unfavorable environment, and after receiving treatment for his addiction, was allowed to return to the same unfavorable surroundings, without proper after care. He immediately fell back into his former habits.

CASE 74

A young female, 22 years of age, was brought to the hospital with a charge of "Possession of Drugs" registered against her. Her parents were born in this country. Her father was a heavy drinker and her mother was loose in her morals. She attended school until 11 years of age and then went to work in a factory. She was physically very attractive, had many friends, but was rather unstable in her emotional reactions. Her first sexual experiences were at the age of sixteen. At seventeen years of age she was taken to New York City by a man with whom she had become infatuated. She saw him inhaling some powder, and she asked to be given some. She experienced a nauseous feeling and had a splitting headache, but when she saw him indulge in this habit she again followed suit. She said:

"I was blowing 'coke' for about six months. I then began to 'shoot' it. When I'd get 'dopey' I would sniff some cocaine. Heroin makes you 'dopey.' You kind of like to sleep. You just want to sleep, that's all. Cocaine makes you jumpy — your nerves spring-like. When I don't get my dope, I get sick in my stomach. My joints ache. I sweat, and I have diarrhoea."

She then stated that she was spending eight dollars a day for her drug. She admitted having been arrested on three different occasions; twice for prostitution, and once for possession of the drug. On two occasions, she was sent to the workhouse, where she was given a cure. When getting off the drug she became sexually very tense and she was initiated into homosexual acts by another girl who was in the same predicament. She said that she was driven to prosti-

tution by the need of money, as she had been left by the man who brought her to New York, and she was working as a chambermaid in one of the New York hotels and her earning capacity was insufficient to pay for the drug.

CASE 75

A woman 34 years of age was sent to the hospital by a city magistrate for a cure. She stated that she was born in Vermont, had a high school education and then came to New York where she was employed as a stenographer. She said that she had married at the age of twenty. Her husband was a travelling salesman and he would leave her for several weeks while he was on the road. She stated that she had been living in an apartment house and had been befriended by a woman who was a drug addict. She met a few other addicts who were friends of this neighbor, and on one occasion she was given an injection of morphine. She said that she had asked for it because all the others seemed so anxious to get that drug, and she wanted to experience the sensation. She fell asleep after that, and did not think any more of it until a week later when she again met the same people, and once more took it. She experienced a bursting headache, and her friend gave her another injection stating that she would be relieved from her headache.

Soon she began to use the drug regularly and found that she could not do without it. She then began to use heroin, as that would appease her nerves more than morphine. She did not tell her husband of it. She would spend eight dollars a day for her drug. As her husband's salary was not enough to supply her with the drug, she went back to work as a stenographer. However, she found it a more convenient way to get money

by going with strange men. She was physically very attractive and her personality was rather pleasant, so that she could command a high fee. It was therefore possible for her to meet only a few men during the month, and to secure enough money to enable her to be comfortably supplied with drugs. She stated that she lost her menstrual period two months after she began taking the drug. She also added that she had no sexual gratification. She said that she had taken the cure before, but when her husband left for the road she became lonesome and visited her former friends, and returned to her habit. She said that when she was in the presence of her female friends, she would occasionally indulge in homosexual acts, but that she would get very little satisfaction from it. She stated that her husband was becoming suspicious of her fidelity, and that in order to be able to be faithful to him, she decided to get off the drug and not be obliged to be immoral any longer in order to get money for the drugs.

The last two cases illustrate the most common method of getting the drug habit — bad companionship. It also illustrates the fact that many of these addicts become prostitutes simply to enable them to secure necessary funds to be supplied with drugs. Homosexuality is not infrequently indulged in, in order to secure some sexual gratification when the usual heterosexual relationship fails to provide it. Furthermore, homosexuality is first practiced by these people when they are receiving a cure because at that time their sexual desire is returning and usually they are in no position to indulge in normal sexual relationship.

Drug addiction establishes a vicious circle in which the chain of events tends in the end to undermine the entire moral and ethical status of the addicts. The patients mentioned first took the drug, and later resorted to prostitution in order to secure the necessary funds to buy the drug.

Case 76

A woman 28 years of age was brought to the hospital by order of commitment signed by a city magistrate for the purpose of securing treatment for drug addiction. The history of this case is interesting from several angles. She was born in the Middle West of native born parents. She was the only child and received an excellent bringing up. She had a collegiate training and later taught physical training in one of the women's colleges. During the war she was engaged in social service work, and there she met a young army officer to whom she became engaged and married him in 1918, on the day when he was to board a liner which was to take him to France. She remained in New York, and engaged in social service work among the troops. Four months later she received word that her husband was killed in action. She brooded considerably over that and remained for days without going outside of her hotel. She had sufficient funds to keep her very comfortable. After a month of mourning she finally became resigned to her lot and again took an active interest in welfare work among the soldiers.

She was physically very attractive. She was generally liked by the other guests of the hotel where she resided. She made the acquaintance of an actor who was living in the same hotel and became infatuated

with him. She saw him on one occasion use a hypodermic needle, and she tried to dissuade him from doing so, but she was unsuccessful. Finally he succeeded in inducing her to " take a few shots " and she became addicted to it.

She regularly went to one of the physicians who would prescribe for her daily dosage and she would spend about four dollars a day for it. She then continued to go from bad to worse. She finally changed hotels and would not send her new address to her people as she was ashamed to face them. She therefore was unable to get any financial assistance from any of her relatives. She was still sufficiently physically attractive to be able to secure large sums of money through prostitution, and she finally resorted to this means in order to earn enough to keep her comfortable.

In 1920, while under the influence of an overdose of morphine, which she had received from a doctor, she had to fill an appointment with one of her male " friends " whom, however, she had never met before. Her signals were crossed, and she selected from a group of men one who happened to be a detective. When she escorted him to her favorite room he excused himself for a moment and returned in a few minutes accompanied by two uniformed members of the police force. She was taken to the night court and from there was sent to the observation ward to be detained for drug addiction. It was found that she had contracted both syphilis and gonorrhoea and she was transferred to one of the city institutions where treatment for these diseases was administered. While in that hospital she was induced to communicate with her relatives in the Middle West, who proved to be prominent in civil and social affairs

in the community where they resided. She went to the West with them when she was finally discharged from the hospital.

Her uncle, who was a physician, supervised the treatment of her diseases, and took care of her while she was with her family. She, however, was very sensitive, and could not face her old friends. She would brood continuously, and after remaining with her people for two months, left them, leaving a note asking them not to look for her, and stating that she was well able to care for herself. She returned to New York and rented a room in another hotel. She learned that during her absence the physician who had prescribed to her formerly was under arrest, and she finally began to use the drug which her friends had purchased from a peddler. She now had to pay as much as ten to fifteen dollars a day for the drugs she would receive. Furthermore, she was now receiving heroin and not morphine. She gradually began to lose weight, and her general physical condition became such that she no longer could secure sufficient funds from consorting with a few men during a month, but had to meet several men a day in order to do so. In other words, she became an ordinary street walker.

She was arrested, being charged with prostitution, and once again came to the observation ward, being sent there by a magistrate from the night court. She was again seen by us. She had so deteriorated physically that it was impossible to recognize her. On her former residence she was rather of an attractive personality and in excellent physical state. She then weighed about 150 pounds. During her last residence (one year later) she weighed 105 pounds; her face was sallow; her stomach functioned poorly; her bowels were constipated; her skin was drawn and full

of hypodermic marks, and her general physical condition was very poor. She was irritable and ugly and asked constantly for her drug in a manner unbecoming a lady.

This case illustrates the fate of an individual who by virtue of her training and social standing should have been a successful and happy individual, but who on account of her drug addiction sank to the lowest depths of misery. She was primarily of a mild manic-depressive make-up. She had a mild depression following the death of her husband. She then met an actor with whom she became infatuated and who used his power over her to induce her to take the drug. It is alleged by those who are in a position to meet and treat the addicts, that drug addiction is rather common amongst actors. Other professional people such as physicians and nurses who are in a position to get the drug easily, and even ministers, are known to have contributed to the drug addict population.

She continued to use the drug after she acquired the habit, but she used morphine which was prescribed for her by a physician. She spent only four dollars a day and never got any skin infections from the hypodermic needle which was used by the physician. She would consort only with a few men in order to get her funds. When she returned to New York, she no longer could get a physician to prescribe for her. At that time she had to resort to the underworld traffic for her supply. She spent as much as fifteen dollars a day for her daily dose. Furthermore, she got

several abscesses in her thighs and arms because she could not use a sterile hypodermic needle, and she now was using heroin, a more deteriorating drug than morphine. Heroin undermined her health to such a degree that even her earning capacity in her miserable way became impaired, so that she had to consort with more men in 24 hours than she previously had done in a week.

We might digress at this moment to speak about the so-called influence which some physicians have in spreading drug addiction. As a matter of fact, it was revealed during the experience which the New York City Board of Health had in 1919, that the greatest majority of medical men shunned the drug addict and would not prescribe for him. This they did not because they feared the law, but because of the ethics which govern their relationship to their patients. It was also pointed out from that experience that of 8,100 registered physicians only 55 were members of the so-called ring which was regularly prescribing for the addicts. It was also pointed out that this ring mustered its membership from the foreign physicians trained abroad, and furthermore, they were excluded from all medical societies.

When we compare the detriment done by the underworld traffic with that done by these unethical practitioners in medicine, the unbiased person would immediately say that it is far safer to have the unethical physician prescribe rather than force the addict to secure the drug from the peddler. The case above illustrates this point

quite vividly. We must never lose sight of the fact that so long as the supply of drugs in the United States exceeds the amount necessary for legitimate medical consumption, there will be drug addicts, and they will secure the drug regardless of measures to prevent them. It is far better to have a person who has knowledge of surgical and medical principles administer the drug to them than to have them buy it from the peddler. It is the lesser of the two evils.

To return to our patient, we are immediately confronted with the fact that she was an additional public menace in that she had acquired both syphilis and gonorrhoea and was a potent factor in spreading these diseases. It must be borne in mind that prostitution is very prevalent among the poorer classes of drug addicts, and that they are undoubtedly a serious menace to the community from this viewpoint.

Case 77

A young female (25 years of age) was brought to the hospital by the ambulance because she had been running up and down the fire escape of her apartment, and finally put her hands through the window of a neighbor. On admission the patient was very restless and excited, said that the police were after her, tossed about in bed, screamed and shouted in an unintelligible manner, picked her nose and her skin, and it was necessary to put her in partial restraint. After she was given the proper medication she finally fell asleep. When she awoke at the end of four hours

she was very restless, and asked for a shot of morphine, claiming that she was a drug addict. She stated that she usually used heroin, but that in order to prevent herself from becoming too drowsy she would also sniff some cocaine. She said that she had bought a bottle of what she supposed was heroin but evidently it was cocaine. She had taken one other dose on the day before, and she became very irritable and restless; her nerves tingled but she had enough presence of mind to go to one of her friends who gave her a shot of morphine which quieted her. On her last dose of the drug, she again became very irritable and in order to steady herself she took some more of the drug. She then began to imagine that there were detectives after her; that she was being followed and that she was going to be killed; and she ran on the fire escape in order to avoid her imaginary followers. She tried to enter her neighbor's apartment through the window but in her haste thrust her arm through a pane of glass and cut her wrist. Further history revealed that she had been using drugs from the age of 18; she acquired the habit from bad associates. She would often use cocaine in order to check some of the undesired effects of heroin. She said that the cocaine addict was looked down upon by the rest of the members of the underworld, and that the morphine addict was the one looked up to by these same people.

This patient illustrates the result of an overdose of cocaine. They are usually recognized by their widely dilated pupils; extreme restlessness and purposeless over-activity. Furthermore, they occasionally have persecutory ideas. Not infrequently they may meet an untimely death in their

effort to escape their imaginary enemies. This case also illustrates the fact that cocaine is not infrequently used by addicts of other drugs in an effort to counteract extreme drowsiness resulting from those drugs.

While the above-mentioned drugs are the most commonly used and constitute the chief habit-forming drugs, during the last few years, owing in part to the activity by the Federal agents in suppressing drug addiction, and caused in part by the popularity of self-medication, there has come into prominence a habit-forming group of drugs which are a real menace to the community. These are trional, sulphonal, luminal, and veronal. These drugs are sold by the pharmacist to anybody. No prescription is necessary for them. They are advertised by several chemical houses as remedies for nervousness, restlessness, insomnia, vomiting and for many other ailments. One nervous patient often recommends it to another. These drugs are valuable agents if properly used by qualified physicians. They are like a knife in the hands of a skilled surgeon. When, however, the layman begins to meddle with drugs, he is in the same position as the child who has in his possession a valuable surgeon's knife. Invariably he injures himself and he is apt to inflict injury to those near him.

Veronal, and to a similar degree the other drugs, when taken in excessive amounts, cause stupor and even coma (loss of consciousness from which the individual cannot be aroused). When the effects

of the drug begin to wear off the individual regains consciousness, is very irritable and complaining about all sorts of maltreatment and injustices received at the hands of his friends, nurses and physicians, staggers about like a drunken man, and has weakened control of the bladder and rectum. Usually the same person will deny ever having taken veronal. When confronted, however, with such evidence as labelled vials containing some of that drug he will admit that he has taken it but will firmly deny his addiction to it.

Alcoholism is very common amongst people who use veronal. This is not the case in the opium group of addicts. The speech of the veronal patient is very characteristic, being of a thick, unintelligible sort, in which there are omissions of many syllables. It takes several days for the effect of the drug to wear off.

Usually the drug is taken by a peculiarly disposed individual, in other words by an individual of a peculiar mental make-up and personality. This individual cannot face situations squarely and when an unpleasant situation confronts him he becomes irritable and restless and seeks refuge in anything that will dull his senses.

The usual answer to the questions as to why they have been taking the drug is " Oh doctor, I try to forget." To state it in a different way, one patient said " I had been worrying; I did not know what path to pursue. I was lonesome; I could not get the advice of anyone. I had to solve my problem for myself. It was too much for me.

I tried to forget it all. I could not sleep. I went to the druggist who gave me this medicine. I took a few tablets as he told me. That gave me a little rest. The next day I grew more restless, as I had to solve my problem on the following day. I therefore took the entire contents of a bottle and then I found myself in the hospital."

This drug is becoming very prevalent in its general use. Many people who have formerly been alcoholics are now using it, for they have found it to give them the same satisfaction as whiskey. This drug should be sold only on prescription. It should be included amongst the narcotic drugs as its use is becoming increasingly alarming.

While from time immemorial more has been written about alcohol than about any other drug, and the average person is well familiar with its effects and of the various dangers and evils lurking in inebriety, comparatively little has been said about the person who drinks to excess. When one scans the medical literature, one meets such terms as dipsomaniac, periodic drinker, etc., but only a few references are made to the personality type of the inebriate. As a matter of fact, the vast majority of inebriates are individuals belonging either to the manic-depressive group of personality, or to the emotionally unstable type of the constitutional psychic inferiority group.

The emotional fluctuations of the manic-depressive individuals drive these people to drink. In fact, most of the consumption of alcohol occurs

during the extremes of emotional fluctuations. Even religion has utilized one or another form of alcohol in its various ceremonials. Many psychiatrists have openly asserted that alcohol in many manic-depressive individuals acts as a safety valve and may even prevent the precipitation of a frank outbreak of insanity. The constitutionally psychic inferior individuals who suffer from emotional instability may also resort to drink because of their peculiar mental make-up. They try to forget their troubles by clouding their senses with liquor.

We have observed in the alcoholic wards all types of alcoholics both before and after prohibition. Much has been written about prohibition in general and it need not be further elaborated upon. It is indeed painful, however, to behold to what extent the truth is being distorted in these accounts. Even the reformers who have gone to the extreme in enforcing prohibition have not been free from this. Much may be said both in favor of and against prohibition. We have seen a decline in the ordinary type of people who used to come to the alcoholic wards before prohibition and have noticed an increase in number of the better type middle-class people who are now being brought to our wards. We have seen the disappearance of the saloon, but there was the simultaneous birth of distilleries and of home brews. There was a definite diminution in the alcoholic admissions to the state hospitals for the insane but at the same time appeared a number of instances where blindness and even death re-

sulted from the whiskey that is now being sold.

One sees relatively few drunken men on the streets, but the hip flask is now being changed to a rather attractive metallic bottle which is being carried by college students, successful business men and people of prominence. One sees a decline in the number of crimes committed by drunkards, but reads too many newspaper reports of crimes committed by policemen while under the influence of liquor. Bootlegging with all its concomitant illegal acts is in its ascendancy. The poor man no longer can get his whiskey, and sick and infirm people are deprived of its legitimate medicinal use because the physician either would not prescribe it owing to the red tape it involves, or because he could not get a safe alcoholic preparation when it was needed for those whom he was treating.

The police who have tried to enforce prohibition are not only unpopular but in many instances are being regarded as oppressors. The antagonism towards the police and all its concomitant emotional reactions are being carried over in many other instances so that many juries will refuse to take the testimony of the policeman. Only recently two prominent jurists reprimanded members of the jury who had brought a verdict of not guilty in face of strong and otherwise convicting evidence because they would not accept the testimony of the police. Thus the safety of the community is endangered. We can only say that extremes in anything are folly, while moderation is an expression of wisdom.

In concluding this chapter, it is opportune to bring up the question of the relationship of the physician to these problems. Because of a peculiarly disposed personality, and by virtue of the principles which he imbibes in the process of a painstaking and laborious study, the physician is instilled with a sense of ethics which is acquired from constant association with his teachers and with the helpless sick who are looking to him for guidance and help. From time immemorial the physician has commanded the faith and trust of the community. This has tended to enhance his ethical relationship towards his patients. In this age of commercialism many temptations have been thrown in his way and yet with very few exceptions he continued to follow that code which made his profession so unique and so widely respected.

On the other hand, the community has allowed many sects to encroach upon his premises, so that the sick have not only been deprived of proper medical care and treatment, but have been intruded upon and misled by wilfully fraudulent and deceitful people. It is really appalling to behold how many sects of healers have arisen during the last few years, to say nothing of such groups as osteopaths, chiropractors, neuropaths, and many other " tommy rot paths." Even well-established churches have allowed some of their members to become healers.

This is in part due to the fact that the medical profession as a whole has never re-

garded itself as a commercial enterprise, and has never fought any intrusion upon its rights, leaving the protection of its sacred mission in the hands of the people themselves. In part it is also due to the fact that the average medical man considers very active participation in political affairs as a matter outside of his calling. When one considers the intimacy with which the medical man comes into contact with the lay people, and the influence that he can use over them, it is really remarkable that medical men do not avail themselves of the unusual opportunities which participation in civic affairs in general and politics in particular offers to them. Treating the sick is their chief mission in life and they do so according to the teachings and ethics of their profession. To designate the amount of whiskey a physician may prescribe for his patient and to limit the number of days within which a certain amount may be given is not only an imposition upon the rights of the physician but it is also a stupid blunder. The ultimate sufferer is neither the physician nor the law, but the sick person who wants to get well.

One cannot legislate ethics. That has to be acquired through a process of training and association with acknowledged professional leaders.

The methods of the reformers have been primarily directed towards the alleviation of conditions for those who are constitutionally inferior or psychopathically inclined. In so doing they have changed established customs and conventions in general to suit the needs of these biologically infe-

rior individuals. It is interesting to study the professional reformer and some of his followers. One often finds in their actions attempts to cover undesirable and repulsive traits of their own personality. Many of them enter it on a purely commercial basis. It might be best to check them altogether. It would be far safer to have every individual actively participate in civic affairs and share in the moulding of public opinion and intelligently eliminate all sources of evil, rather than allow a group of parasitic reformers to thrive on the weaknesses of human nature. The activities of the latter are tending towards undermining the very foundations upon which democracy is built.

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Chapter X

THE UNBIOLOGICAL BEHAVIOR OF THE SUICIDE

Definition of suicide.
Attitude of society towards the suicide.
Suicide as an expression of mental aberration.
Suicide as a logical choice of conduct.
Suicide as an expression of intense emotional outbreak.
Suicide in the aged.
Suicide in the young.
The steady increase in the suicide rate.
Various causes for suicide: Loneliness — ill-health — panics — season of year — wave-like periodicity, etc.
Tables illustrating number of suicides by months and seasons; by age and sex; by method used; by yearly rate.
Changing attitude towards the suicide.
An analysis of 100 consecutive suicidal attempts encountered in patients brought to psychopathic ward.
Tables analyzing mental disorders in 100 attempts at suicide, the age of these cases, their methods employed, and their religion.
Three cases illustrating depressed phase of Manic-Depressive Insanity causing suicide.
Case illustrating manic-phase of Manic-Depressive Insanity causing suicide.
Three cases illustrating suicide in Dementia Praecox patients.
Two cases illustrating alcoholism responsible for suicide.
Cases illustrating suicide in people suffering from chronic physical diseases.
Three representative cases of suicidal attempts in hysteria.
Case illustrating child suicide.
General survey of the problem of suicide.

SUICIDE, or self-destruction, is as old as the human race itself, and the problem of suicide is intimately connected with and as baffling as many of the problems connected with the very origin of life. When one considers how powerful an instinct self-preservation is, we can readily understand how suicide has interested scientists and philosophers of all ages, and how each has endeavored to contribute to the understanding of this almost unbiological form of behavior. Among the difficulties encountered in the study of this problem is the fact that the successful suicide does not, as a rule, leave behind statements or other evidence that assist in making proper inferences as to the causes that have led up to his act. In fact, many of them even attempt to conceal anything that might be helpful in understanding the factors which motivated their conduct. The family also tries to conceal any evidence in order to avoid the stigma that is attached to them on account of the suicide of one of its members.

