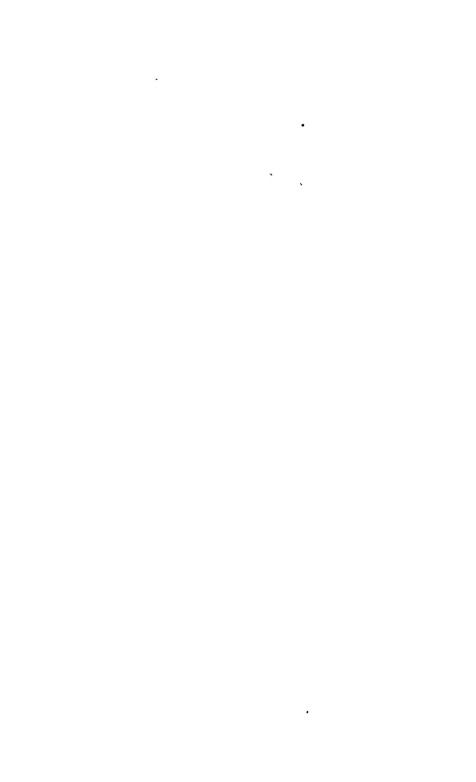
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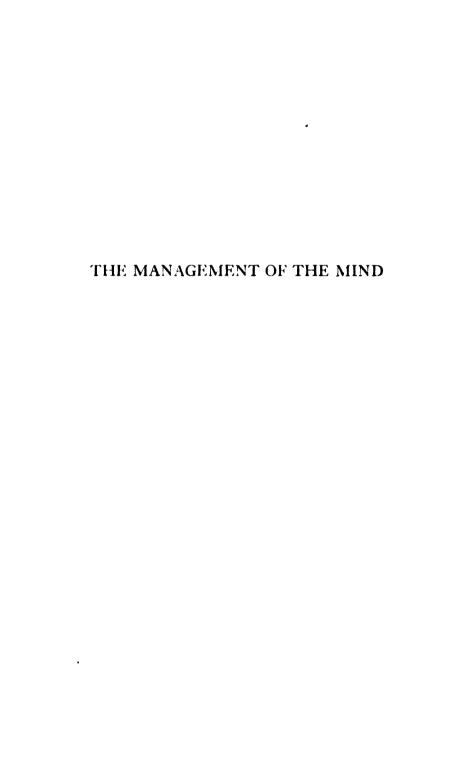
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THE MANAGEMENT of THE MIND

by Damilton Harrington, M.D.

Edited from posthumous manuscripts and notes

by Ralph B. Winn, Ph. D.



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FOREWORD

When my husband, Dr. Milton Harrington, died in May, 1942, he left the manuscript of this book. He published "Wish Hunting in the Unconscious," a critique of psycho-analysis, in 1934, and in 1938 he brought out his psychology and psychopathology in one volume entitled "The Biological Approach to the Problem of Abnormal Behavior." He had planned that this present volume—which contains his ideas on therapy—should complete the trilogy.

It took from twenty-five to thirty years to think out and write the material in these three books. During those years my husband had the varied professional experience of years at Bloomingdale Hospital, at State Hospitals, clinics for pre-school students, for high school students, in research at the New York Psychiatric Institute, in private practice in New York City, as General Medical Officer with the Heavy Artillery in Picardy in World War I, as attending specialist at a veterans' hospital, as consultant in mental hygiene at Dartmouth College and as psychiatrist in New York State Dept. of Correction.

Meanwhile the material in these books was written and re-written as his knowledge through these experiences grew and deepened. Even so I am sure my husband would have felt that much more work should be put on this present volume before publication. He would have found some further careful and meticulous pruning and priming to do.

But knowing the time and thought that had already gone into the writing of it I felt that it should not be left un-used. This feeling was intensified by the particular situation which had endured in the last years of my husband's life. Almost immediately following the publication of his second book he suffered his first attack of coronary thrombosis combined with a pulmonary embolism. It was a crushing and cruel disappointment to find himself thus physically handicapped at the moment when he wished to put all his energies into spreading the ideas enunciated in his "Biological Approach"—ideas which he felt were so fundamental and so badly needed in the art of mental hygiene and the science of psychiatry. He was able to accomplish almost nothing in the four years after his illness except his writing. He published some articles and worked on this manuscript, but it was a time of bitter and tragic frustration.