The attitude of the community towards the suicide has been different in various periods of history. Many of the ancients have sacrificed themselves in the interest of a principle, or faith, or for the benefit of the state. In fact, mythology contains many instances of gods and heroes who have thus taken their own lives. Historical figures like Cato, Seneca, and Brutus have voluntarily terminated their own lives. The Stoics utilized suicide as a convenient means for escaping the painful realities of life. Even Plato is said to have justi-

fied it in case of serious calamity, or in extreme poverty. Occasionally, in order to escape the disgrace attached to a death penalty inflicted by the state, some of the ancients, notably Socrates, resorted to self-destruction. In the middle ages, many of the religious sects threw themselves from high cliffs, or adopted other means of suicide as an expression of their devotion and martyrdom. History is full of instances where captured generals or leaders of unsuccessful revolutions preferred self-inflicted death rather than suffer the humiliation attached to failure. Suicide in these cases not only failed to carry with it the stigma of disgrace but in many instances immortalized these men, and gained adherents to their principles and followers of their ideals.

Later, however, with the advance of Christianity, suicide came to be regarded as an impious act, indignities were heaped upon the body of the deceased, and the family looked upon as social outcasts. Even as late as the eighteenth century, the body of the suicide, could not be interred in the ordinary cemetery. The Hebraic Law to this day prescribes the burial for these unfortunate individuals in certain restricted places. In many countries suicide is still regarded as a crime, and if unsuccessful subject to punishment. The estate of the suicide, however, is no longer confiscated by the state. Even in New York City, the metropolis of the western hemisphere, suicide was a punishable offense as late as the year 1920. As late as this did the popular mind fail to realize that

people attempting suicide are subjects for sympathy and charity, rather than for condemnation and punishment.

We must remember that even at present among certain people suicide is committed in obedience to established principles and customs, and as an expression of affection, gratitude and loyalty to a dead chief. At the time of the death of the late Mikado of Japan, some members of the Samurai race of Japan, many of them having figured prominently in the Russo-Japanese War and in other movements that have tended toward the rise of Japan as a nation, committed suicide, according to customs by hara-kiri.

With increasing interest in modern psychiatric problems, and as the result of the psychiatric attitude assumed in dealing with other problems of human behavior, many began to regard suicide as an expression of mental aberration. In the face of strong emotional conflict, as the result of delusions and ideas of persecution, in an effort to escape their imaginary tormentors, and to evade the terror resulting from horrifying hallucinatory experiences, the individual seeks refuge in suicide. The Psychoanalytic School would regard it as a desire of the individual not to die physically but to kill his own personality. On the other hand, there are innumerable instances where suicide was the result of a well-calculated, logically systematized scheme devised as the most feasible plan of action when conditions became unbearable. Thus the banker who has misused the people's funds in

speculations, in order to avoid disgracing his family as a result of impending conviction and imprisonment, may turn to suicide to escape such disgrace.

Pilgrim mentions the experience of one insurance order whose funds were increasingly being depleted as a result of premiums paid to families of their members who committed suicide. The committee appointed to investigate this problem finally concluded that these men had selected suicide as a means of supplying the economic needs of those dependent upon them. A clause in the constitution of that order was inserted limiting the premiums of the suicide and this resulted in a marked and immediate diminution in suicide amongst their members. These facts would point to the presence of a group of individuals who while of sound mind plan self-destruction.

There are many causes for suicide. All authorities agree that a large number of suicides are the result of mental aberration. This factor will be discussed more fully in analyzing our cases. The economic factor has undoubtedly played an important rôle in many instances. We know that during business reverses and in panics, there is a tendency towards an increase in the suicide rate. During wars, there is a gradual decrease of the suicide rate because of the great opportunity for one type or another of war service, the increased prosperity among wage-earners, and the deflection along more useful lines of the interests of morbidly introspective individuals.

A factor which has played a prominent part in

suicide is the feeling of loneliness, from which so many people suffer. It is remarkable indeed how lonesome one can be in a large city. The rural communities seem to have in them a greater amount of "the milk of human kindness." Furthermore, the resources of the country offer so many opportunities for one to become interested in natural beauties, as to remove any tendency towards morbid introspection. The cold, unsociable atmosphere of the city with its limited opportunity for freedom of movement, tends towards increasing morbid introspective tendencies which finally lead to despair and suicide. It is remarkable how many of such individuals one meets in the psychopathic wards. It is incredible how many of them have for the first time in their lives met a friendly look and encouraging word in the observation ward, having been brought there after an unsuccessful attempt at self-destruction.

In the aged, when opportunities for diverting one's interests among fields of activities are limited, when life has lost many of its charms and attractions, and when some of the fondest hopes have been unrealized and the future is hardly bright, suicide is not infrequent. Thus G. Stanley Hall, in Senescence, quotes Prussian statistics which show that people between 50 and 80 commit suicide about twice as often as those between 20 and 50.

In the young, suicide not infrequently represents an effort to inflict punishment in return for some imaginary wrong at the hands of those interested in them. Occasionally they resort to this proce-

dure in order to gain more attention and affection. This mechanism also holds true in hysterical individuals who really do not desire to die, but simply make attempts at suicide as a means of gaining the desired attention and affection. They usually select a means that will not prove efficacious; often, however, their plans are miscalculated, and they succeed in killing themselves. A young girl, for example, who jumped into the river in the presence of a group of people drowned because there was no one in that group who could swim. Her history revealed several previous attempts at drowning, always in the presence of a large crowd amongst whom fortunately there were a few who saved her.

There has been a steady increase in the suicide rates of the community at large excepting for the period in which there were great wars. An attempt has been made to explain this increase on the basis of the greater complexities of modern life. One can hardly estimate the true value of this factor. As a matter of fact, it is not an easy matter to decide whether modern man has greater difficulties to encounter than his forefathers. Surely, physical difficulties of former times have been considerably mastered by modern science. It is held, however, that there are greater opportunities for emotional conflicts in modern society than there were in the past. Even this last statement is one on which there is considerable difference of opinion.

One frequently meets statements to the effect

that physical diseases are causes for suicide. As a matter of fact, our experience among the chronically and even among the hopelessly ill has led us to conclude otherwise. It is indeed most remarkable how tenaciously these hopelessly and chronically sick cling to life. Repeatedly have we discussed this subject in a frank and open manner, and on final analysis have concluded that if anything the desire to live is stronger among these physically ill individuals than amongst those mentally diseased. It must be admitted, however, that there are instances, where in the face of utter hopelessness and despair, these individuals occasionally do attempt to end their existence. They, however, are the exceptions rather than the general rule.

An interesting feature of the suicide problem is the relative frequency of suicide in the spring of the year. On the other hand, the winter months usually have the least number of suicides (see Table No. 1). A superficial consideration of difficulties usually encountered in the various seasons would lead one to expect the highest suicide rate during the winter months. This, however, is not the fact. Perhaps the general feeling of restlessness and mood fluctuation usually present in the spring months may in part account for this. Stearns speaks of a condition corresponding to hibernation followed by a period of low vigor which perhaps may play some part in this phenomenon.

Another interesting phase of the suicide problem is its occurrence in wave-like periods. In the olden

times many hysterical individuals with psychopathic leanings frequently committed suicide in groups, so that the civil authorities had to resort to unusual measures to check it, such as exposing the bodies of the suicides to public view, confiscating their property, etc. The clergy frequently found it necessary to speak from the pulpit in their efforts to check the group hysteria. Even in modern times there is a tendency for suicide to occur in waves. The notoriety which the suicide receives from some newspapers is, in a measure, responsible for this. The despondent, and morbidly inclined individual is often impelled to take his own life after reading a similar account in a newspaper.

There are many interesting studies of suicide. Lowrey made an analysis of suicidal attempts in a psychopathic hospital. He studied forty-six cases who made unsuccessful suicidal attempts. Of these sixteen cases were Dementia Praecox, nine were patients suffering from Manic-Depressive Insanity, five were of psychopathic personality, three of psychoneurotic nature, and the others were variously diagnosed. The relatively greater number of Dementia Praecox cases could in part be accounted for by the fact that the Dementia Praecox type represented the largest group of inmates in the institution.

Hoffman made a statistical study of the suicide record of 1917 of 100 leading cities. He says: "The annual loss of life through self-murder is approaching 20,000 for the continental United

States. In ten years, therefore, making allowance for an increase in population and a further increase in the actual number of suicides, approximately half a million adult lives will be sacrificed for reasons most trivial or causes largely within the social control. Looking backward throughout the period of 142 years since America became a nation, it may be conservatively estimated that not far from a million people have ended their own existence, regardless of the fact that no country in the world, during the corresponding period of time, has experienced a higher degree of material and social well-being, and provided more abundant opportunities for the pursuit of happiness, individually or collectively considered." He presents highly instructive tables which illustrate many important points:

TABLE NO. I

(Reproduced from Hoffman)

COMPARATIVE NUMBER OF SUICIDES BY MONTHS AND SEASONS, U. S. REGISTRATION AREA, 1911–1915

Month:	No. of Suicides:	Per Cent Distribution:
Jan.	3,906	7.6
Feb.	4,022	7.8
Mar.	4,387	8.5
Apr.	4,748	9.2
May	4,794	9.3
June	4,738	9.2
July	4,390	8.5
Aug.	4,182	8.1
Sep.	4,319	8.4
Oct.	4,444	7.9
Nov.	4,036	7.8
Dec.	3,843	7.5
Winter.	12,321	24.0
Spring.	14,280	27.8
Summer.	12,891	25.1
Autumn.	11,923	23.2

TABLE NO. II

(Reproduced from Hoffman)

SUICIDE IN THE UNITED STATES REGISTRATION AREA BY AGE AND SEX, 1911–1915

Ages at Death	No. of suicides	Rate per 100,000 population	Per cent distribution	Males			Females		
				No. of suicides	Rate per 100,000	Per cent distribution	No. of suicides	Rate per 100M	Per cent distribution
5 to 9	2	.....	.....	1	.....	.....	1		
10 to 14	151	.5	.3	78	.5	.2	73	.5	.6
15 to 19	1898	6.3	3.7	825	5.5	2.1	1073	7.2	9.0
20 to 24	4525	14.3	8.8	2898	18.0	7.3	1627	10.6	13.7
25 to 34	10634	19.4	20.7	8302	36.0	21.0	2338	11.3	19.6
35 to 54	10356	33.3	20.1	8516	51.7	21.6	1840	12.6	15.4
55 to 64	7620	40.9	14.8	6398	66.1	16.2	1222	13.7	10.3
65 to 74	3886	36.6	7.6	3279	61.8	8.3	607	11.5	5.1
75 plus	1512	33.8	2.9	1287	60.7	3.3	225	9.5	1.9
Unknown	191	.....	.4	174	.....	.4	19	.....	.1
All Ages	51,415	16.3	100.0	39,492	24.2	100.0	11,923	7.8	100.0

TABLE NO. III

(Reproduced from Hoffman)

SUICIDE IN THE UNITED STATES REGISTRATION AREA BY METHOD USED AND SEX, 1911–1915

Method of suicides	No. of suicides	Rate per 100,000	Per cent distribution	Males			Females		
				No. of suicides	Rate per 100,000	Per cent distribution	No. of suicides	Rate per 100M	Per cent distribution
By Firearms	15,479	4.9	30.1	14,120	8.7	35.8	1,359	.9	11.4
Poison...	14,020	4.4	27.3	8,894	5.5	22.5	5,126	3.3	43.0
Hanging or strangulation..	7,491	2.4	14.6	6.188	3.8	15.7	1,303	0.8	10.9
Asphyxiation...	6,477	2.1	12.6	4.371	2.7	11.1	2,106	1.4	17.7
Cutting or piercing instrument...	3,279	1.0	6.4	2.884	1.8	7.3	395	.3	3.3
Drowning.....	2,869	.9	5.6	1,845	1.1	4.7	1,024	.7	8.6
Jumping from high places..	956	.3	1.9	602	.4	1.5	354	.2	3.0
Crushing	433	.2	.8	356	.2	.9	67	.1	.6
Other methods	411	.1	.8	222	.1	.6	189	.1	1.6
Total..	51,415	16.3	100.0	39,492	24.2	100.0	11,923	7.8	100.0

TABLE NO. IV
(Reproduced from Hoffman)

Year	Population	Suicides	Rate Per 100,000 of Population	Business Failures Per 1,000 Concerns
1902	17,816,991	3,022	17.0	9.3
1903	18,313,175	3,361	18.4	9.4
1904	18,809,507	3,588	19.1	9.2
1905	19,121,548	3,623	18.9	8.5
1906	19,922,617	3,406	17.1	7.7
1907	20,511,267	3,888	19.0	8.3
1908	21,099,858	4,569	21.7	10.8
1909	21,688,520	4,444	20.5	8.7
1910	22,263,589	4,383	19.7	8.4
1911	22,821,267	4,673	20.5	8.8
1912	23,436,355	4,551	19.4	9.9
1913	24,000,858	4,708	19.6	9.9
1914	24,553,940	5,089	20.7	11.0
1915	25,143,497	5,084	20.2	13.2
1916	25,829,127	4,535	17.6	10.0
1917	26,377,887	4,274	16.2	8.0

Table No. 1 illustrates the great frequency of suicide in the spring of the year. Table No. 2 shows the increase of suicide in direct proportion to the increase of age. Table No. 3 reveals that the most common method employed by the suicide is firearms, closely followed by poisoning; hanging and strangulation come next in line, while asphyxiation is the next method. Cutting and piercing instruments, drowning and jumping from high places follow in order. Table No. 4 shows the steady increase of suicide in the one hundred leading cities studied.

Since the policy of the community has changed from regarding the unsuccessful suicide as a subject for a penal institution to considering him deserving of sympathy, and attention by a psychiatrist, it has been the custom in New York City to send the unsuccessful suicide to the psychopathic ward for observation. We have therefore had an unusual opportunity to study these cases, not only from a purely medical viewpoint, but also from a psychological one. For the sake of a clear presentation of the subject, we have graphically analyzed fifty consecutive females and fifty consecutive males admitted to the psychopathic ward because of attempted suicide. In Table No. 5 are shown the types of mental disorders from which these individuals suffered. It will be seen that in 38% of the men and in 44% of the women, or in 41% of both sexes, there was sufficient change in the mood to justify grouping them under the Manic-Depressive class of psychoses. In other words, Manic-Depressive insanity in its broadest meaning was responsible for 41% of the cases studied.

The Dementia Praecox group composed 14% in each sex. The alcoholic group was represented by 18% in men, 8% in the women, or by 13% of both sexes. It is indeed surprising to find alcohol responsible for 13% of suicides in our cases. The Manic-Depressive, the Dementia Praecox psychoses and the alcoholics represented 68% of the suicidal attempts. Epilepsy was responsible for 6% of the men, 4% of the women, and for 5% of both sexes. Arteriosclerosis and Senile Psy-

chosis accounted for only 4% while the Psychoneuroses were responsible for only 2%. The table is shown below:

TABLE NO. V

TYPES OF MENTAL DISORDER IN 100 ATTEMPTED SUICIDES

Diagnosis	Number males	Per cent males	Number females	Per cent females	Per cent both sexes
Manic depressive psychosis	4	8	10	20	14
Allied to manic depressive	4	8	7	14	11
Undifferentiated depression	8	16	0	0	8
Simple depression	1	2	0	0	1
Agitated depression	0	0	2	4	2
Transitory depression	1	2	0	0	1
Transitory excitement	0	0	3	6	3
Involution psychosis	1	2	0	0	1
Total manic depressive group	(19)	(38)	(22)	(44)	(41)
Dementia praecox	7	14	3	6	10
Allied to dementia praecox	0	0	4	8	4
Total dementia praecox group	(7)	(14)	(7)	(14)	(14)
Paranoia	0	0	1	2	1
Epilepsy	3	6	2	4	5
General paralysis	2	4	0	0	2
Psychosis with arterio-sclerosis	3	6	0	0	3
Senile psychosis	0	0	1	2	1
Psychosis with organic nervous disorder	3	6	2	4	5
Toxic exhaustive psychosis	0	0	1	2	1
Alcoholism	7	14	2	4	9
Acute alcoholic psychosis	2	4	2	4	4
Total alcoholic group	(9)	(18)	(4)	(8)	(13)
Constitutional psychic inferiority	2	4	3	6	5
Psychoneurosis	1	2	1	2	2
Drug addiction	0	0	1	2	1
Mental deficiency	1	2	1	2	2
Intoxication from drugs, etc.	0	0	4	8	4
Totals	50	100	50	100	100

TABLE NO. VI

AGE OF 100 ATTEMPTED SUICIDES

Age	Number males	Per cent males	Number females	Per cent females	Per cent both sexes
Under 10	0	0	0	0	0
11 to 20	8	16	12	24	20
21 to 25	3	6	8	16	11
26 to 30	6	12	11	22	17
31 to 35	7	14	6	12	13
36 to 40	5	10	4	8	9
41 to 45	5	10	5	10	10
46 to 50	5	10	2	4	7
51 to 55	1	2	1	2	2
56 to 60	5	10	0	0	5
61 to 65	1	2	0	0	1
66 to 70	2	4	0	0	2
71 to 75	0	0	1	2	1
Above 75	0	0	0	0	0
Unknown	2	4	0	0	2
Totals.....	50	100	50	100	100

TABLE NO. VII

METHODS EMPLOYED BY 100 ATTEMPTED SUICIDES

Method	Number males	Per cent males	Number females	Per cent females	Per cent both sexes
Jump out window, etc...	12	24	17	34	29
Eat broken glass.....	1	2	0	0	1
Beating head.....	1	2	0	0	1
Drowning.....	1	2	3	6	4
On subway track.....	1	2	0	0	1
Inhaling gas.....	7	14	7	14	14
Hanging.....	2	4	1	2	3
Shooting.....	2	4	0	0	2
Cutting throat.....	5	10	0	0	5
Stabbing or cutting.....	3	6	0	0	3
Set fire, whiskers.....	1	2	0	0	1
Poison.....	0	0	1	2	1
Iodine.....	5	10	6	12	11
Bichloride.....	0	0	4	8	4
Lysol.....	0	0	2	4	2
Paris green.....	1	2	0	0	1
"C N" cleanser.....	0	0	3	6	3
Carbolic acid.....	2	4	1	2	3
Strychnine.....	0	0	1	2	1
Veronal.....	0	0	1	2	1
Wood alcohol.....	1	2	0	0	1
Disinfectant.....	0	0	1	2	1
Method unrecorded.....	5	10	2	4	7
Totals.....	50	100	50	100	100

TABLE NO. VIII

RELIGION OF ONE HUNDRED ATTEMPTED SUICIDES

Religion	Male	Female	Both Sexes
Catholic.....	26	21	47
Protestant...	9	15	24
Hebrew	14	11	25
Unknown....	1	3	4
Total	50	50	100

In Table No. VI, the respective ages of these 100 cases are given. In Table No. VII, the methods employed are given. It will be noticed that jumping from a window represents the favorite method. The inhalation of illuminating gas is next in order, closely followed by iodine poisoning. It will be noted in analyzing our tables, the results are somewhat different than those given by Hoffman.[1] Our cases represent suicidal attempts, the vast majority of which were unsuccessful. His tables represent actual suicides. In Table No. VIII, the various religions of these cases are shown. The greatest number of these cases, however, admitted having lost faith in their religious training. The impression that we have gathered from this study is that lack of religion is a factor to be considered in analyzing the causes of suicide. The faith and hope which religion inspires, and the confidence that is carried with it, enable people to continue the struggle for existence in the face of overwhelming odds.

It will be instructive to analyze in detail some of the cases which we have studied:

Case 78

A young man, 22 years of age, was brought from the magistrate's court charged with carrying concealed weapons. The history of the case revealed that this

[1] Hoffman's figures undoubtedly include some of unintentional self-destruction, such as accidental poisoning, self-inflicted injury while under alcoholic influence, and unable to care for oneself, etc.

boy was of normal birth and labor; had a common school education, worked as a fruiterer, and apparently was getting along well in business. He was always of a rather gloomy, despondent nature; seemed to always worry about trifles, and never seemed to look at the bright side of life. One month ago he became rather restless and uneasy; became depressed, could not continue his work and at times was seen in tears. He left home two days before his arrest, and was not heard from until the day he was admitted to the hospital. When interviewed the patient presented the typical attitude and manner of one suffering from the depressed phase of Manic-Depressive insanity. He was definitely sad, quite depressed, worried a good deal and did not mingle with the other patients. He spoke in a low monotonous voice and moved about very slowly. When interviewed he said: "I got disgusted with life. I could not sleep. Life looked gloomy to me. There was nothing to live for. I bought a revolver and shot myself. A policeman arrested me because I had the revolver in my possession." The patient had a flesh wound in the left side of his chest where the bullet passed through. The diagnosis of the case was that of Manic-Depressive Psychosis, Depressed Phase, and he was sent to a state hospital for care and treatment.

Case 79

A girl 17 years of age was brought to the hospital having taken bichloride of mercury. The history revealed that she was born in California and received a high-school education. She was very attractive and was of a cheerful disposition. She was engaged as a chorus girl in a show which made a success in the

West. She then went on the road and finally came to New York. In that city the play was a failure. She was out of employment and spent all her savings, so that she was penniless. For a few days she went to some of her friends, who gave her food. These friends who assisted her were, in her opinion, immoral, as they allowed themselves to get into compromising situations with men. This idea was revolting to her, and she finally even refused to visit them. She became down-hearted, brooded all day long; she went to one of her girl friends and asked her for bichloride which she pretended to want for a douche. She left her friend, went to a theatre and at the end of the show swallowed the bichloride tablets.

In the hospital the patient showed a very well developed, somewhat under-nourished condition physically; showed no neurological disturbances. She vomited a bloody greenish fluid which was due to the irritation of the mercury on the mucous membrane lining the stomach.

Mentally she was definitely depressed, spoke of her sad plight; stated that she was penniless and would not lead an immoral life as some of her friends had done. She therefore decided to die. She gradually grew weaker and died four days after admission.

Case 80

A young female 20 years of age was brought from her sister's residence after she had made an unsuccessful attempt to jump from the roof. The history of this case revealed the following: She was born in Poland, of Jewish parentage, was quite bright and likeable, but showed a tendency to brood. During the

late war, her family was subjected to unusual hardships. There were many days of starvation. The patient herself was in constant dread of being ruined by the soldiers, for several of her friends had shared such a fate. At the end of the war she was sent a ticket and money by her sister who had emigrated to America some years before. On the boat she met a young man who had come to Poland in order to bring his folks to America. This young man became infatuated with her, and she allowed him liberties after he had promised to marry her. When they arrived in New York, the young man at first paid considerable attention to her, but later he rather neglected her, and showed in many ways that he no longer cared for her. Her sister appealed to his sense of honor and the young man married her. Their marital life was very unpleasant. He had had the advantages derived from living in America for ten years while she was just a simple Polish peasant girl. They had nothing in common. They quarreled frequently. One month after the marriage she suddenly became restless, could not sleep, went to her sister and complained that her husband was making her ill; that she no longer cared to live, and threatened suicide. She left her sister and returned to her husband. At the end of a week she again came to her sister; this time she appeared very dejected, wept bitterly and when her sister left the room for a moment, the patient ran to the roof and was in the act of throwing herself from it when her sister came just in time to prevent her from so doing.

On the ward the patient appeared very sad and quite down-hearted; she did not speak above a whisper. She expressed all sorts of ideas of insufficiency, stating that she no longer could do anything; that she was not

worth caring for; that life had nothing to offer her and that she had ruined her husband's life as well as her own. She wished she were dead. Physically she showed nothing of unusual interest. She was put on proper treatment and at the end of three weeks' residence in the hospital she gradually improved, and stated that she no longer wanted to die.

In relating her matrimonial difficulties she said that she was in a peculiar mental state, and her difficulties had assumed enormous magnitude. She said that she had felt, for a while, that she was getting into a state of depression, but that she could not help it. Finally she had gotten herself in such a peculiar state of utter hopelessness that she pictured herself being punished for sins that she had committed. She therefore decided life no longer was worth while and she tried to end it by jumping from the roof. In the hospital, however, she had gradually lost this feeling and she no longer wanted to die. It was therefore possible to discharge her to the custody of her sister.

The above three cases are examples of Manic-Depressive Insanity, Depressed Phase. It is this type of mental disorder which is responsible for a large number of suicides. They represent about one-third of suicidal cases reported. In our group they were responsible for 41%. Depressed patients, as a rule, have a sense of guilt which often drives them to suicide. They will secretly plan self-destruction and often succeed in carrying out their plans in spite of vigilance on the part of their attendants. All these people have to be carefully watched, and should be under the care of a trained psychiatrist. The unfortunate feature is that

many of these patients are able to keep up with their work and many of them are not regarded as being in any way sick, so that a suicidal attempt in not a few cases is the first sign of the abnormal state. Often while in the hospitals for the mentally sick, these patients will complain to their relatives and visitors that they are maltreated, and will beg to be removed to their homes. This is done in spite of the advice of the physician in charge. Once in their homes, where the supervision is not strict, they will terminate their existence at the first opportunity. The psychiatrists who maintain that all suicides are mentally ill point to the fact that most of the cases present a mood variation from the normal which is distinctly that of a depression, and this mood depression affects their judgment to the extent of making them incompetent.

Case 81

A woman 29 years of age was brought to the hospital after she had repeatedly tried to take her life by jumping from the window, by swallowing sharp metallic substances and by gas inhalation. Her husband stated that the patient was always high-strung, vivacious, overactive and quite lively. Following the birth of a child six years ago she had a definite state of depression which lasted five months and from which she made a complete recovery. The patient gave birth to a second child eight months ago and one month later became very depressed, and was in a hospital for three months; and was allowed to go home,

apparently cured. Three weeks ago she became overactive, overtalkative, could not sleep at night; said she was very happy and felt real well. She would burst into frequent attacks of excitement when she would break things, destroying everything she could put her hands on. When prevented from so doing she would strike her husband or anyone who happened to be near her. She tried to jump from the window; on another occasion attempted to inhale illuminating gas.

In the hospital, she was overactive, overtalkative, she would ramble in her speech; at times it was necessary to put her in restraint in order to prevent self-injury or injury to others. She said: "I am happy; let me go out to a dance; I feel good; why do you keep me here. Am I a prisoner? I'll kill myself. I have no baby — I have no husband — leave me alone; get away."

The patient was finally committed to a state hospital as a case of Manic-Depressive Insanity, Manic Phase.

This case illustrates suicidal attempts in manic patients. As a rule, these patients do not try suicide except when during their periods of mood fluctuations they become depressed, reflect upon either their unhappy state or upon some anti-social act which they may have committed, and then prefer death to their unfortunate lot. Occasionally, when in stress of excitement and motor overactivity, they will try to get away from the people who are caring for them, and unwittingly make suicidal attempts.

Case 82

A female, 32 years of age, was brought to the hospital after having tried to jump from a window. The history revealed that the patient was born in this country, had a common school education, went to high school and was graduated at the top of the class. At the age of 20 there was a definite change in her personality. While she had always been somewhat unsociable, and rather obstinate, she had never been very insistent upon having her way and never shut herself away from her friends. At 20, however, she became very seclusive; would not go out with her friends; remained at home; did not try to get any employment and would remain content with doing the housework for the family. In spite of this definite change in her personality the family did not suspect that there was anything seriously wrong with her, although they admitted that she was somewhat queer. At about 25 years of age she began to complain of the neighbors, that they were poking fun at her and that they were passing disparaging remarks about her. Later she said that almost everyone was looking mysteriously at her. Still later she began to complain of feeling electricity in her body. She stated that her food was being tampered with. One week before admission she became greatly upset, saying that there was a plot on foot to do away with her, and that all sorts of horrible tortures were in store for her. She finally locked herself in her room; insisted that people were coming to her home to kill her and refused to admit anyone. Her family tried to pry the door open, and the patient jumped from the window in her effort to escape her imaginary enemies.

On the ward, the patient was very dull, seclusive; very suspicious and evasive; she imagined that her food was being poisoned by her enemies; she talked excitedly about the subject; she said: "I had to protect myself. I suspect someone is putting poisonous drugs into my food. I feel it going all through my system. They are going to crucify me, that's what they will do. I want to die a natural death. I don't want to be tortured."

She was diagnosed as a case of Dementia Praecox and was committed to a state hospital for further care and treatment.

CASE 83

A man, 35 years of age was brought to the hospital, having attempted suicide by stabbing himself with a knife. The patient had had a former residence at the Manhattan State Hospital. He had always been unsociable, did not like company, was quarrelsome at home, could not keep any job, and neglected his personal appearance. For the past five years he had been reacting to imaginary voices, most of which, however, were of a pleasant nature, the patient being told that he was a chosen prophet, and that he was going to make people lead better lives. Four years ago while preaching to a crowd which gathered in the street, he was arrested and sent to a state hospital where he remained for two years.

In the hospital the patient was very quiet and did not mingle with the other patients. He paced up and down the floor, apparently reacting to imaginary voices, as he would frequently stop and talk in an unintelligible manner; he did not answer questions relevantly or coherently. He expressed a deeply religious trend. He said: "God selected me as a Jewish Messiah.

He talks to me constantly. He tells me to preach to people. I was the one who brought peace to the world. There is no more war. God told me to sacrifice myself for the Universe. I could not die. I do not want to die. I can never die. I can go to Heaven. I am his chosen favorite."

Diagnosed as a case of Dementia Praecox and committed to a state hospital for further care and treatment.

CASE 84

A young woman (28 years of age) was brought to the hospital after having jumped from the ferry boat into the river. At first the patient refused to give any information about herself and to all questions she would reply in a uniform manner asking that a telegram be sent to a certain movie star. She was quite seclusive; at times she appeared depressed and would ask to be put into the electric chair to end it all. Her ideas were rather meagre and her emotional reaction was entirely inadequate to the stimulus eliciting it. Later she became more communicative; said that everybody was against her. She was going to become a very popular actress and therefore the other girls were jealous of her and were plotting to injure her. Upon investigation it was learned that she had come from Detroit to New York in her effort to escape her imaginary enemies. She later admitted having had a residence in a state hospital in Michigan. She was committed to a state hospital for further care and treatment with a diagnosis of Dementia Praecox.

These three cases illustrate attempted suicide in Dementia Praecox patients. These individuals select self-destruction in an effort to escape from

imaginary persecutions. Often they commit suicide because of delusions due to imaginary voices telling them to do it. They react to false sense perceptions and are slaves to their morbid ideas. Their acts are impulsive, and often are executed without any warning, so that in spite of careful watching on the part of their nurses and attendants they may succeed in terminating their lives. The most horrifying types of self-mutiliation have been committed by these patients. We have seen a patient who had completely torn away his external genitals by means of his finger nails, having labored under the delusion that it was the Lord's wish that he should do so. Another patient of this group poured kerosene on his beard and then set fire to it, in response to a similar delusion. In our group of attempted suicides, Dementia Praecox patients represented fourteen per cent. of the total number.

CASE 85

A woman 31 years of age was brought to the hospital in a semi-conscious state having been found in her room with the gas jets open. The landlady stated that the patient had been drinking heavily the night before, and that on the morning of admission an odor of gas was traced to the patient's room. On opening the door, the patient's room was filled with illuminating gas and the patient was found in a semi-conscious condition.

On admission, the patient was stuporous and had a disagreeable, penetrating alcoholic odor to her breath. After proper treatment, the patient regained conscious-

ness, and was able to give a clear account of herself and of her acts. She admitted having been a heavy drinker, but denied attempt at suicide. In an effort to explain her situation she stated that it was quite possible that she had turned on the illuminating gas without lighting it because of her alcoholic state, but it was more likely that she had blown the light out, without turning it off.

Case 86

A man 35 years of age was brought into the hospital after being saved from drowning. He had a very heavy odor of alcohol to his breath and had the facial appearance of one who had always been drinking heavily. The history revealed that the patient had always been a heavy drinker; that one week before admission he began to complain to his sister that people were going to harm him; that he was going to be cut up, that he heard the neighbors talking about him, and that most everybody was involved in this plot. Furthermore, he suspected his own brother-in-law, and would leave the room whenever the latter entered. On one occasion his brother-in-law brought some friends to the house and when the patient heard them talk, he hurried out of the room and ran to the river, eluded two men who were trying to prevent him from jumping into the water, but was saved by a sailor from a passing boat.

In the hospital, the patient at first was very suspicious, reacted to imaginary voices, which were threatening him and were calling him all sorts of degrading names, and appeared to be in great fear. At the end of three days' rest and treatment, he lost these fears, and no longer heard these voices. He gradually

improved so that at the end of the week he appreciated that his mind must have been upset and finally accepted the explanation that his heavy drinking had affected his brain. He was diagnosed as a case of Acute Alcoholic Hallucinosis, and was allowed to go home after making a complete recovery.

These two cases represent attempts at suicide occurring among alcoholic persons. The first case represents an ordinary drunkard who, while under the influence of alcohol, is unable to take proper care of herself, and because of this, occasionally jeopardizes her life. Such a person may fall overboard, step in front of a moving vehicle, become asphyxiated by illuminating gas, or take poison mistaking it for some medicine. Suicide in such cases is not the result of a premeditated act, but of utter carelessness and helplessness resulting from alcoholic intoxication.

The second case represents a type of mental disease resulting from prolonged use of alcohol and which is characterized by the occurrence of marked false perceptions of hearing which causes great fear. These hallucinations of hearing are usually of a threatening nature, the patient imagining that he is being haunted and that his very life is in danger. In order to avoid being apprehended by his imaginary enemies, and in an effort to escape the imaginary tortures which are in store for him, such a patient will occasionally attempt suicide. Some of the rather mysterious suicides occurring among the apparently wealthy and healthy individuals are the result of these acute

alcoholic hallucinations. The relative frequency of suicidal attempts caused by alcohol can be judged from the fact that, of our group of cases, 13% were alcoholics.

CASE 87

A young man 28 years of age was brought to the hospital after having attempted suicide by strangulation. The patient had three years ago contracted gonorrhoea and syphilis. Following his infection with the syphilitic germ, he became paralyzed and was under constant treatment for two years, the paralysis passing off but leaving the individual in a rather poor physical condition. He was told by his doctor that although he had recovered the function of his limbs he was still in danger and it was necessary for him to be under a physician's care for practically the remainder of his life. The examination of the blood and of the spinal fluid still showed evidences of an active syphilitic disease process. The patient was an intelligent man, and was aware of the seriousness of the nature of his illness. He had formed a friendship with a young girl and seriously contemplated marriage. He knew, however, that if the girl was informed of his disease she never would consent to marry him, furthermore he realized that even if she were to marry him, their marital life would in all probability be unhappy; he began to brood and finally made the unsuccessful attempt at suicide.

CASE 88

A young woman 22 years of age was brought to the hospital after having made an unsuccessful attempt to jump from the window. Her parents stated that

the patient had been suffering from heart disease since childhood. This incapacitated her to the extent of preventing her from participating in the usual play and games of the children of the neighborhood. As she grew older she was unable to participate in social affairs, as she could not dance, swim or even walk more than a few blocks without becoming short of breath and suffering from rapid beating of the heart. She often discussed her sad plight with her parents, and had insinuated that she would prefer death to such an unhappy existence. Her attempt at suicide was precipitated by a disappointment. There was a social affair in the home of one of her friends to which she was invited. She had looked forward to it for several weeks. On the evening of the party she had an attack of rapid beating of the heart and shortness of breath which necessitated her going to bed, and prevented her from attending the social affair. She cried bitterly that night, and finally expressed her disappointment in her suicidal act.

The last two cases are examples of attempts at suicide in people suffering from chronic disease. As stated before, the usual reaction of these people is one of extreme tenacity and of intense determination to make the best out of life in spite of their handicap. Even in the face of excruciating pain, these patients want to live despite their oft-repeated remarks that death would be welcome. When their pains have been alleviated by sedatives and the patients have regained their natural poise, they will admit upon interrogation that their desire to die was more apparent than real; that it was induced by the pain and often utilized in their

effort to secure the proper sedative. It will be noted that in these two cases there was a strong element of emotional reaction, and one is justified in questioning whether these people who are physically ill and attempt suicide, are not really suffering from an acute outbreak of a mental disorder of the Manic-Depressive type.

Case 89

A young woman 25 years of age was brought to the hospital after having attempted suicide by drinking lysol. The history revealed that this girl was always of an hysterical nature; craved a great deal of attention and depended upon the other members of her family to get along. She married a rather energetic, persevering young man whose time was occupied by his work, and who did not lavish as much affection on his wife as she desired. He was industrious and faithful to her; treated her with every consideration, and yet she was dissatisfied because his work necessitated his remaining in his place of business longer than his wife had expected. One month after their marriage she tried to jump from a window. A few weeks later she ran to the roof threatening to throw herself into the street, and on the present occasion, she attempted to swallow lysol.

At the hospital the patient admitted that she really did not want to do away with herself. What she had planned was to arouse her husband's sympathy and thereby gain her end of having him near her most of the time. She admitted that she really was not going to throw herself from the roof and that before she had tried to jump from the window she made it her

business to have most of the members of her family in the room so that suicide would be prevented, and their sympathies would be aroused. She frankly stated that she did not swallow any lysol but put a sufficient amount of the drug on her face so as to cause discoloration and fulfill her purpose. After a few interviews with the patient, during which her entire conduct was critically analyzed, she gained some insight into her abnormal form of reaction and was allowed to go home in custody of her husband.

Case 90

A young girl 18 years of age was brought from a correctional institution after having attempted to swallow a commercial disinfectant. The history revealed that this girl was always somewhat neurotic and somewhat unstable emotionally. She showed a precocious sexual development and wanted to remain out late nights. Her parents had to reprimand her on several occasions. Twice she had swallowed tincture of iodine after her parents had admonished her for staying out late. Her act was precipitated by her father reprimanding her in the presence of a young man. She no longer would listen to her people and her father placed her in a correctional institution where she found a rather rigid régime, and she could not tolerate the discipline and she therefore attempted suicide.

Case 91

A young woman 30 years of age was brought to the hospital after having swallowed tincture of iodine. She was a rather sensitive and unstable woman, who had spent most of her time in her home; always craved

a good deal of attention and was regarded more or less as the " baby of the family." She had been going out with several men and became attached to one of whom the family did not approve. On several occasions her parents strongly objected to her association with this man. On one occasion this man was met by her people and was told not to continue in his attention to the patient. Her suicidal attempt was precipitated by a quarrel which she had with her eldest brother who insisted that she give up this man's friendship.

In the hospital, the patient spoke freely of her difficulties; stated that she had been intimate with this man; that she really loved him and that she could not live any longer without him; that since her parents objected so strongly she thought that life was not worth while, and therefore took the iodine. After several interviews with the patient, she gained considerable insight into her case, and decided that she could manage her affairs more successfully, and was finally allowed to go home in custody of her parents.

The last three cases represent suicidal attempts in hysterical individuals. As a rule, hysterical people do not attempt suicide in order to actually terminate their lives, but rather as the result of a strong emotional tension which impels them to commit the act in an effort either to gain a desired end, or to flee from a painful situation. The methods usually employed are such as rarely to cause death. Most of the hysterics swallow tincture of iodine because it is the most available drug at hand, and furthermore because it usually results in the collection of a crowd among whom invariably there will be a few ready to offer misguided sym-

pathy. Occasionally they attempt to inhale illuminating gas, making sure, however, that there are others in the room who will detect the odor and frustrate their suicidal attempt. Sometimes their plans are miscalculated, and their knowledge of the action of drugs is nil, and their suicidal attempts are successful. Thus one hysterical girl swallowed a solution of bichloride of mercury which caused her death. She made one previous attempt at suicide by swallowing a tablet of bichloride of mercury which she immediately vomited. This time she swallowed a solution of bichloride of mercury and could not vomit all of it. This resulted in her death. Another hysterical individual who had on several occasions cut the tendons of his wrist finally succeeded in committing suicide by severing his jugular vein. His knowledge of anatomy was quite limited, and he succeeded in his suicidal attempt.

Case 92

A girl 13 years of age was brought to the hospital having swallowed iodine. The history of the case revealed the fact that she was a rather bright and attractive child; got along very nicely and was well liked by her teachers and friends. One year ago, she was one of the organizers of a club whose leader was a well-known Socialist. These young children were initiated into the teaching of social inequalities, and they were constantly told of the grave injustice done to the laboring classes by the capitalists. Because of her fluent speech and attractive personality, she was

the president of the club. She neglected her school work, and paid greater attention to the duties that were connected with the club. During the local campaign she would speak on the street corners. Her teachers repeatedly warned her that her work was becoming very poor in quality and that she would not be graduated if she were to continue this low standard of work.

The child misinterpreted the teachers' warnings and defiantly disregarded them. She openly stated that the teachers belonged to the capitalistic class as they did not work; furthermore she laughed at some of the doctrines taught in school and on several occasions compared her school teachers with the leader of her club who happened to have been a member of the State Legislature. She idolized her leader, and his teachings were divine inspirations to her. When the school term closed, she failed to receive her diploma; brooded over it, and swallowed the iodine.

In the hospital, the patient continued her attitude of hostility towards the general organized system of society; stated that she swallowed the iodine to show them that she was ready to sacrifice herself in behalf of her principles; that since she was a Socialist nobody really cared for her and that she really cared nothing for her teachers' opinions, and she wanted to show them that her own doctrines were much firmer than those held by her teachers at school. After several interviews by different members of the staff, she finally was made to see the fallacy of her reasoning, and the unhappiness which her acts had caused her teachers, her family and herself. She finally acknowledged that there was a possibility of her having entertained incorrect ideas, although she would not fully admit that such was the case. She stated that instead of partici-

pating in games and wholesome diversions, she would read books and pamphlets in which were depicted the injustices done to the working classes by their employers. She often in her reveries pictured herself participating in reforms that would liberate the working masses and she would invariably see herself in these reveries as the leader of such movements and the heroine admired by millions.

This case represents an attempt at suicide in a child. Prussian statistics compiled in 1910 showed that there was on an average one child suicide a week. One-fourth of their group of cases was caused by mental disease. One-third of the children committed suicide in fear of punishment for some offense at school, or insufficient successes at school. They concluded that the causes for suicide lay in situations that had a reason at home rather than in school. Often these children would in their infantile manner of behavior attempt suicide in an effort to punish those interested in them for an imaginary injustice received at their hands, or as an expression of their innocence of an act for which they may have been reproved.

In addition to the people who actually commit suicide, there are many more who at one time or another are more or less inclined to take their own lives. That they do not yield to this impulse is due to the strength of the instinct of self-preservation, to ethical considerations, such as unwillingness to leave a dependent family, etc.; and to social pressure, which has always been exerted to prevent the individual from taking his own life. The psy-

choanalyst would describe many accidents as abortive attempts at suicide in cases in which other motives repress the conscious suicidal wish. The accident thus becomes an expression of the unconscious desire for death, and is a compromise between the conflicting motives of the individual.

Suicide, then, in the vast majority of cases, is an expression of a strong emotional state, in which the individual is compelled to take his own life. In a large number of cases, this is due to a real condition of mental aberration, the Manic-Depressive reaction predominating. Occasionally it results from responses to false or misinterpreted sense perceptions resulting from alcoholic indulgence, or accompanying other mental disease processes. Frequently it may be an expression of a flight from reality in which the individual utilizes the most extreme form of conduct in his effort to solve a trying situation. It must be remembered that in the face of extreme stress, an individual apparently in a normal mental state may calmly plan and execute suicide. The application of the generally accepted mental hygiene principles in dealing with people out of employment, social misfits, and those who lack opportunity for expression of their normal instinctive tendencies for social intercourse will materially lessen the number of suicides.