With the desire to finish his work so far as it was possible to do so I decided to publish this work. The manuscript as he left it with the notes which he added from time to time has been edited and prepared for publication by Prof. Ralph B. Winn of the Department of Philosophy and Psychology, Hofstra College, and Editor of the "Encyclopedia of Child Guidance;" it has further been read and criticized by Prof. Frank H. Hankins of the Department of Sociology at Smith College, both loyal and sympathetic friends of my husband. I wish to acknowledge my deep gratitude to them both but especially to Dr. Winn for his unselfish interest and effort in preparing the manuscript for the press.

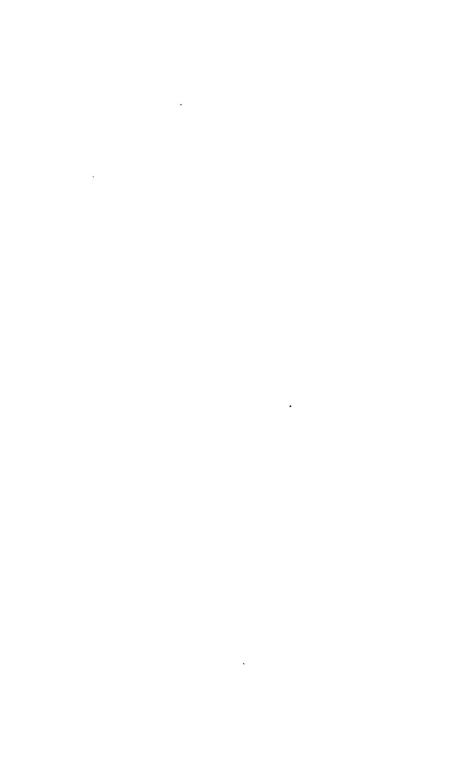
The book is published as a memorial to my husband, Dr. Milton Harrington, and his struggle and labor for a more scientific psychiatry and more fundamental mental hygiene. Its publication has been made possible by

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the help of a group of the personal and professional friends who have wished to honor his memory in this way.

It is the wish of all of us that the book may prove the help to psychiatrists and the laity that my husband hoped it might be.

Gratia Eldridge Harrington



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INTRODUCTION

The purpose of this book is to explain the what and wherefore of the mental ills to which all of us are exposed and from which all of us suffer in greater or lesser degree, to the end that we may be able to avoid these mental ills and to live as happily and usefully as possible in this troubled world.

For the attainment of this objective, a certain amount of self-knowledge is essential. Suppose that a man, in carrying on his business or profession and in the various other aspects of his daily life, were obliged to make use of some very expensive and delicately adjusted instrument or machine. Suppose that this means of livelihood and success in all that he did depended upon his proficiency in the use of this machine. Suppose, moreover, that this machine were one which, once worn out or destroyed, could never be replaced and which, therefore, must be carefully guarded against the possibilities of injury and misuse. Would you not say that a man possessed of so delicate and valuable an instrument and one so vital to his welfare, should seek to acquire as thorough a knowledge as possible of the facts and principles that should guide him in its care and use, of the plan upon which this instrument is constructed and how it works, of the things that -might injure it and how it might get out of order, of what should be done to keep it in perfect running condition and to set it right if it goes wrong? As a matter of actual fact, each and every one of us is provided with just such a delicate and priceless instrument in the thing we call the mind. It will be understood that by mind we do not here mean consciousness or behavior, but that thing, whatever it may be, by the action of which our various forms of behavior and states of consciousness are produced.

What we are offering in this book is, therefore, an elementary course in what might, very properly, be called the science of psychoorthology, the purpose of which is to discover and teach how to keep mentally fit; how to maintain one's emotional balance under the stresses and strains to which we are all subjected in the turmoil of our present day life; how to think straight and how to live normally and effectively in this changing world.

to live normally and effectively in this changing world.

More specifically, the psychoorthology here presented consists primarily of two parts. The first part has to do with the prevention of mental ills. This is mental hygiene. The second part has to do with the treatment of those mental ills which we have failed to prevent. This is mental therapeutics.