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Chapter XI

EDUCATIONAL MALADJUSTMENTS

Distribution of abnormalities among children and the adult population.
Statistical data concerning pathological school children.
Comment on these figures.
The mentally defective child as a problem in school; case studies.
Careful diagnosis necessary in some cases of apparent mental defect.
The epileptic child as a case of educational maladjustment.
Congenital lues a cause of abnormal behavior in school children.
Post epidemic encephalitis syndromes in school children.
Mental disease and abnormal conduct in school.
The psychoneurotic child; his abnormal personality and behavior.
The problem of the neurotic child.
Adolescence as a factor in educational maladjustments.
Emotional conflicts, due to pathological home situations, in children who show conduct disorders.
The governess as a source of emotional disturbance.
The abnormal behavior of the unwanted child.
A case showing many sources of maladjustment.
Necessity for careful individual study and treatment of school children.

ANY attempt to outline the causes and conditions which unite to produce conduct disorders would be sadly incomplete without a consideration of maladjustments which appear in the school system. The criminals and delinquents in

our penal and correctional institutions at one time or another passed through the schools of the country, and from the children who are now enrolled in the schools will come the next group of delinquents and criminals who will fill these same institutions. This does not imply that all the children who find it difficult to adapt themselves to the requirements of the educational system will inevitably become behavior problems in a more serious sense as the time goes on. On the contrary, many individuals who never succeed in making a satisfactory adjustment during their school history do become socially adapted and find their vocational level successfully. An investigation of the causes of maladjustment in school children, however, will show that their behavior difficulties are produced by the same factors which operate in the causation of more serious conduct disorders of later life.

In the preceding chapters, we have traced a great deal of abnormal and anti-social behavior to mental and physical diseases, emotional conflicts, defective intelligence, abnormalities of personality make-up, etc. It must not be supposed that these are limited to the adult population, for in reality they often have their origin in the period of childhood. In fact, recent studies of school children indicate that approximately 15 or 20% may be classed as definitely pathological. Of 4,839 public school children in Maryland, who were given medico-psychological examinations in the course of the mental hygiene survey of the state,

only 79.7% could be considered to fall within the range of normalcy. In the recent mental hygiene survey of Cincinnati, only 86.8% of the 4,326 school children examined were diagnosed as normal. The diagnostic data included in both these studies are illuminating, and the following tables are therefore reproduced:

PERCENTAGE DISTRIBUTION OF MENTAL DIAGNOSES OF 4839 PUBLIC SCHOOL CHILDREN IN MARYLAND.

Diagnosis	*Per cent*
Superior	9.1
Normal	55.5
Dull normal	15.1
Borderline mental defect	3.7
Mental defect	3.4
Character defect	10.1
Psychopathic personality	1.9
Psychoneuroses and neuroses	0.7
Mental disease or deterioration	0.2
Epilepsy	0.2
Endocrine disorder	0.1
Total	100.0

(Reproduced from the Report of The Maryland Mental Hygiene Survey, page 60, Table XX.)

MENTAL DIAGNOSES OF 4326 SCHOOL CHILDREN IN CINCINNATI.

Diagnosis	*Number*	*Per cent*
Normal	3003	69.4
Dull normal	741	17.1
Subnormal	208	4.8
Borderline mental defect	86	2.0
Mental defect	86	2.0
Pre-psychopathic	69	1.6
Psychopathic personality	47	1.1
Nervous and neurotic	36	0.8
Question of epilepsy	3	0.1
Epilepsy	9	0.2
Endocrine	29	0.7
Unascertained	9	0.2
	4326	100.0

(Reproduced from the Report of The Mental Hygiene Survey of Cincinnati, page 62, Table 35.)

While these figures are startling enough, they do not include the whole number of maladjusted children in our schools. These are only the gross maladaptations. More careful investigation will find among the children who appear to be normal upon a superficial examination, individuals who are suffering from emotional conflicts, pre-delinquents, and other maladjusted types. Thus, intensive studies will show a decided increase over the figures quoted above in the number of children deviating from normalcy, although some of these may be less markedly pathological than those included in the preceding tables.[1]

[1] The research which is being carried on under the direction of Dr. V. V. Anderson of the National Mental

The most easily recognized type of educational maladjustment is that due to mental deficiency. The feeble-minded child stands out from his classmates at once by reason of his inability to learn new material and to keep pace with the other pupils of his age. He is known to the teacher as a chronic grade repeater, and often as a disciplinary problem also. His inability to understand what is being taught in the class makes him restless and mischievous. He is apt to dislike school intensely and is then a frequent truant. Some children of this defective type show much improvement in conduct when transferred to a class specially adapted to their needs, in which they are given a minimum of academic work and are allowed to devote most of their time and energy to manual training.

CASE 93

Jimmie C. was a typical disciplinary problem of this kind. He was a fifteen-year-old boy who had been tried in one school after another but had never gotten along anywhere. He was constantly in fights with other children, swore at his teachers, and never applied himself to his lessons. His family history was negative except for a mother who was a " nervous " type. The physical examination also showed nothing of significance. There was an account of a bad fall at the age of 7, with a severe injury to the head, but an X-ray showed no evidence of fracture of the skull.

Hygiene Committee by the Monmouth County Mental Hygiene Clinic among the public school children of Monmouth County, New Jersey, will soon afford interesting statistical data on this point.

The neurological examination was also negative, except for slight exaggeration of elbow, wrist and knee jerks. The blood Wassermann was negative.

The psychometric examination gave more significant findings. On the Stanford-Binet,[1] Jimmie's mental age was only 10 years 2 months, while he had a chronological age of 15 years 6 months. (This would make an I. Q.[2] of 65.) This rating was strongly indicative of mental deficiency. The school record was in harmony with the evidence of the intelligence test. At the age of 15½ Jimmie was only in the fifth grade; he had repeated every grade up to that time.

In expressing his desire to leave school and go to work this boy showed more wisdom than teachers who expected a pupil with his limited capacity to achieve the standards of his classmates. Although unable to profit by extensive academic training, Jimmie could undoubtedly have been taught to do some simple manual work and have formed habits of industry which would have enabled him to become a self-supporting member of the community instead of developing habits of idleness and irresponsibility.

Case 94

Another boy who came into the children's court because of truancy presented a somewhat similar picture. The family history was negative and the physical examination practically so. The developmental history gave a record of spinal meningitis at the age of

[1] See Chapter III for a description of this test.

[2] I. Q. — *Intelligence Quotient*. This is simply the ratio between the chronological and mental ages. It is obtained by dividing the mental age by the chronological age. In adults, the I. Q. is always calculated on the basis of an arbitrarily assigned chronological age of 16.

13 months. Previous to the onset of this disease, the boy had learned to walk, but he now stopped and did not begin again for three months. When sent to school he was unable to make any progress. He repeated grades continually, and when brought to Bellevue was only in the third grade, although he was 15 years of age. He disliked school, and constantly played truant. He would frequently stay away from home until midnight. The father found it impossible to give the boy proper supervision. (The mother had died of influenza.) The boy was sent to the truant school for a period of 7 months, but his conduct did not improve after his release.

The psychometric examination gave this boy a mental age of 8 years 4 months. His chronological age was 15 years 4 months. (I. Q. 54.) He was diagnosed as a case of mental deficiency induced by his infantile attack of meningitis. In view of his defective intelligence his poor school progress could only be considered natural. He was recommended for a period of training in a school for the feeble-minded.

Even when the mentally defective child is placed in a special class he does not always adapt himself to this simplified routine.

Case 95

A boy of 11 years 10 months was brought to the hospital from the children's court. The charge was assault. The findings and story of the case were as follows:

A physical examination of the boy revealed characteristic stigmata often associated with mental defect. The upper lip was enlarged and protruding, the upper

jaw malformed, and the tongue protruded along the midline. The boy's developmental history was also typical of mental deficiency. He was retarded in physical and mental development, and had a history of convulsions during the infancy period. At school he was always backward and was finally placed in an "ungraded" class, in which the mentally defective children of the school were segregated and given a curriculum suited to their limitations. In this class he adjusted himself to the schoolroom routine fairly well until he got into a quarrel with another boy over the possession of a piece of wood. He was holding a razor blade in his hand at the time, and in the course of the struggle the other boy was cut on the wrist. The charge of assault and arrest followed, and the commitment to the hospital for observation. The psychometric examination showed a mental age of 6 years 2 months. His chronological age, as stated above, was 11 years 10 months. (This made the I. Q. 52.) In view of his obvious mental deficiency he was returned to court with a statement to the effect that he could not be considered responsible for the act with which he was charged.

There are cases of mental deficiency among school children which may be traced to some disturbance in the glands of internal secretion. In these cases, improvement is to be anticipated if proper medical treatment is given.

Case 96

A boy was sent to the clinic by his teacher because of his nervousness and inability to learn. He was reported to have been restless all his life, moving about

continually even in his sleep. His muscles twitched continually, and he did not sit still but was constantly moving about in his chair, even when being examined. The psychometric examination gave him a mental age of 6 years 4 months. His chronological age was 8 years 6 months (I. Q. 74). This intelligence rating would rank him in the borderline class of mental defectives. Physically, he showed clinical signs of thyroid insufficiency. He was placed on thyroid extract over a six-month period, and showed constant improvement, becoming less nervous and getting on better with his lessons at school.

Case 97

In another case of glandular imbalance the pituitary gland was involved. This was in a girl who was excessively overweight. She also showed other clinical signs of endocrine disturbance, and the X-ray revealed a typical dyspituitarian skull formation. Her developmental history gave an account of retardation in physical and mental development. She did not begin to walk until she was 3 years of age, and did not talk until the age of 4. Her teeth did not appear until she was 2 years old. There was a history of convulsions during the first three years of infancy. Her appetite was abnormal, especially her craving for sweets. Menstruation was precocious, being established at the age of 10. For a long time this girl would not cooperate on the psychometric examination. When finally persuaded to respond to this test, she made a mental age of 4 years 6 months on the Stanford-Binet in contrast to her chronological age of 11 years. (Her I. Q. was 40.) She was sent to an institution for mental defectives, where she could receive treatment for

her glandular disturbance and at the same time be given proper educational training.

Occasionally we find a case in which we hesitate to make a definite diagnosis of mental deficiency, even when the rating on the psychometric examination is indicative of feeble-mindedness. This is especially applicable in instances when we are considering very young children in whom there is hope for improvement with change in physical condition or environmental circumstances. We quote two such cases in which a definite diagnosis of mental deficiency was considered unfair:

CASE 98

A boy of 12 years 4 months, who was brought to the hospital for observation, achieved a mental age of 8 years 6 months on the Stanford-Binet. (I. Q. 68.) He was in the ungraded class at school, had fallen in with some bad boys in his neighborhood and been arrested for stealing. This sounded like a typical case of mental deficiency, yet there were other factors which caused one to hesitate before making a hard and fast diagnosis of innate mental defect. His development had been normal during the infancy period. He had walked and talked at the usual age. His attendance at school had been irregular, and he had never been to school until 9 years of age. This brief and intermittent school attendance would in itself partly account for his inability to read and write. The physical examination revealed the existence of a chronic heart disease, which reacted on his whole personality, causing an attitude of listlessness and depression. It was

obvious that he put forth little effort on the psychometric examination, and that the Stanford-Binet rating quoted above could therefore not be accepted as unquestionably accurate. A diagnosis of mental retardation was made, and the boy was transferred to the medical ward for treatment for his heart condition.

CASE 99

An eight-year-old boy was committed from the court for observation. He had been taken to court by his father and stepmother, who complained that he ran away from home continually and asked to have him committed to some institution. On the psychometric examination this boy rated as 5 years mental age. With his chronological age of 8 this gave him an I. Q. of 62. The physical examination was negative. His developmental history showed some retardation in both physical and mental development, he was slow in learning to walk and talk, etc. There was an unfortunate home situation, however, which was to be considered as well as these other facts. The boy's mother had died when he was a small child, and the stepmother was so cruel that the neighbors often threatened to interfere in his behalf. It was not strange that under these circumstances the boy often ran away from home. He was recommended for institutional care more to free him from the intimidating presence of his stepmother than because of certainty that he was as defective as the tests indicated.

It is manifestly unfair to any child to make a definite diagnosis of mental deficiency if there are existent any factors which offer hope of a temporary condition of mental retardation due to other

causes than innate intellectual defect. In such doubtful cases no effort should be spared to bring about improvement before the child is disposed of in the special class for defectives or in an institution for the feeble-minded. It is for the avoidance of incorrect diagnoses in such doubtful instances that we insist upon a consideration of the physical condition, home surroundings, etc., of our retarded children as well as the rating of the psychometric examination.

A certain number of maladjusted children will be found to be suffering from some definite disease such as epilepsy. The epileptic child may have such a severe form of the disease as to make continuation in school impossible, he may be gradually deteriorating intellectually as a result of his attacks, or he may have the disease only in the form of psychic equivalents which are manifest in some kind of misbehavior not readily recognizable as of epileptic origin.[1] It must be borne in mind that these cases of epilepsy in both school children and adults can be ameliorated to a marked extent by proper medical treatment. Under favorable conditions, the epileptic child responds to therapy very well, and is enabled to go on with his school and eventually to enter upon some vocational pursuit.

[1] A case of this type has been given in detail in Chapter VIII, showing a school maladjustment resulting from epileptic manifestations, which long remained unrecognized.

Case 100

One school boy had had epileptic attacks since the age of 7. These attacks occurred every six or eight weeks, and interfered a great deal with his school work. At the age of 16, when he left school, he had only reached the fourth grade. His mental age on the psychometric examination at this time was only 9 years 5 months. (I. Q. 58.) He had been in charge of the Catholic Guardian Society for some time, as both his father and mother were confined to hospitals for the insane. His epileptic attacks interfered with his adaptation even more after leaving school than had previously been the case. He could always go back to class after having an attack, but he could not retain a job under these circumstances. When his school career was over, therefore, it became necessary to commit him to a state colony for epileptics.

Case 101

In another case, the result was entirely different. This was a bright child who was in the second year of high school at the age of 13 years 8 months and whose mental age on the Stanford-Binet was 14 years 8 months (I. Q. 107). He began to have epileptic attacks at the age of 12. Previous to this he had been one of the best pupils and had skipped one or two grades. The epileptic attacks which he developed were severe enough to interfere with his school progress rather seriously. He came to the clinic and was given medical treatment over a period of three months. He was first tried on sodium bromide, then on luminal and finally thyroid and later pituitary. The pituitary was found to be the most effective medication in his

case. After this treatment he was able to continue his work free from attacks.

Cases of congenital lues (syphilis) in school children may cause a gradual deterioration in the quality of the school work, or may be manifest in misconduct. The former condition is due to gradual development of the disease in which vision, hearing, speech, etc., become affected.

CASE 102

An eleven-year-old boy was sent to the hospital for treatment for congenital syphilis. His mother was in a hospital for the insane suffering from general paresis. The boy rated as of normal intelligence on the psychometric examination, and although he was only in the third grade at school he had never repeated any grades. For the past year or two, however, his parents and teachers had noticed a gradually progressive deafness and increasing impediment of speech. The boy himself made no complaint except for frequent headaches. He became irritable and restless, and was unable to concentrate on his studies. His eyesight began to give him some trouble. The physical examination gave him a four plus Wassermann; there was a fine tremor of hands and tongue, and a noticeable slowness and hesitancy of speech. He was diagnosed as suffering from congenital lues and medical treatment was recommended.

CASE 103

Another child whose failure in school could be traced to a syphilitic inheritance was a little girl of eleven. Her father had been treated for this disease, but had

considered himself cured, and had never told his wife of his infection. The child got on at school very well at first, and succeeded in reaching the third grade. Then she began to get inattentive, grew dull and stupid, and ceased to talk clearly. By the time she was brought to the hospital, she was unable to make herself understood when she spoke, and her attitude was one of extreme dullness and stupidity. Physical examination revealed a faint rash on chest and shoulders, stiffness of ankle joints, slightly spastic gait. Blood Wassermann was four plus. All these clinical signs indicated congenital lues. The child was given salvarsan over a period of several months. Her condition gradually improved; her speech became clearer, she began to take an interest in the games of other children on the ward and was finally permitted to go home with her mother.

Syphilitic infection in children may take the form of juvenile General Paresis. When this occurs, marked conduct disorders are apt to be developed, as in the cases of adult General Paresis reported in Chapter VI.

Many cases of conduct disorders in school children may be traced to mental disturbances following attacks of epidemic encephalitis (sleeping sickness). Children who return to school after having this disease often are restless and troublesome from a disciplinary viewpoint. Sometimes they show improvement with the lapse of time, and their mental functions are restored. This was true of the following case:

Case 104[1]

A boy, aged nine years. Chief complaint, insomnia at night and somnolence during the day. Unable to learn well. The family history, both maternal and paternal, was good for two generations back. They were of German descent.

The patient was of normal birth; he had had none of the other diseases of infancy except measles. He was considered an average child, learned easily and had acquired a good knowledge of both the German and English languages. When the United States entered the war, in 1917, the father, who, although an American citizen, was residing in Germany, was held as an alien enemy and the family suffered great privations. They lived close to the fighting zone and were in several air raids. The greater part of the time they were compelled to live in a cellar.

At the conclusion of the war, the family migrated to America. The child got along very well with other children and made an excellent adaptation to his new country.

In January, 1920, the patient was taken ill suddenly with fever and restlessness and, later, somnolence. He slept for six continuous weeks. At times he was in delirium, in which he would call to his mother and point at the ceiling, saying there were aeroplanes and Zeppelins around and asking her to remove him to a cellar.

At the end of six weeks the fever gradually declined and he began to sit up and his sensorium gradually cleared. In March, his mother took him to the Cats-

[1] Reported by Leahy and Sands in New York Medical Journal, Aug. 3, 1921.

kill Mountains, where he remained for two months. After his return from the mountains the patient had become quite restless; he became rather disobedient, would not mind his mother, and had a ravenous appetite. He could not sleep at night and would prevent his mother from sleeping. During the daytime, however, he would often go to sleep, even while standing. It was impossible for him to learn readily and in talking he would frequently interpose English words when speaking German and vice versa. He remained indoors the greater part of the day and would not associate with the other children.

In January, 1921, he was admitted to Bellevue Hospital. He was well developed and well nourished, and generally in good physical condition. His heart and lungs were normal. There was no neurological disturbance.

Mentally, he was at first rather quiet, somewhat forgetful, did not know anything about his clothing, appeared rather restless, and seemed to prefer to be by himself. He would frequently interchange his German and English when speaking. He did not associate with the other children in the ward. He did not seem to be pleased with his examination, coöperated very poorly, and showed considerable irritability. His mental tension was definitely lowered; his memory and retention were somewhat impaired. He showed definite attention disorder and could not hold his attention on one subject for any length of time. Intelligence examination by the Stanford-Binet on January 28th showed that he had at that time a mental age of 6 years 4 months. His chronological age was at this time 9 years 9 months (I. Q. 67). The psychologist, however, wisely added that the patient ought to be retested later, as in view of his personal history it was quite possible that

his difficulties might be due to some other cause than an intellectual defect, and that the mental age and the intelligence quotient obtained on this test were probably incorrect.

The patient was immediately placed with the other children. He required no sedatives nor any milder therapeutic measures. He was kept from sleeping during the day, was allowed to attend his school both in the morning and afternoon and was placed upon occupational therapy. He gradually became brighter, liked to associate with the other patients, and slept very satisfactorily at night. His condition, though far from satisfactory, indicated that he was on the way to greater improvement.

A mental test, done on March 11th by the same psychologist, placed the mental age of the patient at 7 years 10 months. His chronological age was now 9 years 10 months (I. Q. 80). A supplemental note by the psychologist stated that the gain of one year and six months in his mental age was accompanied by considerable improvement, both in his attitude and general conduct. On the ward, he was less timid and talked more freely. Shortly after this he was able to go home with his parents.

Case 105

A girl of 8 was brought to the hospital suffering from a post-epidemic encephalitis syndrome. She was of normal intelligence, and was in the second grade at school. She was a problem to her mother and teacher, because of her stubbornness and tendency to run away from home and school. Her irritability and restlessness developed after an illness which was diagnosed as influenza at the time, but was more probably epidemic encephalitis or sleeping sickness, as it had the usual symptoms characterizing that malady.

CASE 100

One of the boys of the observation ward might have been expected to develop some form of post epidemic encephalitic disorder, for his heredity indicated a predisposition to instability. His father and mother were both alcoholic. The mother was immoral and separated from the father. One of his brothers was defective mentally. The boy lived with his father and stepmother. The latter was a drug addict, and provided a home that was anything but stabilizing for the child. His developmental history was negative except for an attack of meningitis in early childhood. Strangely enough, Joseph seemed to suffer no ill effects from this disease, but got on very well in school, reaching the fourth grade at the age of 10 years. At this time he became ill with epidemic encephalitis. The attack lasted three weeks, during which time he was delirious for several days, saw double, etc. Since this illness he had been unable to get on in school. He felt drowsy and had no ambition, although his illness had occurred a year and a half ago. In school he was not able to get along with other children, but teased them and beat them. He also began to steal. At the hospital, the physical examination was practically negative, and the psychometric examination rated him as of normal intelligence. The only explanation for the change in his personality make-up and conduct was that he was suffering from a post-encephalitic syndrome.

Mental diseases of all types also have a share in the production of abnormal behavior in school children. A sudden failure in the hitherto satisfactory pupil, accompanied by a change in per-

sonality traits and behavior is always ground for the suspicion that the child is developing a mental disorder of some sort. Manic-Depressive attacks and the early symptoms of Dementia Praecox occur to some extent among school children, especially in the upper grades and high school. The following case may be cited in this connection:

Case 107

A certain boy who had entered school at the age of 6 made very good progress until the age of 11, when he failed to pass the fifth-grade work, and was forced to repeat that class. For the two years previous, he had been growing increasingly irritable, and had developed a tendency to temper tantrums. He now became entirely unmanageable, stayed away from school and from home, began to take sums of money from his mother and even displayed assaultive tendencies. He was finally brought to the hospital after having attempted to commit suicide. He was found in his room with the gas turned on. He explained that he had decided upon this course because he was tired of hiding from the truant officer. His attempt to take his life was serious enough; he was partially unconscious when discovered.

This boy was of normal intelligence, but was suffering from a depression. His psychotic state rendered him liable to do injury to himself or others. On the ward he was unmanageable, would give way to temper tantrums without obvious reasons and would attack the other children. His heredity probably gave him a predisposition to instability. His father had been so unstable and bad-tempered that the mother was

unable to live with him. The boy was diagnosed as suffering from an undifferentiated depression. Against the advice of the physicians, his mother insisted on taking him home.

Case 108

A boy of 17 was brought to the hospital by his mother. He had a history of petty thieving, and was reported to have repeated the eighth grade three times, although previously able to get on well in school. He refused to work, played only with small children, etc.

The rating on the Stanford-Binet gave the boy a mental age of 12 years 10 months (I. Q. 80). The performance ranged from a basic year of seven to a group limit of sixteen years, with several failures at the twelve year level, almost complete success at the fourteen year level, and then a sudden cessation of successes with only one correct response at the sixteen year level. This uneven distribution of performance was not in itself sufficiently erratic to excite suspicion, were it not for the fact that it was accompanied by a noticeably indifferent attitude with apparently no affective reactions. This dreaminess and indifference would make one suspect some incipient mental disorder of the dementia praecox type.

The boy's history was also suggestive of some mental trouble. He had always been seclusive and never played with other boys, but sat by himself and read. Up to the eighth grade he had been fairly successful in his school work. When called upon to explain why he played only with small children, he replied: " They are not strange children; they are my little cousins." He stated that he stole money from his aunt because he " wanted to sit in a box seat at the

theatre." He appeared not to realize the inadequacy of these explanations, which showed a lack of insight on his part. He gradually grew worse, and was finally diagnosed as Dementia Praecox.

Some children of unstable mental make-up develop psychoneurotic symptoms which interfere with their school adjustment. Often these pupils are bright enough intellectually, and would get on very well in school but for their psychoneurotic tendencies.

CASE 109

One psychoneurotic boy found it difficult to adjust himself to a new school environment. He had been in the Boston schools until 12 years old, and had gotten on very well. Just as he was entering the seventh grade, his family moved to New York. The boy thus had to enter a new school and adapt himself to a new group of classmates. He complained that the boys teased him because he was Jewish, and that the teacher called him a Bolshevik. He began to stay away from school, and his parents were unable to make him attend. He was adjudged a case for the truant school, but the school physician intervened in his behalf, and asked that he be sent to the hospital for observation.

The boy was found to be of average intelligence. His mental age on the Stanford-Binet was 13 years. (Chronological age 11 years 11 months, I. Q. 109.) The physical examination was negative. He was cheerful on the ward, but for a long time refused to discuss the subject of school. It was finally found that he associated all sorts of fears with his school situation. He was afraid of his teacher, was afraid that he could not accomplish the work assigned, felt

that the other boys did not like him, etc. He longed to be back in the old familiar places. An attempt was made to induce him to rationalize his attitude, and he was sent back home to make a second trial at adjustment.

The child who suffers from a manic-depressive attack or from psychoneurotic symptoms is often only temporarily maladjusted. We may hope for his improvement and return to the school environment to complete his school work in a satisfactory manner. There are other cases of misconduct among school children where the outlook is not so hopeful. These are the types whom we designate as psychopathic personalities, and whose erratic behavior is a constant source of difficulty to parents and teachers.

CASE 110

A 12-year-old boy was brought to the hospital for examination as to his mentality, with a history of truancy, lying, stealing and general incorrigibility. He was found to be of normal intelligence. The physical examination was negative. There was no history of significant hereditary characteristics, and the home environment appeared to be a normal one. This child had always been unstable and troublesome. He would cry easily, but always forgot his promises to do better. He took money from his parents and from the teacher's desk. At times he would run away and be gone for several days in succession. He had always been restless and over-active, with a history of talking in his sleep. He read a great deal, and seemed to be imaginative. He told of stealing money to go to the country

because he wanted to go to work on a farm. In spite of his intellectual capacity he had had to repeat three grades in school. At the age of 12 he was in the sixth grade, having made up the work for one grade in summer school. When settled down to work he could accomplish his lessons satisfactorily, but his peculiar personality seldom permitted him to do this. There seemed little indication that he would ever adjust himself to the requirements of the school. He appeared to have no realization of the seriousness of the habits he was forming. He cheerfully admitted various thefts, explaining that he didn't think the things would be missed. He seemed to feel that his running away was sufficiently explained by his desire to go to the country.

Case 111

Allan D. was another psychopathic child. Although of average intelligence, his inattention and lack of application had caused him to repeat several grades so that at the age of 16 he was only in the eighth grade, and had just failed to pass this. He had never been truant except on one occasion, but was guilty of plenty of misconduct along other lines. He was known to lie and steal and was suspected of sex assaults on his 6-year-old brother and on a little girl in the neighborhood. His mother considered that he always had been peculiar. She said that he was wilful and disobedient. His father had been untruthful, headstrong and immoral. His stepfather had been very kind to the boy. Allan himself admitted this, and confessed that whenever he said other things about the stepfather he was not truthful. The boy claimed to have a deep affection for his mother, yet

he did not hesitate to do things to grieve her. He seemed entirely lacking in moral responsibility. His physical examination was negative. The only explanation for his conduct was his psychopathic personality make-up.

The neurotic child is often a problem in school, although a less serious one than the psychopathic type. Neurotic children are apt to be irregular in attendance on account of illnesses, and are so sensitive and shy in school that it takes an exceptional teacher to get them to do themselves justice. Out of their poor physique and sensitivity develops a lack of self-confidence and a feeling of inferiority which interferes with their success in class work to a marked degree.

Case 112

June F. was 16 years of age. She was a problem to her teachers because she was not doing well in her school work and because of her peculiar habits. She was felt to be a slight disciplinary problem because she did not hesitate to disturb the routine of the class-room in order to call attention to herself. June's intelligence was found to be only average, while she was attending a school in which most of her classmates ranked as decidedly superior in intelligence rating. Thus at the outset she was under a heavy handicap. She might have overcome this by diligence and application but for her sensitive and neurotic make-up.

At the beginning of the examination June was exceedingly antagonistic. Unwittingly, she betrayed her

sensitiveness and feeling of inferiority at the start by inquiring if she were considered a dummy that it was felt necessary for her to have an interview with the school psychologist. After some discussion of her trouble with French and other subjects, she became more confidential, and admitted that she had always been over-sensitive, that she used to cry at the slightest criticism, and that her attempts to overcome this tendency had resulted in the assumption of the bold and indifferent attitude which was criticized by her teachers. She went on to explain the peculiarities of conduct which her teachers had mentioned by saying that she hated to do things just as everyone else did because she desired to be original. Her seclusiveness and lack of comradeship with the other girls she attributed to her sensitiveness; she hesitated to make advances to the girls in this new school lest they repel her friendliness.

This girl needed to rationalize her attitude to some extent. She was led to understand the nature of her feeling of inferiority, and to see that it was a temperamental trait, and that she need not fear that others would underestimate her as she did herself. She was told that she must give the other girls a chance to know her and like her, as they could not help doing once she permitted them to become really acquainted with her actual self. Her teachers were advised to give her praise and encouragement, and to overlook her peculiarities and avoid calling attention to them as much as possible. Private tutoring in French was also advised for June until she had caught up to the standards of her new school.

Case 113

Charlotte S. was another neurotic child. She was rather dull intellectually, and her mother brought her to the physician as much on account of her backwardness in school as for treatment for her nervous condition. Charlotte was exceedingly restless. She could not sit still during the examination, and her mother said the same thing occurred wherever she was. At the theatre she would bite her handkerchief, etc. Charlotte's early developmental history showed little of significance. She walked and talked at the usual time. There was a history of walking and talking in her sleep, however. Menstruation was established at the age of 12, but had been very irregular. (The girl was now 13 years 11 months of age.) Charlotte had had a great deal of illness. She had diphtheria twice, had whooping cough and pneumonia at the same time, and had had measles. She had been operated on for appendicitis, and had had tonsils and adenoids removed. She had had a great deal of trouble with her nose and throat and frequently had hemorrhages from this source.

On the psychometric examination she achieved a mental age of 11 years (I. Q. 79). In view of her nervousness and evident hesitancy in responding, this rating may not have represented her best effort. She had a tendency to become confused when questions were put to her, and much tact and patience were necessary to persuade her to attempt a solution of many of the problems. It was found that she was often able to solve problems to which her initial response was " I don't know " when she was encouraged to attack them. One might suspect from this that her backwardness in school was partly due to her nervous-

ness and lack of self-confidence. She certainly appeared too dependent on her mother for a girl of her age, constantly looking to her for advice as to how to answer questions, etc.

Physically, this girl showed some clinical signs indicating the possibility of glandular imbalance. There was also a question of visual defect. It was felt that much might be done to overcome her nervous symptoms through attention to her physical condition and establishing a more normal relationship with her mother. She was sent for a thorough optical examination, and was started on medical treatment for her nose and throat and for her probable endocrine disturbance. Her mother was made to realize the necessity for the development of independence and responsibility in her daughter, and her coöperation for this purpose enlisted.

In any study of educational maladjustments, the factor of adolescence must not be overlooked. The adolescent period is normally one of restlessness and thirst for new experiences, and carries with it a rebellion against authority which is only an expression of the desire to become independent and assume responsibility. Without these impulses the boy and girl would remain too long under the parental protection, and seek to avoid the cares and responsibilities of adult life. Yet these adolescent activities, necessary though they may be to the development of the personality, are not always in harmony with the school routine, and may be a source of some trouble to parents and teachers.

Case 114

One girl of 13, of superior intelligence, was a problem to her teachers because she would not apply herself to her studies. When interviewed she was perfectly frank about the matter. She announced that she considered school a bore, that she hated being inside studying when she might be out doing something every minute. The only kinds of books she enjoyed reading were detective stories, because in those "something happened." She liked to indulge in stunts which gave her a thrill of excitement. She thought it would be fun to burglarize a house, just to see if she could do it, and then return the things she had taken, of course. She was proud of the fact that none of her elders could restrain her. She boasted that she could make things so unendurable for her governesses that her parents could not find one who would stay long. All this was not conducive to study, but was a natural adolescent phase, for youth craves excitement and adventure, and is loath to be confined to books. There was nothing to do but let her naturally outgrow this stage of her adolescence. Her failures in school did not worry her, because she was fully conscious of her intellectual ability, and knew that she could easily maintain the standards of her class whenever she tried to do so.

Case 115

The desire to escape parental restraint built up a love of horseback riding in one girl of 14 so that she let this pursuit interfere with her studies. She had always had governesses who accompanied her wherever she went, except on her rides. As she expressed it,

if she came home with a low mark either her mother or her governess kept urging her to study every minute she was in the house. A recent absence from school on account of illness had resulted in poor rank in school work for that month, after which the difficulty began. In order to escape the nagging of her mother and governess, she would get her horse and go riding for hours although she realized that she ought to be studying, and was secretly anxious lest she have to repeat her grade. The prodding of her mother and governess did not tend to alleviate this anxiety, so that the child's chief motive became a desire to escape from their authority. She became very sensitive and easily upset. It was recommended that she be sent to a school in the country, where she could have more freedom than the city life permitted. Ostensibly, this was suggested on account of the nervous state which was rapidly developing in the girl, but in reality the recommendation was made in order to give her an opportunity to enjoy a normal amount of freedom and independence.

That adolescent ideals are not always those which are conducive to high scholarship and as such would be approved by teachers, can well be imagined.

CASE 116

One girl of 15, who ranked as of very superior intelligence on the Otis Group Test, was nevertheless failing in her school work. Her physical condition was good, she had a normal personality make-up, and her home environment was excellent. The whole difficulty was in her attitude toward school. To her mind, school was simply a place to spend the time

until she should be old enough to " come out." Her chief topics of conversation were social activities, and what all the " debs " she knew were doing. She had no desire to rank high in her studies. She and her chums agreed that study was a waste of time. It was their ambition to become clever if superficial conversationalists.

Case 117

Another girl, 16 years of age, did not see why her teachers should expect her to get good marks in her studies in view of the fact that her chief interests were art and athletics. She really disliked school, because it used up so much time when she might have been painting. It was endurable only because of the gym work. She came down to the examination in her gymnasium suit, and could hardly sit still to talk, she was so eager to get back to gym. Her hair was closely cropped like a boy's in order to have it out of the way while she was performing athletic stunts. Her dreams were concerned with wrestling and fighting. Her daydreams were of the time when she would work out a technique of her own, and would be recognized as the originator of a new style of painting. It is not easy to see how this interest could be transferred to anything so prosaic as study. Perhaps a thorough psychoanalytic study would have revealed a " masculine protest " beneath the surface of this girl's mental life. The influence of an idolized teacher might be utilized to change her hopes and aspirations to some other theme. Before we turned her energy into other channels, however, we should want to be certain that she lacked real ability for artistic accomplishment, which might be her proper vocation.

Probably the largest percentage of school maladaptations go back to emotional conflicts centered around pathological family and home life. These conflicts are as many and varied as are the family situtions which create them. Some children are antagonistic to their parents, and carry their rebellion against parental control over into refusal to accept the authority of teachers. This is particularly apt to occur at adolescence, as we have stated. Perhaps the home atmosphere may be such as to develop a timid and shrinking personality in the child, and to breed a lack of self-confidence which interferes with his making the best possible showing at school. Unharmonious relations between parents may produce a feeling of unhappiness in the child, until he broods over their difficulties instead of applying himself to his work in the classroom. Almost any disturbing element in the home may become a source of anxiety and emotional disturbance in the mental life of the child, and is reflected in his behavior.

Sometimes the inability to do well in school work can be connected with a home situation which causes nervous strain and interferes with the child's regular habits of sleeping, etc.

Case 118

One girl of 14 who was not keeping up in her school work was at first a puzzle to the examiner. She was bright intellectually and there was no physical difficulty to account for her poor effort. Although not a neurotic or over-emotional type, this girl did give the

impression of being rather tense nervously. Her interest was apparently centered in her school work, and she frankly admitted that she wanted to pass her examinations and go on with her class more than anything else in the world. At last it was revealed that this child had an invalid mother. In the evening, when she should have been doing her home study, she was playing cards, etc., with the invalid in order to amuse her. Her afternoons were often given over to this duty, also. What studying she did manage to do at home was accomplished in the late evening hours when she should have been sleeping. The combination of anxiety about her mother and continual loss of sleep were interfering with her school work to a marked degree.

In other homes, the parental attitude builds up a fearfulness and timidity in the child which prevents adjustment to the school routine.

CASE 119

Adelaide was a 12-year-old girl whose mother believed in being the undisputed head of the household. Adelaide spent most of her time in school worrying about her lessons, not because she was afraid of her teachers, but because she dreaded having to carry home a poor report to her mother. Her anxiety interfered with her efficiency as a student to a marked degree. Her dream life reflected her emotional disturbance. One of the dreams she recounted was of a girl with red hair, whose mother and sisters were unkind to her. (Adelaide had red hair. She also had a sister whom she felt to be her mother's favorite child.) In the dream, the red-haired girl's mother died. Then the

girl went to live with an aunt in the country where she had a glorious time. The natural solution for such a type of maladjustment as Adelaide presents is removal from the unfortunate home situation. In her case, transference to a boarding school was recommended.

In many well-to-do families, the governess becomes the center of an emotional disturbance. The methods employed by governesses to exact obedience from their charges are often open to criticism. Fear is a favorite method of control, but it often reacts disadvantageously on the child.

Case 120

Katherine was a small child in the third grade. She was restless and mischievous in school to such an extent that she became somewhat of a disciplinary problem to her teacher. She was in good physical condition and her intelligence was distinctly superior. Her home situation appeared good at the first inspection. There was the not unusual conflict with brothers and sisters, with much mutual teasing and fighting, but this did not seem sufficient in itself to explain Katherine's restlessness in school. Indeed, one would have expected her to use up much of her surplus energy in this way.

A glance at Katherine's dream life proved illuminating. A new governess had recently entered upon the home scene. Since her advent, Katherine had been having fear dreams. Were they connected with the governess? Not openly, at any rate. For instance, she had dreamed of being alone in a great forest, when suddenly a huge owl swooped down and began to carry

her off. Another dream pictured Katherine alone in a big, dark hall, when suddenly a frightful woman jumped at her, made awful faces at her and seized her, whereupon she awoke thoroughly frightened. She reluctantly admits that she did have one dream concerning the governess in person — when she thought the governess had gone away and that she was alone with her mother and father. In this dream she felt very happy.

Repeated questioning now elicited the information that the new governess was in the habit of punishing the children by striking them, and that she had threatened them with worse punishment if they mentioned this fact. This admission was drawn from Katherine with difficulty; she always blushed and became uneasy whenever the governess was mentioned, an affective reaction which in itself was sufficient to excite suspicion as to the relations between the two. It now became evident that one source of Katherine's restless and mischievous conduct might be undue repression at home under the new régime. The recommendation in this case was of course to get rid of the governess.

There is probably no other home situation which can cause as much distress in the child as the feeling that he is not wanted by his parents.

Case 121

Christine T. was an excellent example of this. She had been placed in a boarding school by her mother, and had given the teachers much trouble by running away. She was slightly below average in intelligence, but was not defective. She was a somewhat neurotic type, but her chief difficulty is brought out in her own account of her situation:

" My mother put me in boarding school when I was a little girl, right after my father died. I was there nine years. (I am 14 and a half now.) My mother never came to see me, not even when I was sick with chorea these last five years. This fall, when I got well from chorea, they wanted to put me back in the sixth grade, where I had left off. I was a lot bigger than any of the other children in that class, and I didn't like the school any more. So last week I ran away and came home to my mother. She didn't want me, she just tried to send me back to the school, so I ran away from her, too. A policeman brought me here to the hospital. He found me crying on the street."

This child was so bitterly grieved by her mother's attitude that she refused to see her when she came to the hospital. What she needed was not to be returned to the former school, but to be given to foster parents who would supply the affection which she had been denied all her life.

Besides these gross maladjustments which occur in school children, there are less flagrant ones which are connected more intimately with the method of education itself. Cases of special disabilities in reading, spelling, or arithmetic are sometimes found among the backward groups. These types of educational problems have been adequately described by several psychologists, notably by Dr. Bronner, Dr. Leta Hollingworth and Dr. Arthur Gates. Such specialized types are principally of pedagogical concern, and are not directly productive of abnormal behavior. Studies have also been made of speech disorders among school children. Dr. Smiley Blanton and Dr. Margaret Blanton

have made excellent contributions in this field, which is also somewhat apart from that of conduct disorders, and will not be discussed in this chapter.

Often we find a child in school who is maladjusted for many reasons, all of which contribute to the final picture. One such case may well be presented at this point, as an illustration of the necessity for thorough study of the child before making diagnosis and outlining treatment.

CASE 122

The parents of a certain eleven-year-old girl became anxious over her apparent dullness. They complained that she could not get on in school, that she could not seem to comprehend many things easily grasped by the average child, such as plots of motion pictures, etc. They were almost convinced that the child was mentally defective, and being intelligent people themselves, were very much upset by this idea.

This child had a very comfortable home. Her heredity was good, although her father was a somewhat unstable type. Her developmental history showed that she had been a delicate child from infancy. Shortly before the examination, she had been ill with epidemic encephalitis, which as we have seen is apt to have a long continued effect on the personality. Her vision was very defective, and she had a special disability in reading which had begun on account of uncorrected visual defect, and persisted in the habit of transposing letters in the words being read, which led to frequent mispronounciations. Her dullness in school and her inability to follow the stories of motion pictures were due to this special disability. Her general intelligence, as measured by the

Stanford-Binet, was average for her age. She was 11 years 3 months old chronologically, while her mental age on this test was 12 years. (I. Q. 106.)

A feeling of inferiority had been developed in the child's mental life. Her frequent illnesses formed the characteristic background for the growth of such a feeling, and it was intensfiied by her consciousness of her inability to read as well as her companions, etc. This sense of inferiority made her lacking in self-confidence, so that she seldom ventured to attempt even the type of work which she could have accomplished in spite of her reading disability. This feeling of inferiority and lack of self-confidence was the worst aspect of her case, since it was the one most likely to lead to personal unhappiness, and interfered with her putting forth the effort necessary for rapid improvement.

For this child there were many things to correct. She needed to be placed in a school where she could receive intensified and special instruction in reading. She needed a thorough eye examination, to be sure that her glasses corrected her marked visual defect adequately. She needed medical observation and treatment for post-encephalitic symptoms if any such existed. Most of all, she needed to have her feeling of inferiority removed and her self-confidence restored. This could be accomplished by wise parental attitude, and insight on the part of her teachers.

We must always bear in mind the complex nature of the human organism, and the necessity for investigating the child's life from every possible angle in our study of educational maladjustments. The source of abnormal behavior may be in the

physical condition, in the relations with parents or other associates, in the personality make-up, the intellectual capacity, etc. Or it may be in a combination of these or other factors. Our medical examination must take account of the possibility of mental as well as physical disease. Our psychological examination should include tests of special abilities and disabilities as well as those for the measurement of general intelligence. The sociological study should inquire into heredity, developmental history, relations in the home and school, play activities, type of companions, etc. We must also secure an insight into the child's mental life in more intimate ways. We must obtain his confidence to such an extent that he will reveal his feelings and ideation to us in detail. We must know his hopes and fears, his ideals or his obsessions with forbidden activities, his emotional reactions in general.

The cases reported in this chapter are only a few of the many types of abnormal behavior found in maladjusted school children. We have endeavored to cite a sufficient number of concrete instances of educational maladjustment to make it evident that the school problem is that of the individual child. The school system as originally planned was not founded on a knowledge of individual differences in either intellectual, physical or emotional make-up. There was a standard curriculum and an inflexible discipline, to which every pupil was indiscriminately expected to adapt himself. With our present knowledge of innate variations

in mental capacity and personality make-up, we are gradually improving this condition. Little by little, the educational system is being modified to suit the needs of the child. Special courses for the mental defectives, out-door classes for children suffering from incipient tuberculosis, rapidly moving classes for pupils of superior intelligence, trade schools for individuals who are too dull to assimilate the higher branches of academic instruction, and many other innovations have marked the progress in pedagogical methods during the last decade.