Under mental hygiene, there are, broadly speaking, two problems to be considered. First, there is the problem of self-management, of how the individual man or woman is to order his own life, or, in other words. of how he is to handle his own mechanism of behavior in order to get from it the best results possible. This we call the problem of individual hygiene. Second, there is the problem of how people are to deal with their fellows, of how the parent is to deal with his children, the teacher with his pupils, the employer with his employees, and society as a whole with itsmembers, in order to get from each and every one the behavior most satisfactory from the standpoint of the common good. This we call the problem of social hygiene. Also, under mental therapeutics there are, broadly speaking, two problems to be dealt with. First,

there is the problem of dealing with people who behave abnormally in their own homes or in the world at large. This we call the treatment of extra-mural cases. Second, there is the problem of dealing with people who are unable to get along satisfactorily in the outside world, by placing them in institutions and treating them there. This we call the treatment of intra-mural cases.

These four major problems or divisions of psychoorthology—namely, individual hygiene, social hygiene, treatment of extra-mural cases, and treatment of intramural cases—will, in the following pages be discussed in the order in which they are here named. Before launching out on this undertaking, however, let us pause for a moment to get our bearings. At the present time, there are, broadly speaking, two kinds of psychological approach to the problem of our mental ills, between which we may choose.*

The first of these is the psychoanalytic approach. According to psychoanalytic theory, functional nervous ailments are due to impulses or desires, mainly sexual in origin, which, being kept bottled up in the unconscious, tend to manifest themselves in disguised or distorted forms. Cure, therefore, according to this theory, is to be accomplished by getting rid of the unconscious wish which is responsible for the patient's unhappy conditions, or at any rate by bringing this wish into consciousness where it will no longer give rise to the symptoms of nervous or mental disease, which result from its repression. And this, of course, is what

^{*} If anyone wishes to know the reasons which may compel one to consider the choice, he can examine my little book entitled "Wish-Hunting in the Unconscious" (Macmillan, 1934).

the psychoanalyst claims to be able to do by the use

of his psychoanalytic treatment.

Psychoanalysis is a sort of mental surgery by means of which, at least so it is claimed, the psychoanalyst releases from the unconscious mind the deeply buried, instinctual motives to which our mental ills are due. It is, in other words, essentially a method of treatment by 'catharsis', or evacuation. Now whatever may be said as to the therapeutic value or lack of value of this form of treatment, one thing is quite certain: it is altogether too expensive to be generally or even widely employed. For psychoanalysis means being closeted with the psychoanalyst for an hour daily over a period of anything from one to four years, and the cost of such extended treatment runs into thousands of dollars. This treatment, therefore, is possible only for the fortunate few who come within the higher income brackets. But what is to be done for the vast army of sufferers from nervous ills who cannot afford to indulge in anything so expensive?

There is another possible viewpoint and avenue of approach to the problem of mental abnormality than that which psycho-analysis affords. This alternative viewpoint is one which I have expounded at considerable length in a recently published volume entitled "A Biological Approach to the Problem of Abnormal Behavior." Behavior, according to this viewpoint, is produced by the action of a highly complicated mechanism composed of sense organs, nervous system, muscles and glands, which developed in the course of evolution because it was of value in the struggle for existence: and our abnormal forms of thought, feeling and action are due to the inevitable limitations and defects of this piece of mechanism, by reason of which it not

infrequently fails to respond in a satisfactory way to the demands made upon it. These limitations and defects have been, it is understood, greatly enhanced by the many deviations of the civilized mode of existence from the primitive pattern of life, to which all the preceding centuries have fitted the human being. Looking at the matter from the biological point of view, behavior may be regarded as a more or less constant succession of adjustments to the changing conditions of life; and neuroticism and other mental ills occur when our attempts at adjustment do not meet with success.