The adjustment of the pathological child does not always mean the transference to a class for atypical children, however. In many cases, it means intensive treatment of the child along other lines. Medical treatment, training in the formation of personality habits, remodelling the home and other social milieu, are in order as often as pedagogical measures. Each child must be studied carefully, the causes of his abnormal conduct determined, and a plan of treatment mapped out in the light of our knowledge. No amount of group treatment can accomplish our purposes with the maladjusted child; he is always an individual, and must always be regarded as a separate problem needing the attention and care adapted to his own peculiar needs.

SUPPLEMENTARY READINGS

BLANTON, SMILEY. Speech Defects in School Children. Mental Hygiene, Vol. V, No. 4, October, 1921. This treats of a phase which is not entered into in this chapter, but which is worthy of reading.

BRONNER, AUGUSTA. Psychology of Special Abilities and Disabilities. Little, Brown and Co., Boston, 1921. Dr. Bronner is an authority on this subject, and her book is invaluable.

CAMPBELL, C. MACFIE. Nervous Children and Their Training. Mental Hygiene, Vol. III, No. 1, January, 1919. Contains some valuable material.

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KENWORTHY, MARION E. Extra-Medical Service in the Management of Misconduct Problems in Children. Mental Hygiene, Vol. V, No. 4, October, 1921. An excellent article.

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RICHARDS, E. L. Some Adaptive Difficulties Found in School Children. Mental Hygiene, Vol. IV, No. 2, April, 1920. Describes the process of readjusting some maladapted children.

IDEM. The Elementary School and the Individual Child. Mental Hygiene, Vol. V, No. 4, October, 1921. Similar in nature to the preceding article, and should be read in conjunction with it.

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WHITE, WILLIAM A. The Mental Hygiene of Childhood. Little, Brown and Co., Boston, 1919. Presents the problem from the viewpoint of psychoanalytic theory and practice.

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Chapter XII

VOCATIONAL AND INDUSTRIAL MALADJUSTMENTS

Social psychology of labor unrest.
Contrast between the old and new industrial eras from the psychological point of view.
Present industrial system involves repressions and emotional conflicts.
Relation of intelligence to occupation.
Vocational maladjustments occasioned by placing the individual in a type of work above his level of general intelligence.
Case of the mental defective who was promoted above his mental level.
Healthy unrest induced by the realization of not working up to one's mental equipment.
Vocational guidance should fit the individual to an occupation correlated with his intelligence rating.
Special abilities and disabilities which make for vocational aptitudes.
Personality make-up as a factor in vocational success.
Vocational maladjustment due to sensitive and timid personality. Two cases which show this factor.
Incipient mental disease a factor in vocational misfits.
Some cases of Dementia Praecox showing effect on vocational adaptation.
Manic-Depressive attacks in cases of industrial maladjustment.
The psychoneurotics and constitutional inferiors as a vocational problem.
Emotional disturbances a source of vocational dissatisfaction.
Loss of the love object a cause of vocational failure in one case.

Emotional conflict rising out of the family life transferred to the vocational situation.
Vocational unrest must be thought of in terms of the individual.
Necessity of securing the emotional drive of interest and enthusiasm for success in the chosen vocation.

IF we interpret abnormal behavior in a broad sense as including any form of behavior which indicates that the individual is maladjusted and that he is tending to become a liability rather than an asset to the community, our consideration of this subject, however cursory, would certainly be incomplete without a brief discussion of vocational and industrial misfits. Social psychology has long been concerned with the problem of labor unrest in its group aspects, which involve such factors as turnovers, strikes, unionism, and the development of various political theories by the laboring classes. All these forms of group behavior are indicative of a general and widespread unrest among all types of workers usually attributed to the fact that the modern industrial system is ill adapted to the instinctive and emotional needs of human nature. To the ideal of economic efficiency all other impulses have been subordinated, with the result that the workers within the system are subjected to an emotional tension which breaks over into activities such as strikes, labor turnover (*i.e.*, going from one job to another frequently), and all the other symptoms of restlessness which are characteristic of the organism when its fundamental cravings remain ungratified.

We have only to contrast the industrial situation of earlier centuries with that of to-day in order to understand this state of affairs. Before the invention of machinery and the establishment of the factory system, the various arts and crafts were carried on in the home or by means of guilds. The workman knew that his skill in his own particular handicraft gave him reasonable certainty of livelihood, since it could only be rivalled after long years of apprenticeship. The modern factory employee has no such assurance; he operates a comparatively simple piece of machinery which anyone else can soon learn to do equally well. Hence the feeling of insecurity in his employment with the accompanying fearfulness and anxiety over "losing his job" is a constant source of unrest.

Moreover, the guildsman, as he wrought upon his material, knew a taste of the joy that comes with the consciousness of having created something with one's own hands, and which is rooted in what we have already described as the innate tendency "to manipulate the objects of the environment and mold them into new forms." To-day this pleasure is limited to a comparatively small class of artists, writers, musicians and scientists. The average workman has no such opportunity to exercise his skill and ingenuity; his task is limited to some one small part of the work which is necessary to complete the finished product. This automatic and uninspired task holds illimitable vistas of monotony for the worker unless his

native intelligence is so low that he is incapable of feeling the desire to vary his routine and branch out into constructive effort. Here again lies a source of dissatisfaction.

Even if the worker succeeds in adapting himself to the new economic situation, with its monotonous labor and its element of uncertainty, he finds that his emotional life is affected by it in other ways which although indirect are none the less an outcome of modern industrial conditions. Under the old system, a home, a wife and children were an economic asset. At that time a wife was necessary for the preparation of food and clothing, while the children could help with simple parts of the productive process. At present, to own a home is far beyond the means of many workmen. The women, although they still have much to do with the making of clothing and the preparing and serving of food are doing these things in the factory and in the restaurant. And children are a burden economically which one may well pause before assuming.

The worker of to-day, whether man or woman, in many instances finds that the love of the mate and offspring together with all the other emotional associations of home life must be sacrificed in the interest of self-survival. Under ordinary circumstances competition for employment is so keen and the type of work demands so little in the way of training and skill, that the worker cannot command sufficient income to enjoy normal family life. If he does attempt it, the

struggle of maintaining the home and caring for the children is so great as to rob it of much of its power to give happiness. Often the problem of providing for his family becomes in itself the greatest possible source of anxiety.

If we turn aside from the thought of man becoming thus enslaved to the machinery which he has created, with the inevitable suppression of his own personal wishes to a greater or lesser degree, we find that there are many other factors which operate in individual cases to increase the chances for maladjustment to one's work. The matter of individual variations in general intelligence and special abilities and disabilities immediately occurs to us in this connection as offering innumerable opportunities for vocational misplacement. Psychometric examinations in the U. S. army showed a definite correlation between the level of intelligence and occupational pursuits. Men who achieved a high score (A or B) on the Army Alpha Intelligence Test were found to represent the professional group, such as engineers, physicians, dentists, etc. The C+ men were those engaged in such occupations as photographer, telegrapher, book-keeper, clerk, and the like. The men who fell in the C group represented types of employment such as cook, baker, plumber, gunsmith, carpenter, machinist, telephone operator, etc. The C– men were laborers, miners, teamsters, barbers, etc.

A chart giving the distribution of occupations in relation to general intelligence as indicated by

rating on the Army Tests is reproduced on the following page. This chart is based on the average intelligence found in each occupation listed. That is, the 25% receiving the lowest ratings and the 25% receiving the highest ratings on the Army Intelligence Examinations are not represented, the diagram being based on the achievement of the middle 50% for each occupation.

If we try to place an individual who by virtue of his native intellectual capacity would fall within the " C " group in an occupation which requires a " B " grade of intelligence we could hardly expect him to do well at his work. Indeed, such a placement may lead to grave results. Dr. Pratt, in an article on " The Problem of The Mental Misfit in Industry," tells of a case which illustrates this point. It is the history of a mental defective who rated so low on the army intelligence tests that he was withdrawn from the ranks and put into a position at the dock loading automobiles. He did so well at the work that his foreman promoted him to driving one of the trucks. Even at this more complicated occupation he got on passably so long as his route was confined to the short haul between the works and the loading dock. But one day the foreman sent him on a special haul across the city, with instructions to make his delivery as soon as possible. His judgment proved defective in this exacting situation. Obedient to the command to hurry, he neglected to calculate his time margin correctly in crossing a railroad track, was struck by the train and killed. The

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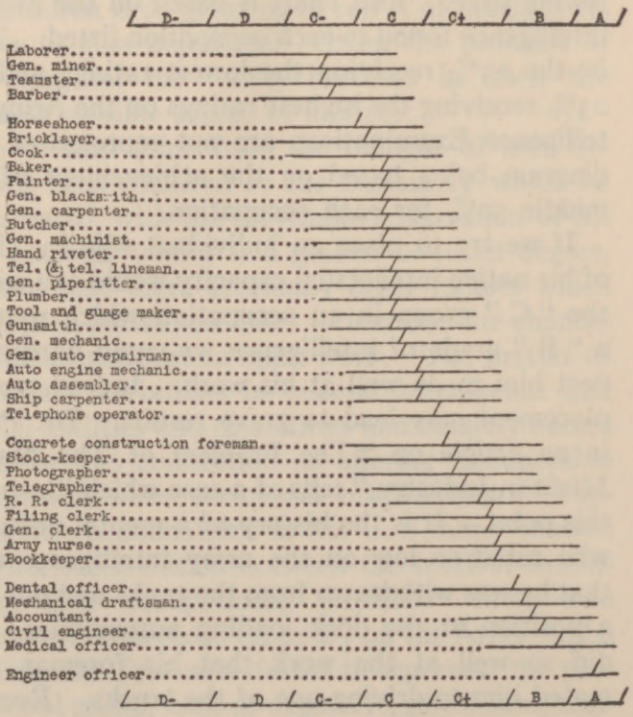

(Reproduced from Vol. XV of Memoirs of The National Academy of Sciences, Fig. 57, Page 829, Occupational Intelligence Ratings. Horizontal bars show range of middle 50% tested in that occupation; median is indicated by vertical lines.)

amount of intelligence which he possessed had fitted him for the adequate performance of his duties when he was loading automobiles at the dock, but was unequal to the more complex activities of truck-driving.

The opposite situation, in which the individual of superior (A or B) intelligence is engaged in a type of work which could easily be performed by a person of less capacity than himself means that the individual is not working at his highest efficiency. This involves potential social wastage, to be sure, but does not predispose to accident and actual loss as is often the case when the occupation makes demands above the worker's mentality. The realization that his work is too easy may make for dissatisfaction of the individual with his job, but this is to be considered a " healthy irritability " which acts as a stimulus in causing the worker to seek a more advanced position.

One of the functions of vocational guidance is to assist the individual in determining to what occupational level he may aspire in view of his native intellectual capacity. This is often a situation requiring much tact and finesse. When a 19-year-old boy with a mental age of $11\frac{1}{2}$ expresses the ambition to become a doctor, and shows indefatigable industry in school which wins the sympathy of his teachers in spite of his obvious dullness, it is difficult to tell him that his cherished vocational ideals can never be achieved. The only course is to induce him to make a transfer of his interest to some vocation which lies within his

reach by picturing its advantages and assuring him of his evident aptitude for this line of work. On the other hand, it is easier to encourage the superior type to seek higher training which will fit him for a better position more in harmony with his real abilities.

Even within the occupational groups which demand the same general level of intelligence, the individual may be better fitted to succeed in one type of work than another by virtue of certain special abilities or disabilities which may form a part of his mental equipment. Contrast the different demands of the professions of medicine and civil engineering, for example, which both require superior intelligence for success, but depend on diverse specializations. Or in a somewhat lower group, consider the mathematical accuracy demanded of the book-keeper, the faculty of visualization of the picture to be obtained necessary for the good photographer, and the language ability which makes the secretary indispensable to the business man who must employ someone to keep up his correspondence. In view of all the differences between the various occupations, it is not strange that in addition to making use of examinations for determining the approximate intelligence level, vocational advice needs to be based on further knowledge obtained from such special data as can be secured by the use of tests for clerical ability, mathematical accuracy, engineering aptitude, etc. As a basis for advice as to further training or as a preliminary to vocational placement,

the various psychological examinations along these lines are indispensable. Indeed, we need more of these to use in our endeavor to size up the person who seeks advice concerning his vocational difficulties, for the more we can learn of his mental make-up the better choice shall we be able to assist him in making.

The intellectual side is only one aspect of the vocational situation, however. Success depends quite as much and perhaps far more upon the personality make-up of the individual than upon his intelligence. The good nurse must not only have the mental alertness to carry out the doctor's instructions; she must also have that combination of sympathy and tenderness and optimism in her personality which in itself is a stimulus to her convalescent patient. The teacher may be a master of his subject, but if he is unable to win the affection and loyalty of his students, if he is unable to enter with them into their hopes and aspirations, he may achieve renown in scientific research but he will not send out a group of pupils fired with the same enthusiasm to continue his work after his time is ended. If he cannot accomplish this, he is misplaced as a teacher; his place is with an organization which cares only for the results worked out in his laboratory, and in such a position sooner or later he will probably find himself. The executive, however shrewd, succeeds best when he has in addition the type of personality which inspires confidence and loyalty in those working under his direction. More than one man or woman of un-

doubted intellectual ability has failed to reach the level of achievement which might have been predicted on the basis of this one factor because their personality has been such as to impede their progress by keeping them in constant disharmony with those with whom they came in contact in the course of their work.

The individual with a timid or sensitive personality make-up is especially lacking in ability to make the proper vocational adjustments. Not only does he tend to underrate his ability and fail to arouse a feeling of confidence in his qualifications when he seeks employment, but even after he is placed in a position he is apt to react to criticism, if any be forthcoming, in an over-exaggerated fashion, and may become discouraged to such an extent as to give up his place on that account. Lorine Pruette and Douglas Fryer cite two cases in which vocational maladjustment was undoubtedly to be attributed to this factor.

Case 123

The first case is that of a young man of 22, who had partially finished high school and then completed a business course. He had had three years' experience as a book-keeper. His rating on the Army Alpha Intelligence Examination was A, or superior. A glance at the chart showing correlation of intelligence rating with occupation will show that a C+ rating is the average for this type of work. Nevertheless this particular book-keeper had little confidence in his own ability, and would probably not have had courage for some

time to apply for a position on his own initiative. At the Placement Bureau it was found necessary to make definite appointments for him instead of following the usual custom of giving him a list of openings in his field, for he was too timid to make contacts with possible employers for himself. Once located in a position, he could be trusted to do work of a satisfactory character; his difficulty was in his timid and shrinking personality make-up which prevented him from making his own opportunities.

Case 124

Another boy of 18 showed similar personality traits. He was a public school graduate with three years' clerical experience. His rating on the Army Alpha was B, which again is a much higher intelligence than that necessary for clerical work. He was convinced of his incapacity for achievement, however, and although highly conscious of the irrationality of his attitude, seemed to be suffering from a feeling of inferiority which was beyond his control. Once the Placement Bureau had secured the proper contacts for him with prospective employers, he lost much of his timidity and feeling of inferiority and was able to make a fair impression.

Case 125

A young professional woman, rating A on the Army Alpha, seemed unable to continue in any one position for long. She, too, was found to have a feeling of inferiority and to be over-sensitive to criticism. Within a period of six months she had resigned two positions because of criticism which had made her feel dis-

couraged and incapable of doing her work properly. Her third placement proved successful. She found her superiors appreciative and soon developed into a valuable and efficient part of the organization in which she was serving, making some reputation in her particular field.

A certain percentage of vocational maladjustment may be traced to the onset of various types of mental disease. Incipient psychoses of the Manic-Depressive or Dementia Praecox types often have their first manifestation in vocational failure.

CASE 126

A certain upholsterer, for example, became unable to stay for any prolonged period in the same position. Without any apparent reason he would leave one job and hunt for another. This went on for months, then he also began to move from one place to another, never living long in one place. He was finally brought to the hospital on complaint of his neighbors. He had placed a peculiar notice on his door and was suspected of setting fire to the house in which he was living. In the hospital it was found that he had developed definite delusions of persecution which are typical of Dementia Praecox of the paranoid type. He believed people were trying to kill him by means of poisonous gases. Every place he went to work he fancied he could smell these, hence his restlessness and frequent changes of positions. This reason for his unrest was not discovered, however, until his hallucinations and delusions became so marked as to cause him to put a notice on his door requesting people not to make such bad smells, followed by his attempts to burn the house

in which he believed his persecutors to be located.

Sometimes an actual accusation becomes the starting point of a delusional system built up around the occupation in cases of incipient Dementia Praecox.

CASE 127

Louis S. was a young man of 25, a Russian Jew 9 years in the United States, a celluloid worker by trade. He was brought to the hospital by his wife who said that he had had some trouble in the shop where he was employed several months ago and had been unable to get work since then. It appeared that the trouble to which Mrs. S. referred was a quarrel between Louis and his boss in which the latter called him a thief. Louis immediately left his job, and started looking for another one. But the chance remark of his previous employer had been woven into his delusional trend, so that wherever he went to look for work he imagined that he was regarded as a crook, and hence did not succeed in getting another job. He finally became convinced that all the employers whom he had seen were in a plot against him, that his wife had become unfaithful and that all his relatives were not treating him as they should.

CASE 128

In still another case of Dementia Praecox work was given up because it interfered with a form of activity dictated by the patient's delusional trend. A young man of 33, American-born, single, occupation, clerk, gave up his job and began to spend all his time in a motion-picture theatre. For three weeks his foster-

mother tried to get him to go back to work unsuccessfully, then she brought him to the hospital. His explanation was quite simple. He believed that a certain actress was able to communicate with him by her eyes, and he was neglecting his work to attend the pictures in which she appeared and receive her messages.

The necessity of recognizing this type of industrial maladjustment for what it really is and referring it to the psychiatric clinic is readily appreciated when we realize that the individual who is reacting to hallucinatory and delusional experiences is apt to do harm to himself or others. This is particularly true in paranoid trends with ideas of persecution, when the patient is liable to attack the fancied persecutor.

Case 129

Take the case of a young man who was arrested for assaulting a former employer. At the hospital, where he was sent from court for observation, he gave the following explanation of his act:

"I went to work for this fellow down on Third Avenue. He said he would treat me right and I went with him. For three months he paid me, then he gave me nothing more. I left him but still he would not pay me. After that he began influencing me. At first he gave me headaches and pains through my stomach. Sometimes I would go to bed with my shoes and stockings on and wake up with them off. Then my food started tasting queer. One day I saw him putting something red in my tea. Then I knew he was trying to poison me. He gets herbs from a man

over in Brooklyn with which he influences people. His wife is sick by his influence, too. She has a snake or a frog in her. He kept after me so I decided to kill him. I am not sorry I stabbed him. Look at all he did. If I had only taken the three steps to God I would not have done it. If only I had been baptized, had my feet washed and taken Communion I would have let him go on killing me. The reason I did not want to die was because I was afraid of going to Hell."

The beginning of a Manic-Depressive attack is often manifested in an inability to continue the usual routine of work, or in erratic conduct which leads to discharge from the position which has hitherto been satisfactorily filled. The Manic-Depressive type of individual is also apt to be restless, and to wander from one job to another.

CASE 130

A young woman of 24, who had been giving satisfactory service as a housekeeper, became irritable and quarrelsome and finally threw a cup and a pot of tea at her employer. This act was the beginning of a Manic-Depressive attack which was severe enough to necessitate her commitment to the state hospital shortly afterward.

CASE 131

Somewhat similar is the case of a 27-year-old Greek who was employed as a cook at a restaurant. One night he left his work and attempted to arrest a gambling party at one of the tables, threatening them with a water pistol. He, too, was suffering from a Manic-Depressive psychosis. He had been brooding

over the death of his brother, who had lost a fortune gambling. Out of this grew his belief that he was called upon to lead an anti-gambling crusade.

Sometimes individuals in a mild Manic-Depressive state will be placed by some agency in one position after another, their continual failure to adjust themselves to their work remaining a source of mystery for some time.

CASE 132

Hilda F. was a Jewish girl whose father had committed suicide when she was a small child, after which her mother abandoned her and returned to Russia. Hilda grew up in an orphan asylum. When she was 20, an attempt was made to secure her a position at housework in which she could become self-supporting. For six months she kept one of the representatives of the asylum busy placating one employer after another. At her first place she was simply disobedient to her mistress. At the next place she began to tell untruths; later still she began to steal from her employers. She became more and more difficult to manage, and by the time the social worker in charge of her industrial placement had decided to bring her to the doctors for observation she was irritable, talked incessantly, and showed marked assaultive tendencies. She was sent to the state hospital for the insane. Diagnosis, Manic Depressive Psychosis.

Sometimes the Manic-Depressive temperament can be alternately a liability and an asset from the vocational viewpoint, as the following case illustrates:

CASE 133

A prominent financier lost a fortune on Wall Street during the development of a depression in which his mental alertness became impaired to such a degree that he could no longer size up the financial situation accurately. After this he became depressed to such an extent that he was sent to the hospital. With the beginning of the opposite or manic phase of his disease, he grew eager to go out and build up his fortune again. His mind now became overactive along this line, and he planned innumerable schemes in which he talked of oil wells, etc. What actually did happen was that he was released while somewhat in a manic state (although mild, of course), and became the best salesman employed by the firm with whom he secured a position. The manic tendency to think and talk rapidly stood him in such good stead in this particular line of work that his sales were double those of any other man on the road. He might even have been advanced very rapidly on the basis of his success, but for the fact that he became worse and was obliged to return to the hospital after some months in his new business.

The psychoneurotic is often dissatisfied with his work because he blames it for his fancied ills or feels his employers are unsympathetic and unfair, etc. Just as he drifts from one clinic to another because he feels that the doctors previously consulted are too harsh or do not understand the nature of his illness, so he seeks work where he can obtain consideration and interest in his ailments. Just as he is never adapted to life, so he is never adapted to his vocational situation.