For example: At the time of the last world war, we had a large group of war neurotics. These were men who broke down because they were unable to adjust themselves to the conditions of military life. Army life in wartime made certain demands upon them which they were unable to meet. Then, after the war was over, there developed amongst our war veterans, on their return to civilian life, another large group of nervous ailments which sometimes were spoken of as postwar neuroses. As an attending specialist in neuro-psychiatry with the United States Veterans Bureau after the war, I had an opportunity to make a fairly exhaustive study of these cases, and the result of my investigations was to convince me that in at least a very considerable proportion of cases, they were due to the fact that the social and economic conditions to which the men returned after the war was over, were of a kind to which they were unable to get adjusted. These cases were, therefore, essentially peace neurotics. . They were breakdowns occurring as a result of the stresses and strains imposed upon these men when they were obliged to leave the relatively congenial military

environment and return home to take up again the burdens of civilian life.

These two groups of neuroses go to show that, although nervous breakdowns occur as a result of the stresses and strains imposed upon us by the conditions of life, the personal equation is also a factor to be reckoned with. There are an almost infinite variety of situations to which the individual may be unable to get adjusted and which may lead to a nervous breakdown; but the kind of situation that will be most difficult for one person may not be difficult at all for someone else. There are people who develop neuroses because of their inability to bear the complexities of business life, and some who break down when obliged to retire from business and lead a life of idleness. There are men and women who suffer nervous breakdowns because they cannot adjust themselves to a state of celibacy in which they are denied the means of sexual satisfaction; and I have also seen not a few breakdowns after marriage because married life, too, has its deprivations and its difficulties and in many cases makes demands upon the individual, which he is not capable, or strong enough, to meet.

So, although it may be held as fundamentally true that neuroses occur because of the difficult situations of life to which we are unable to adjust ourselves, it is equally true that what is difficult for one person may not be difficult for another. In every case, we have to take into consideration, not only the nature of the load, but also the back which has to bear it. This fact is of great importance and should be a source of encouragement and hope to all of us, because it means that, although the situations of life which cause our nervous breakdowns are commonly situations from

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which it is impossible for us to escape, it does not follow that these nervous breakdowns are unavoidable. For, if we cannot change and get away from a disturbing situation, we can, by education and training, in the majority of cases, 'acquire an ability to meet it and to surmount the difficulties which it presents. This education and training in the art of adjustment, this development of our capacities to meet our needs, must of necessity be the mainstay of any mental hygiene program that enables us to keep our balance in this troubled world. It must also be the root of any form of therapy that is to be of real or permanent value in the treatment of mental ills produced by loads which in the past were too heavy for us to carry, but which in the future we shall again be compelled to bear.

CHAPTER I

CAUSES OF TENSION

Perhaps the greatest problem of practical psychology as well as of psychiatry, and one closely connected with the attainment of happiness and the prevention or cure of mental ills, is that of adjustment.

Adjustment can be defined in terms of requirements of one's physical or biological environment, in terms of conditions imposed upon men by their general culture or particular milieu, and also in terms of childhood or adult life experiences. But we find it most conducive to our purposes to regard adjustment as a matter of finding comfort or satisfaction. We speak of a man as being in a state of non-adjustment when he is uneasy or discontented; and we say that he is in a state of adjustment when he is enjoying relaxation and peace of mind. Or, to put it somewhat differently, we say that a man is in a state of non-adjustment when he suffers from unsatisfied cravings or desires; and that he has made his adjustment when these cravings or desires have ceased to trouble him.

Take, for example, the case of the man who has been drafted into the army. This man is in a state of non-adjustment as long as he finds the situation horrible or terrifying, as long as he has a craving to get out of it and return home. Similarly, a man is failing to adjust himself to the married state as long as he fails to find happiness and satisfaction in it, or as long as he sighs for a return to his former state of single blessedness.

It is always in these conditions of dissatisfaction or non-adjustment that our neuroses develop. No soldier ever developed a war neurosis who was happy and contented in the army. No man ever developed a neurosis in any situation in which he was satisfied and at ease. The conditions productive of nervous and mental breakdowns, the so-called trying or difficult situations of life, are those in which we are unable to find comfort or peace of mind. They are those that awaken within us impulses and desires from which we are unable to find relief.

So we can see that this problem of mental adjustment is of fundamental importance to all of us. It is of importance to the physician and to the neurotic patient and the so-called mentally ill, because failure to adjust is the chief cause of our nervous and mental ills. But it is also of importance to the ordinary layman who looks upon himself as a perfectly sane and normal individual, because adjustment means the attainment of happiness and peace of mind and that is what everyone of us is looking for. It is the aim of all human striving, the ultimate objective toward the attainment of which all our efforts are directed.