The constitutional inferior, with his defective judgment, poor insight, and emotional instability is also a case of chronic industrial unrest. He is discontented with the world in general, he never finds a successful method of adjusting to the demands of the group, and this characteristic is reflected in his attitude toward his work. If he does not advance rapidly, he never thinks of looking for any cause of his lack of progress in his own personality but considers it the fault of his employers or of the industrial system in general. In the latter event he may become a labor agitator and disrupt the morale of the other employees.

If we turn from these grosser forms of maladjustment to the consideration of the more subtle aspects of the affective life of the worker, we shall find that almost any type of emotional disturbance can react upon the individual to impair his efficiency. Lorine Pruette and Douglas Fryer have described a number of cases in which emotional conflict of one kind or another lay at the source of the vocational maladjustment. Emotional disturbances connected with the home life are reflected in an irritability toward the vocation in several cases reported by these authors. One boy who was rebellious because he felt that his parents gave him insufficient personal freedom carried over this antagonism toward his employers by refusing to obey the rules of the firm for which he worked.

CASE 134

This was a boy of 19, with a rating of B on the Army Alpha Intelligence Examination, which was superior to that needed for his work as clerk. He had had clerical experience for five years, and was quite capable of holding his positions but for his rebellion against any semblance of authority, which grew out of the adolescent desire to achieve freedom from the parental control. His difficulties were adjusted when his parents were induced to understand his feelings and give him more responsibility and independence.

The loss of the love object can so lower the emotional tone of the individual as to breed a distaste for life in general and for the vocation in particular.

CASE 135

Miss Pruette and Mr. Fryer cite as an example the case of a young man of 28 who for 11 years previous to the death of his wife had been in export work making $275 a month. With the loss of his wife's love and encouragement he had given up all interest in life, had permitted his physical condition to become run down, and finally lost his job. When he came to the Placement Bureau he was so discouraged that he was willing to accept any kind of position, even that of messenger. He was advised to confide the care of his two small children to his sister and to seek for himself a complete change of environment in which there would be nothing to remind him of his painful memories.

Pruette and Fryer conclude that in many of their clients at the Placement Bureau the voca-

tional problem becomes not one of finding out what is the matter with the job, but of heeding the old adage *cherchez la femme*. Sometimes it will be the economic difficulties confronting the engaged man who is anxious to marry which cause dissatisfaction with his work. In other instances, vocational interests are sacrificed to a mother who refuses to move from her accustomed home. Men with families dependent upon their efforts cannot give up a lucrative position for an opening which promises big results in the future but is not immediately a paying proposition. Sometimes the impossibility of earning sufficient income to care for the increasing number of children sends men in despair to the vocational advisor of the Placement Bureau. Inability to give the wife and children all that one could wish is an acute source of vocational discontent. All of these cases in which a woman is concerned are at bottom cases of emotional conflict.

When we think of industrial unrest and vocational dissatisfaction in terms of the individual, we find that there are as many sources of difficulty as there are types of individual to adjust to the vocational situation. In this sense, the problem of vocational adjustment becomes a phase of the greater problem of the adjustment to the demands of life. Vocational advice and placement must be based upon a knowledge of the individual from every point of view. It is not so simple a matter as was once conceived, — *i.e.*, the mere estimation of intelligence and special abilities. We must also

have some insight into the personality make-up and habitual attitudes of the individual, and a knowledge of his affective life, together with the status of his physical and mental condition relative to the possibility of health or disease. When our files contain some such composite picture of the individual as this, plus a record of his reactions in various positions which he has held, we shall be in a position to recommend him for training or placement with a much higher chance of satisfaction.

Even when we have this extensive material at hand, we are still confronted with the necessity of tying up the interest and "emotional drive" with the task for which the individual is best adapted. The man of inferior intelligence or defective personality make-up may be ambitious for a vocation which is far beyond his reach. Vocational choices and ideals are often made with complete irrationality and without reference to personal qualifications for the work selected or desired. Family pressure, social situations, desire for economic rewards, etc., are generally more potent factors in the formation of vocational ambitions than calm and impartial self-analysis. Indeed, it is doubtful whether the vocational aptitudes of an individual could be determined by any amount of introspection or subjective method. Psychological examinations and estimates by associates probably offer a much more accurate basis for making decisions on this matter. But there must be associated with the vocation the interest and enthusiasm for the work which is a part of the affective life, and with-

out which it is impossible to attain the highest point of achievement.

It is of course an open question to what extent the interests of the individual can be changed by vocational advice. Psychologists who are working in this field are conducting research to determine the degree of correlation between the vocational ambition or choice and the possession of intellectual and personality qualifications which make for success in the desired or chosen field. The result of their studies will be awaited with interest. While the existence of a specific talent such as artistic ability, or inventive genius, may in rare cases become the dominant motive in the selection of the life work, we should expect that in less gifted individuals the vocational choice may be influenced by many extraneous factors, such as the advice of parents and other associates, unconscious emotional trends, etc.

As representative of the psychoanalytic school, we might quote Brill's opinion that the unconscious affective elements are so important that the individual can only be successful in some vocation which affords a sublimation of the repressed instinctive and emotional desires of the personality. Indeed, his view is so extreme as to rule out the possibility of vocational guidance, on the basis of intelligence tests, personality ratings, and the methods now generally in vogue, ever being advantageous for the individual. We must maintain, in spite of this excellent authority, that these methods, in combination with a careful analysis

of the affective aspects of the case such as is found in the material quoted from Miss Pruette and Mr. Fryer, offer a vast amount of assistance in many instances of vocational maladjustment. Our speculations on these debatable points will doubtless be clarified when some of the researches referred to in the preceding paragraph are available for our use.

The close relationship between vocational maladjustment and gross forms of abnormal behavior should be fairly apparent. In the final analysis we shall find that the same factors underlie both. Inferior intelligence, emotional conflicts, abnormal personality make-up and incipient mental disorders may lie at the root of the vocational maladaptation or abnormal and anti-social behavior. In many cases, both misconduct and failure at vocational pursuits may be an expression of one and the same aspect of the mental life.

It is of even greater significance to realize that the therapy for conduct disorders of various types may lie along vocational lines. In some cases, vocational adjustment may in itself be sufficient to remove the emotional conflict and restore the individual to a normal mode of behavior. This is especially true when such motives as a feeling of inferiority or dissatisfaction with the self are the underlying causes of misconduct. Through vocational success the normal feeling of self-respect may be restored and the satisfaction which comes from regarding oneself as a useful member of society may be achieved. Repressed emotional

energy may be turned into substitute outlets along the line of work as well as of anti-social behavior. In many cases of juvenile delinquency this presents the solution of the problem. Whenever we can sublimate the energies of the individual into vocational activities, we are establishing a socially adapted form of response which will prove to be the most successful means for the prevention and correction of conduct disorders.

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Chapter XIII

MODERN METHODS FOR THE CORRECTION AND PREVENTION OF CONDUCT DISORDERS

Intolerant attitude of the group toward aberrant members.
Primitive attitude toward mental disorders.
Early asylums for the insane.
Introduction of psychiatric hospitals.
The development of the mental clinic.
Primitive attitude toward the criminal.
Universality of the death penalty.
The social motive of revenge upon the criminal.
The motive of preventing repetition of crime and the intimidation by means of torture.
Exile of criminals.
Imprisonment as a form of punishment.
Development of the modern prison system.
The idea of reforming the criminal.
Influence of psychiatric knowledge on the treatment of delinquency.
Glueck's plan for the New York State prison system.
The modern reformatory plan.
The dangers of the reformatory system.
Criticism of trial by jury in its present form.
Legal errors in the commitment of insane patients.
Necessity of psychiatric clinics in the courts.
Personnel and technique employed in clinical service.
The development of the ideal of prevention of delinquency.
The mental clinic for school children.
Functions of the school clinic.
Actual status of clinical work with delinquents.
Commonwealth Plan for the Prevention of Delinquency.

Psychiatric clinics operating in the schools under this plan.
Pre-school age and baby clinics.
Mental hygiene education of parents.
Mental hygiene education of the community.
The rôle of the scientist in the social organization.

FROM time immemorial, the attitude of the group has been one of intolerance toward any of its members whose behavior deviated from socially approved modes of conduct. It did not matter whether the aberrant individual was a genius or the most atrocious criminal; he was radically different from the rest of the group, and as such was regarded with suspicion. Socrates drinking the hemlock, Galileo brought to account for his scientific inquiries, Jesus upon the cross, were all victims of social intolerance and conservatism. The early Christians were martyrs to their convictions until their numbers increased to a point where they themselves became the persecutors of other faiths. Mediaeval fanaticism even insisted upon the suppression of all scientific interests which might necessitate a modification of religious creeds and churchly dogma. From the earliest ages, the history of mankind has been one of persecution of the individual who dared to think or act differently from his fellows.

In primitive times, individuals afflicted with mental disease were often regarded as inspired by gods or as possessed by evil spirits. In the former instance they were frequently revered as oracles and prophets; in the latter, they were shunned or turned over to the incantations of the medicine

man. At a later period, however, after the Christian religion obtained a firm foothold, and the old gods were relegated to the status of demons, abnormal behavior due to mental disease was regarded as indicative of communion with these bad spirits, and much of the witchcraft persecution was levelled at individuals whom modern psychiatry would class as victims of mental disorders of one type or another. In some instances, to be sure, in which the disordered mind became warped along religious lines, the victim was looked upon as a saint, and treated with reverence and respect. But these cases were few in number and could not begin to balance those whose mental illness resulted in untold suffering at the hands of their superstitious companions.

Even when superstitious fears did not lead to persecution of the insane as witches, they were still regarded as a menace. During the 17th and 18th centuries, they were thrown into dungeons, along with paupers and criminals, where they languished in chains, with which they were bound in order that they might not inflict injury on themselves or others. Even the asylums of the 19th century, although they made some effort to provide medical care for the mentally ill, still clung to the tradition of chaining. As the physicians in charge of these newly established asylums learned more and more about their patients, the treatment of the insane gradually grew more humane. Other methods of restraint replaced chains, but it was a long time before the patient suffering from mental

disease was left comparatively free, as in the psychiatric hospitals of the present day. The isolation cell, the strait-jacket, and many other methods now obsolete still existed within the memory of most medical men.

With the institution of less rigid treatment, however, a few of the insane recovered. This attracted the attention of the medical profession, and they began to apply the same methods to the study of mental disease that they had found efficacious in the study of physical maladies. A classification of the various forms of mental disorders according to their symptomatology resulted, and research for pathological conditions or other causes of mental disease was undertaken.

New York was the pioneer state in instituting the modern system of management of the insane. From 1830 to 1870, county asylums were established, and in 1873 a state lunacy commission was appointed to supervise these institutions and also the private asylums which had sprung up over the state. Not until 1896, however, was the county asylum system replaced by the state hospitals. At about the same time, the Psychiatric Institute was founded. This Institute had charge of the training of physicians appointed to the state hospital staff, the standardization of methods for treatment and management of the insane, and the encouragement of research along psychiatric lines. The New York State Hospital system as thus organized became the model for other states and for foreign countries. Some other

states have improved upon the New York system by adding to the state hospital plan a psychopathic hospital. At the psychopathic hospital, the mentally ill receive a preliminary study, and those needing prolonged treatment or permanent care are transferred to the state hospitals, while the borderline cases, which are capable of fairly rapid improvement, are retained until their recovery.

The final outgrowth of the scientific treatment of the insane is the mental clinic, which attempts to treat incipient mental disorders, and prevent their becoming so severe as to necessitate confinement in an institution. This type of clinic was first conceived as an out-patient department in connection with the psychopathic hospital. Its scope has extended increasingly, however, until it now includes the prevention of mental disease through the study of school and vocational maladjustments, etc., which are often due to the development of abnormal personality traits apt to lead to psychotic trends if not handled in season.

A comparison of the old attitude toward the mentally ill with that in vogue to-day is indeed an indication of scientific and social progress. The modern hospital ward with its cheerful pictures, its section for occupational therapy, and its comparative freedom presents an almost inconceivable contrast to the old system of incarceration and solitary confinement. The loss of superstitious fear of the insane and the scientific study of mental disorders has resulted in an advance along humanitarian lines which has had a far-reaching effect in the social

life of man. Under the modern methods of treatment, the patient is often permanently cured, or at least temporarily improved, so that he can be returned to the community, and often is able to resume the uninterrupted commonplace of daily life without mishap.

Quite as radical as the change in the social attitude toward the insane is the change in the attitude of the group toward the delinquent. Among primitive peoples, the breaker of social taboos was usually sacrificed to the gods whom he was supposed to have offended by his act. Violation of taboos, sacrilege and treason were the only crimes considered to concern the general public, however. Private crimes, such as murder, assault or theft were settled by the relatives of the injured parties by blood-feuds. Later, the church and state took over the task of suppressing these crimes, which with the growth of the monarchial state came to be regarded as an infraction of the " King's peace."

One of the easiest methods of dealing with the criminal was to get rid of him by execution, and the death penalty was inflicted for many misdemeanors both in primitive society and in the early history of civilization. Burning, hanging, breaking on the wheel, beheading, drawing and quartering, and many other forms of capital punishment are recorded in history. In the early history of England we find that slaves were burned for theft. The frequency of burnings gave one English queen the name of " Bloody Mary." Crucifying criminals or throwing them to animals in the " circus "

was customary in the ancient Roman empire. Various other methods of capital punishment were resorted to at different times and in different countries. In France, as late as the sixteenth century, counterfeiters were boiled alive. In China, it is traditional for faithless wives to be trampled under foot by elephants.

When less drastic measures than capital punishment were utilized, there was an attempt to make the penalty fit the crime. The old Mosaic law meted out retaliation in exact proportion, — " a life for a life, an eye for an eye, tooth for tooth, foot for foot, burning for burning, wound for wound, and stripe for stripe." The ancient Egyptians cut off the hands of forgers. Under Henry VIII in England, cutting off the right hand was the legal penalty for striking another person with sufficient force to draw blood. Mutilation was employed by the Persians and various Oriental peoples as a form of punishment.

The types of punishment to which we have been referring represented an effort on the part of society to take revenge upon the culprit. A later motive was that of deterring the criminal from repeating his crime and intimidating others from following his example. This purpose gave rise to the most hideous forms of torture, too harrowing to describe in detail. The method of torture was practiced for thousands of years.

Exile was substituted for capital punishment as a more humane way of ridding the group of the criminal. It was used fairly extensively by the

ancient Greeks and Romans. The English resorted to it frequently, and even maintained a "felon fleet" for the transportation of criminals to Australia as late as 1790. At that time the English penal code listed 145 offenses for which the death penalty was inflicted, but the hangmen were kept so busy and the jails were so full that the surplus numbers were disposed of in this way, the death sentence being commuted to exile for a period which varied from a minimum of seven years to a maximum of the life of the individual. Many of the offenses for which people were executed or exiled at that time would now be considered trivial. There are records of women and children being condemned for the theft of a two-penny pork pie or a square of linen. Some of these criminals were sent to the American colonies as well as to Australia.

The persistence of the theory of torture was evident in the equipment of the English criminal transport vessels. Whipping posts, manacles, iron strait-jackets, spiked collars, branding irons, and numerous other brutal devices were provided for the restraint and management of the prisoners during the voyage.

The third concept back of punishment of the delinquent was the idea of segregating law-breakers for the purpose of social protection. While prisons for holding individuals in confinement until they could be tried and punished, have existed from early times, the prison as an institution for the confinement of convicted criminals has only

been in existence within the last 150 years. Until about 1780, the jails and prisons of both Europe and America were used simply for the detention of criminals until their trial, after which those convicted were sentenced to death, to corporal punishment of one kind or another, or to deportation, as described above. The use of the prisons for the confinement of criminals as a form of punishment originated in the efforts of the Quakers to substitute a more humane penal system for that of corporal punishment.

The efforts of the Quakers did not stop here, however. Their next move was to reconstruct the prisons themselves. In place of the customary flinging together of men, women and children into one building, the Quakers formulated the plan of solitary confinement. Under their influence, the prisons were rebuilt so that each prisoner might have a single cell to himself. They held that the isolation, with its opportunity to meditate upon his sins, would be good for the soul of the confined person. In this fashion, the modern prison was produced.

The system of solitary confinement, first practiced in the Pennsylvania prisons, was later replaced by a modified plan, which was first put into effect at Auburn (New York). The Auburn plan was that of solitary confinement at night and associated labor by day. Economically, it had distinct advantages over the Pennsylvania system, and by many it was thought to be more humanitarian. It soon became the accepted model for

American prison institutions.

With the introduction of these more humanitarian methods of penology, came another change in the social mind. Society came to desire not only the segregation of the criminal for its own protection, but also wished for a method whereby he might be reformed and become a useful member of the community. This resulted in the establishment of " reformatories " for young delinquents who were first offenders. In these institutions, the sentence was more or less indeterminate, and the aim was the return of the individual to the community as soon as he had made sufficient observable progress to warrant the expectation of his adapting himself to the group life. Unfortunately, similar methods were not applied simultaneously to institutions for adult criminals.

The present transition in the social attitude toward the delinquent is intimately connected with the development of modern psychiatry and the scientific management of the insane, which we have previously mentioned. In our study of mental disease, we discovered that many insane acts were anti-social in nature, and the individual could not be held accountable for his behavior on account of his psychotic condition. Thus a new aspect of anti-social conduct presented itself, namely, the responsibility of the individual for his behavior. When mental diseases came to be regarded as a strictly medical problem, and the sufferer was placed in state hospitals instead of being thrown into dungeons and prisons, there came about a re-

action against the imprisonment of the insane criminal under the same régime as his fellow-delinquent who was not suffering from any form of mental disorder. Thus, the criminal who was adjudged to have committed an anti-social act because of a psychotic condition was sent to the hospital rather than to the prison, while those already in prison who developed psychoses were transferred to separate institutions.

The modern prison program is an outgrowth of the psychiatric study of the criminal. Glueck found in his study of 608 prisoners at Sing Sing that 59% of these were suffering from some nervous or mental abnormality which in one way or another had contributed to their anti-social behavior; 12% were frankly insane; 28.1% were mentally defective; 18.9% were psychopathic. As we have seen in the preceding chapters, insanity, mental deficiency, emotional instability and many other factors enter into the production of abnormal and criminal conduct.

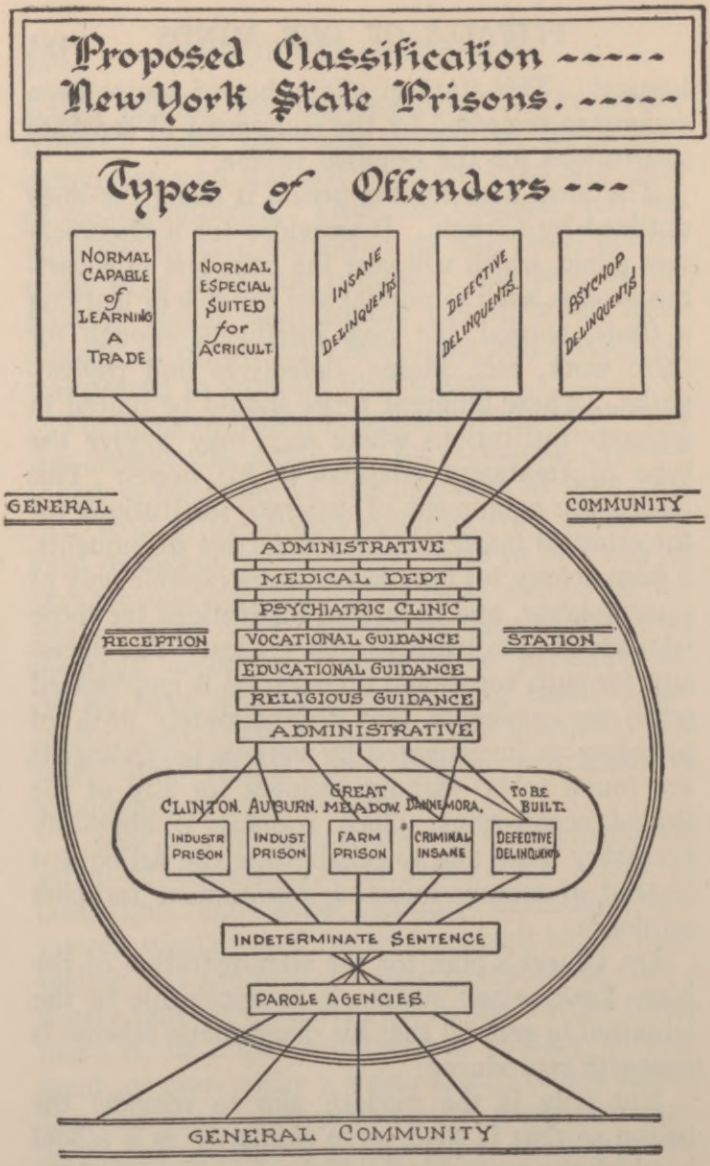
Under the old prison system, a heterogeneous group of criminals, some sane, some insane or borderline, and some mentally defective, were thrown together and forced to submit to the same régime. If the prisoner were psychotic to such a degree that the untrained eye of the warden recognized it, he might be placed in solitary confinement, or even suffer a worse fate. It is a known fact that in one state prison not so many years ago, an insane prisoner was chained to a stake in the prison yard and his food thrown to him by the

keepers. This state of affairs has of course been somewhat remedied by the equipment of separate institutions for the criminal insane.

The ideal plan for the prison is along the lines outlined by Glueck. It provides for a classification clinic, which will sort the offenders into various groups, such as normal and capable of learning a trade, normal, but only intelligent enough for farm work, etc., insane, defectives and psychopaths. These different types should be placed in separate institutions where each may receive the type of treatment adapted to his needs. This means the equipment of separate institutions for the criminal insane, and for defective delinquents, a farm colony for normal prisoners capable only of routine labor, and industrial institutions for those who are able to learn various trades. The necessity for such vocational preparation is emphasized when we remember that approximately 66% of prisoners as investigated by various psychologists are found to be without training for any of the skilled occupations. Such training is obviously necessary if we aim to rehabilitate the delinquent instead of merely inflicting punishment for past misdeeds.

Dr. Glueck's plan for the administration of the New York prison system is so applicable to the situation in general that his diagramatic scheme is herewith reproduced:

Not only is the modern aim to remodel the prison so that it shall serve primarily as a school in which the normal individual can be trained along



(Reproduced from Mental Hygiene, Vol. I, No. 2, April, 1918: Concerning Prisoners, by Bernard Glueck, M.D.)

industrial and vocational lines and in habits of better citizenship (or as a hospital in which he can receive proper treatment for mental disease); it also includes the purpose of keeping him out of prison whenever possible. The probation system for first offenders is the official expression of this aim. The probation officer has as his duty the supervision of the first offender for whom there seems hope of adjustment without the intervention of the prison or reformatory. As these probation officers become better trained, and as they are guided by the diagnostic data and recommendations of a psychiatric clinic, they will give increasingly efficient service. There is yet much to be accomplished in this line, however, both in the way of education for probation work, and in the establishment of court psychiatric clinics for the examination of social offenders.

Since reformatories came into existence at a later date than prisons, and since they were concerned with juveniles, they were of course somewhat less drastic in the beginning. Nevertheless, the psychiatric attitude has had no less influence upon the character of these institutions. The old reformatory had its solitary confinement cells, its harsh discipline and its severe punishments. The modern " training school " abounds in normal activities such as school work, prevocational training, trade school instruction, boy scout troops, student government, etc. The boys or girls are studied from the psychiatric and psychological viewpoint, and are given training in harmony with their per-

sonality make-up and intellectual abilities. The entire scheme is in harmony with modern scientific and humane ideals.

If we must have correctional institutions for children, the least we can do is to see that they are managed along the lines indicated above. The institutional child often suffers as a result of the very environment in which we have so ruthlessly placed him. From associates more hardened in crime than himself he learns of deeds he would never have imagined if left to his own devices. Unless he has some definite training to counteract these influences, his first act upon his release is to try out this new knowledge. If he is not provided with plenty of recreational activities, such as boy scout work, ball games, and other sports, he spends his leisure time in perverted practices with his companions, and comes out of the institution more abnormal as well as more antisocial than he was at the time of his admission. Such results can hardly be condoned, yet they are the inevitable result of institutionalization of the child unless every precaution is taken to avert them.

CASE 136

We might cite an instance in which institutional life built up distinctly abnormal tendencies in one child. This was the case of a 15½-year-old boy, who was arrested on the charge of sodomy and sent to the hospital for observation. The family history was negative except for nervousness in the mother. The physical examination was practically negative. The psycho-

logical examination indicated subnormal intelligence. The outstanding characteristic, however, was emotional instability, and the boy was finally diagnosed as a Constitutional Psychic Inferior with sexual perversions.

The patient's personal history was the keynote to the whole situation. He had first been committed to the Catholic Protectory at the age of 10 for stealing some Buffalo nickels from his father. Twice later he was sent to the Protectory by the school authorities, once for truancy and again for causing a disturbance in the schoolroom. While he was in this institution, he witnessed perverted practices between the other boys. After his release he remembered these things, and began to experiment along similar lines, first masturbating and later indulging in perversions with a five-year-old child. The little five-year-old, not realizing the meaning of the act, reported the occurrence to his parents, who caused the older boy's arrest.

This boy's abnormal tendencies were developed during his confinement in the institution, to which he was committed for seemingly trivial offenses. His maladjustments at home and at school were undoubtedly due to his psychopathic make-up and his intellectual subnormality. Had he been intelligently handled by his parents and teachers, he might have been enabled to make an adaptation to his environment without any necessity for the institutional experience which only made him more of a social menace than he had been before.

Although we have made much progress in our treatment of the insane and criminal classes, in

respect to our methods of trial and judgment of offenders, there is still opportunity for improvement. As Harry E. Barnes has remarked in his article on the evolution of the penal system, the trial by jury gives no assurance of an impartial administration of justice, for the jurymen are ordinarily average citizens, well-meaning, to be sure, but lacking the training which would enable them to scrutinize the evidence carefully and come to their decisions uninfluenced by the eloquence of persuasive attorneys. Modern sociologists would have the traditional jury replaced by a permanent board of experts, trained along various lines such as biology, economics, sociology, etc. The function of such a board would be the impartial weighing of evidence and formulating conclusions from this alone. In Dr. Barnes' opinion, the fact that we are a long way from seeing this plan put into actual practice is but an indication of the great distance which we have yet to travel before we can consider that we are according a scientific and at the same time a humane treatment to our delinquent classes.

Another point which offers itself for criticism, is the legal attitude toward those psychotic patients whose commitment to the proper medical institutions depends upon the decision of the court. Many such cases, who not only need proper medical attention for their mental disorder, but require hospital care lest they do injury to themselves or others, are able to deceive their relatives and others not trained in psychiatry as to their actual

mental state. It is not strange that judges are also sometimes mistaken about these individuals, and order their release from custody, in spite of the statements of competent medical men as to the psychotic condition of these patients. Sometimes such legal errors are followed by tragic results. We might cite a particularly striking example from recent experience.

Case 137

A woman of 40 was brought to the hospital from court. She had been arrested on the charge of disorderly conduct. For some time she had been annoying a former employer, writing him letters, calling him up on the 'phone, and finally threatening him. Psychiatric examination showed that this woman was suffering from a psychosis closely allied to Manic-Depressive, with a marked paranoid trend. She was suffering from delusions, would imagine that her employer was calling her on the 'phone, and would then want to call him, etc. She refused to go to the state hospital upon the recommendation of the physicians, but demanded a hearing before the judge. She was taken before one of the supreme court justices, who made the following ruling:

"Upon hearing held by me, ..., I find the said ..... to be sane, and order her to be discharged from custody."

The patient was accordingly discharged. She was very much elated at her victory over the physicians, and as she was leaving the court room, asserted that she was now going to find out what her old employer meant by having her arrested. A few days later an

article appeared in one of the New York papers, reporting her suicide. She had gone to the office of her former employer, who had immediately caused her to be arrested again, on the charge of threatening assault. A police officer made the arrest, but neglected to search his charge for weapons. As she was being placed in a taxi for removal to the police station, she shot herself. Evidently, she had brought a pistol with her intending to kill her old employer, and failing in this, had used it for suicidal purposes.

Enough has now been said to demonstrate the necessity for psychiatric clinics in connection with courts, where offenders may have the proper study before any determination is made as to their disposal. There are a few such clinics in existence in connection with certain courts in various parts of the country, but these are all too small a number. They are particularly necessary in the juvenile courts, since it is here that many first offenders are brought, and their treatment at this time may mark the decisive step between the development of a criminal career and the turning back to a socially approved line of conduct. It may be well to digress from the main thread of our discussion, at this point, and to give a brief outline of the personnel and methods of study which such clinical examination of the delinquent requires.

The immediate personnel of the psychiatric clinic includes the services of well-trained psychiatrists, psychologists and psychiatric social workers. Probation officers should also work in close connection with the clinic, since the success

of their efforts will depend on the insight into the probationer which can only be obtained by reference to the findings of the clinical study. The decisions of the judge must also be made with a knowledge of the clinical findings, as well as upon the legal presentation of evidence.

The purpose of the clinical study of the delinquent is to discover the causes of his abnormal behavior, and to map out a program for his adjustment to his environment. We have seen in the course of our present discussion, that the causes of anti-social behavior may be of many kinds. Physical and mental diseases, intellectual inferiority, emotional conflicts, personality defects both native and acquired, bad environmental influences, and many other factors enter into the causation of conduct disorders. To determine the nature of any particular case, therefore, requires psychiatric, psychological and sociological study, as has been suggested in enumerating the personnel of the clinic.

The psychiatric study demands a thorough physical and medical as well as a complete mental examination. In addition to the ordinary medical examination, which means the heart, lungs, etc., the various neurological tests are made and clinical signs of glandular imbalance are taken into account. A serological examination is also indispensable. This means simply that a blood Wassermann test must be performed (and if necessary a spinal fluid examination made) to rule out the possibility of syphilitic infection as a cause of abnormal conduct. Metabolism studies (in cases

which show signs of glandular disturbance), X-rays, and other laboratory aids to medical diagnosis are called into assistance whenever the superficial physical examination indicates the desirability for such procedure.

The mental examination consists of the usual psychiatric observation for hallucinations, delusions, disorientation for time or place, and other symptoms of mental disorder. It also includes a study of the mental life, with more or less utilization of psychoanalytic principles, with a view to revealing any possible emotional conflicts, obsessive ideation, etc.

The psychological study of the aberrant person is equally thorough in nature. It includes examinations for the determination of the general level of intelligence (such as the Stanford-Binet or the Army Alpha), and all sorts of tests for the establishment of the existence of special abilities or disabilities which may be utilized in vocational guidance. The data of the psychological study should offer not only an estimate of the individual's intelligence, which may be a contributory factor in the production of his misconduct, but also a picture of his potentialities for achievement, since the sublimation of energies once used along antisocial lines into vocational or other socially approved activities is often an important step in the adjustment of the individual's behavior and the correction of his difficulties.

The sociological study should give an account of the hereditary and environmental influences

which have been brought to bear on the personality development of the individual. The family history must be obtained in detail, with especial inquiry as to the existence of neurotic or psychotic taint, intellectual impairment, syphilitic or epileptic members, etc. The physical condition of the home, the economic status of the family, the attitude of the parents toward the individual as a child and his reactions to the father and mother, his early companions, his school and vocational career, his developmental history through infancy and childhood, must all be described as fully as possible. This social history gives us innumerable sidelights on the personality, and often reveals definite causes of abnormal reactions.

When these studies are completed, the causative factors differentiated, and a plan of therapy outlined, it remains to know by whom this treatment is carried out. This differs in different instances in accordance with the nature of the case. Persons whose abnormal behavior is the result of some physical or mental disease naturally receive medical treatment at the hands of a qualified physician or in the proper type of hospital. The mentally deficient become custodial cases in the institutions for the feeble-minded, or are given special training in the public schools or placed in training schools for mental defectives. The probation officer plays an important rôle in cases whose misconduct, although flagrant enough to bring them into conflict with legal codes, is of a kind to permit their being given another trial at large in the community.

Given an insight into the personality and capacities of his probationer, this officer can often help him make a social adjustment and prevent his appearance in court as a " repeater." In cases of emotional conflict, the remedy lies for the most part with the individual himself; outside assistance consists chiefly of aiding him in the rationalization of his conflict. Whether he can do this successfully will depend in large measure upon his own intellectual capacity, his personality make-up and his ability to face reality squarely, even though it be painful. For the adjustment of behavior difficulties in children who are brought to the juvenile court, the coöperation of parents and teachers must be depended upon to a large extent. The efforts of the social service worker to mold the environment must also be taken into account.

From the ideas of reforming the criminal and of curing insanity, it is a short step to the concept of preventing mental disease and delinquency. This, indeed, is the latest aim in this field. It has been mentioned incidentally in remarking upon the development of the mental clinic, but in its full implications it can be expanded endlessly, for it has innumerable possibilities. It is an ideal of recent origin, however, and its practical applications are still in their infancy.

In 1918, it was estimated that 500,000 persons pass through the penal and correctional institutions of the United States annually. Each year, too, approximately 50,000 new patients are admitted to the state hospitals of the country. These

two groups represent only the gross types of abnormal behavior. There is in addition to these a class of individuals at large in the community who, although their behavior is not sufficiently abnormal to bring them into actual conflict with legal codes or to indicate the existence of definitely psychotic conditions, are nevertheless more or less maladjusted, so that they are unhappy in their personal and business relationships. It is not to be conceived that the vast numbers represented by these and by the frankly abnormal and anti-social are an irreducible minimum, irretrievably doomed to an abnormal mode of existence.

As a matter of fact, the causes of abnormal behavior are manifold, as we have seen in the course of this study, and many of them are of a nature that would permit of their removal from the life of the individual. Aberrations of the instinctive and emotional life are not necessary in many cases, nor are mental conflicts and the formation of faulty personality habits inevitable. Many of these difficulties could be averted if the child were provided with proper environmental influences. Moreover, many of the physical and mental diseases leading to aberrant conduct will yield to therapeutic treatment, and the number of maladjusted would be still more reduced thereby. The proper physical, mental and social hygiene, particularly in the impressionable years of infancy, childhood and adolescence, would do much to prevent the development both of minor behavior diffi-

culties and more serious conduct disorders (such as insanity and delinquency).

The scientific program for the prevention of behavior abnormalities is very largely an extension of the methods in vogue for the correction of conduct disorders. It consists of the extension of the medico-psychological study of the individual from the group already manifesting serious behavior difficulties (*i.e.*, the psychotics and delinquents) to that in which definitely abnormal conduct has not yet appeared except in a rudimentary form. In other words, the study of children of school and pre-school age in whom there is any indication of incipient maladjustment, is the proposed means of directly dealing with the problem of prevention. The logical outcome of this concept is the establishment of psychiatric clinics in connection with the schools. The functions of the mental clinics in connection with the school system would embrace such activities as the following:

1. The recognition of somatic disease and incipient mental disorders, and the institution of proper therapeutic measures for these.

2. The recognition of mental defectives and the arrangement of a curriculum suited to their needs and capacities.

3. The recognition of the superior child and adequate provision for the development of his special abilities.

4. The recognition of undesirable personality traits in the process of formation and the endeavor to mold the personality along acceptable lines to

prevent the possibility of failure in later life (either through the development of psychotic trends or vocational maladjustment, etc.).

5. The recognition of vocational aptitudes and advice concerning their utilization.

6. The guidance of play to inculcate the qualities of fairness and sociability.

7. The discovery of abnormal emotional reactions or incipient emotional conflict and the utilization of proper psychological methods for their removal from the mental life.

8. The study of children showing pre-delinquent tendencies and the transference of their activities into other socially approved types of conduct.

9. The study of the environmental situation, and the readjustment of the home and general social milieu for the benefit of the child.

10. The study of problems involved in adolescent transitions, and advice concerning these difficulties.

Such clinical service, in order to be universally effective, should not be limited to the public schools, but should be provided in private schools, colleges and universities (in connection with the department of student health), orphanages and all other institutions dealing with children and young people. This service should detect abnormal behavior patterns in the process of formation, when they can be corrected before they become sufficiently pronounced to cause serious maladjustments. In this way, much personal unhappiness

and a great deal of social wastage could be prevented.

Although we have come to realize the necessity of introducing scientific methods for the correction and prevention of conduct disorders into the court and school systems, the actual carrying out of this project is taking place very slowly. As we have seen, the development of the mental clinic as an out-patient department of the psychiatric or psychopathic hospital is comparatively recent. The establishment of clinical service for delinquents occurred at a still later date. The first clinic for the study of adult criminals was that at the Boston Municipal Court under the direction of Dr. Anderson, which was initiated unofficially in 1913, while Dr. Healy's famous medico-psychological studies of juvenile delinquents were begun in Chicago at about the same time. Other court clinics similar to these have sprung up sporadically over the country, but their numbers are wholly inadequate in view of the scope of the field to be covered.

The Commonwealth Program for the Prevention of Delinquency is the most ambitious attempt to actually meet existing needs along this line. It provides for the maintenance of demonstration clinics in connection with the juvenile courts and public schools. It is believed that when the demonstration period is ended, the community in which it has been made will have come to appreciate the value of such work sufficiently to cause the institution of permanent clinical service at the public expense. As the result of one such demon-

stration, permanent clinical service has already been established in connection with the juvenile court at St. Louis. Similar demonstrations are under way in other cities, and will soon be placed by permanent clinics.

The school clinics which form another division of the Commonwealth demonstration are the first psychiatric clinics to operate exclusively with school children.[1] It is true that school children have been brought to mental clinics in juvenile courts and out-patient departments of hospitals, but these have been cases of such marked abnormality as to be readily discernible even by the layman. By the time they received clinical study they had reached a stage requiring corrective rather than preventive measures.

Dr. Glueck's Bureau of Children's Guidance, which operates in connection with some of the New York City schools, and the Mental Hygiene Clinic working in the public schools of Monmouth County, New Jersey, under the direction of Dr. Anderson, are definitely concerned with the prevention of conduct disorders. They study the child as soon as the first signs of maladjustment in any form appear, with a view to determining the causes of his behavior and outlining a plan for the prevention of more serious misconduct.

The Monmouth County clinic is particularly unique in that it deals principally with children

[1] Dr. Fernald has for some time furnished clinical service for the public schools of Massachusetts, although this has been limited to retarded children for the most part.

who live in a rural environment, and who present many problems which may be traced specifically to this fact. The lack of proper play and recreation facilities in rural districts is frequently productive of behavior difficulties. Lacking a wholesome outlet for his energies in play activities, the child may become precociously concerned with sex affairs or may find other means of obtaining excitement and exhilaration more or less anti-social in nature. This is not peculiar to the group of children being studied in Monmouth County, but is a general statement, applicable to children placed in a rural milieu. The mobile mental hygiene clinic, which is the necessary form of clinical service in rural districts, presents many difficulties of organization and administration, but it is a very necessary part of an inclusive preventive program.

Recent studies in child psychology indicate that the pre-school years and infancy are as significant for the formation of habits which act as a foundation for conduct disorders in later life as are the years spent in school. Many abnormal reaction patterns are built up in the first years of the child's life. Just as baby clinics have already been inaugurated to care for the physical welfare of the young child and to offer guidance to mothers in the care of their babies, so the time will come when mental hygiene clinics will also offer their services for this period of the child's life. Just as the mother should be taught the proper methods of feeding and otherwise caring for the physical needs of her child, so she must be given an insight into

the mental mechanisms of childhood. She must learn how easily abnormal emotional reactions, such as morbid fears, are set up in the child's life, and how difficult it is to dispel these reactions once they have become habitual. She must learn to replace the traditional parental discipline of repressive measures based on mere authority with sympathetic guidance of the child's diverse energies into wholesome play and work activities. Only through the intelligent coöperation of the home can the child be trained in adequate habits of character and personality formation.

While the various types of clinical service will do much to eliminate abnormal behavior traits from the life of the individual, the community in general must have some education along the lines of mental hygiene if we are to obtain the highest possible success along preventive lines. In its broadest aspects, this means that the general public must have some knowledge of the underlying principles of modern dynamic psychology, and must acquire to a certain extent an impersonal and scientific attitude toward such problems as we have been discussing. Once there is firmly established in the social mind the concept that the aberrant individual is urged on by motives beyond his control and often beyond even his own understanding, that he is seeking, perhaps blindly, for some satisfaction for his fundamental human cravings, and that he is not hostile to the interests of his fellows from mere perversity of volition, then we may expect a more tolerant attitude toward the divergent

members of the group, and a more intelligent treatment of their problems.

Just as the parent and teacher must face the fact that the child has definite affective needs which must be given satisfaction by providing adequate outlets for his emotional energies and permitting him a reasonable amount of freedom in which to develop his own personality, so the group as a whole must recognize that each of its individual units has his own emotional cravings and has similar need for as much personal autonomy as can possibly be granted. Fearful for its own safety, the community has always been loath to permit too much individual liberty, and has always attempted to suppress the personality which was noticeably different from the social norm. As we have remarked previously, this unreasoning attitude of the group has resulted in the loss of contributions of vast importance to society in many instances, and has often materially retarded social progress.

We are still too much the slaves of old traditions and conventions which were woven into the mores in a day when scientific knowledge was lacking, and when taboos and fear inhibitions were necessary for the protection of the individual and for the survival of the group. We have now reached a stage of social evolution in which we can safely grant more freedom to the individual. The system of repression not only involves personal unhappiness, but also results in the dissipation of energies in rebellion against imposed codes of conduct

when these energies might better be converted into a broad sphere of social usefulness, yet the great mass of people are still governed by taboos and inhibitions built up in ignorance and superstitious beliefs.

It is not compatible with the theory of democracy to withhold from the masses the knowledge which has come into the possession of the upper classes, nor is it for the best interest of the group to do so. We have no right to place a heavy premium on marriage by refusing the popular dissemination of data as to birth control, for example. In so doing, we not only place unjust restrictions upon the individual, but we also foster the social evil of prostitution to some extent. We have no right to take away from the working man the sociability of the saloon and the relaxation of his alcoholic beverages, when it is possible for the prosperous citizen to secure his liquor as liberally as ever, in spite of the laws we have made. If we insist on prohibition, we should at least furnish some vicarious means of attaining similar satisfactions. We have no right to prevent the spreading of knowledge concerning prophylactic measures for preventing the contraction of venereal disease on the sanctimonious and pseudomoral grounds that the possession of such knowledge would lead to an increase in irregular sex habits among the general population. The misery of innocent women and children which is caused by venereal disease (easily preventable were the social attitude toward the problem other than it is) is a more

pressing reason for the dissemination of such information than all those which unscientific moralists can assemble against it.

The burden of reproach falls to some extent upon the scientist, himself. Too often he has remained absorbed in his research, leaving the public to suffer at the hands of charlatans who purveyed a distorted and untruthful version of his discoveries. (Some of the popular lecturers on psychoanalysis, auto-suggestion, spiritism, etc., are pertinent contemporary examples of this.) The scientist should feel it a part of his obligation to his fellows not to leave society to the management of those who are ignorant of the significant facts which he could present to assist in a better organization. That he may have difficulty in convincing the conservative and intellectually inferior members of the group is true, and these are no small number. Yet it is his duty to provide an intelligible statement of his findings for the purpose of educating the public. Moreover, it is still further his duty to take an active part in political affairs, in order that he may prevent the perpetration of such outrages against the common weal as are imposed upon a credulous people by unscrupulous politicians. The movement of the age is the application of scientific principles for the welfare of mankind, and in this the scientist must become the leader unless he would see his life work distorted beyond all recognition, and his most cherished discoveries made a source of grief to mankind.

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