Suppose that I am thirsty and have a wish for a drink. Here is a state of non-adjustment or dissatisfaction. Let us consider the nature of the physiological process that underlies it. The body, in this case, has been drained of water; the various tissues, conspicuously the soft palate, suffer from dryness. This dryness affects certain sense organs located there and impulses are transmitted to the central nervous system as a result of which energy is generated in certain of the neurones composing it, more or less as steam is generated in a boiler or electrical energy in the cells of

a battery. So we have produced what we may think of as a state of pressure or tension, the energy under tension tending to flow out, in the form of impulses to muscles which are thus thrown into action, the action in this case probably taking the form of going in search of a drink.

Now as long as the dryness continues—in other words, as long as I remain in need of water—just so long will the sensory stimulus continue with its resulting state of nervous tension, and just so long will I experience craving or dissatisfaction. But suppose that presently, as a result of my efforts, I am able to secure a drink. The tissues of my body are now provided with the water which they require; and when this happens, the stimulus resulting from lack of water in the tissues is cut off; nervous energy, therefore, ceases to be generated in the central nervous system and to flow out over the efferent nerve fibres in the form of impulses to action. My state of nervous tension is relieved, my muscles that previously had been kept in action as a result of tension are permitted to relax. I am now in a condition of satisfaction or peace of mind. I have succeeded in making an adjustment.

Craving or unsatisfied desire in this case is therefore, the manifestation of an underlying state of nervous tension, and satisfaction is the feeling which is experienced when this tension is relieved. And what is true of this case is true generally. Life is a neverending series of reactions to the demands that are made upon us by the situations of life.

The life of the individual man or woman is a constant struggle to achieve satisfaction and escape dissatisfaction, to get pleasure and avoid pain. But satisfaction and dissatisfaction, pleasure and pain, and the entire gamut of emotions are merely manifestations of underlying physiological processes rooted partly in inherited tendencies and partly in acquired inclinations. Expressed in physiological terms, what the struggle for satisfaction really amounts to is a continual effort to find relief from the states of nervous tension produced by the various stimuli to which the organism is subjected. It is, in other words, a struggle for adjustment.

The problem which confronts each of us is that of making our personal adjustments in the best way possible. And, since making an adjustment is, in every case, a matter of getting rid of the stimulus to which the tension is due, we have here a two-fold problem:

(1) to find the stimulus which is causing the tension and (2) to find the best possible way of dealing with this stimulus.

In this chapter, we shall consider the former problem.

Our ideas as to the causes of the events we see taking place in the world about us are formed by observing the conditions under which they occur and then drawing such inferences as our observations may warrant with regard to their connection. For example, we observe that every time we pull the cat's tail she meows and that every time we stroke her she purrs and we infer that the pulling of her tail is the cause of the meow and the stroking of her fur is the cause of the purr. Or, we observe that every time we press a certain button a bell starts ringing and every time we cease pressing it stops, from which we infer that the pressing of the button causes the ringing of the bell.

Our ideas as to what stimuli cause the psychological reactions taking place in ourselves, including those of

tension and relaxation, are formed essentially in the same way. We observe that when someone insults us we feel angry, from which we may conclude that the insult is the cause of the anger; we observe that whenever we think of a certain thing we feel afraid and that whenever we stop thinking of it the fear tends to disappear, from which we infer that the thought of this thing may be the cause of the fear. It is only by this method of observing the conditions under which our psychological reactions occur—usually in a considerably more complex form and combination than in the above example—that we can determine the nature of the stimuli which give rise to them.

But the question is, how are we to apply this method to get the most successful results? The question is best answered by considering the difficulties which prevent us from picking out the stimuli which cause our states of non-adjustment.

DIFFICULTIES TO BE OVERCOME

The difficulties we encounter here, like those in everything else we undertake, are of two kinds, objective and subjective; that is to say, the difficulties or obstacles actually present in the task which confronts us and the defects or limitations in ourselves which prevent us from meeting these objective difficulties as we should.

Of the objective difficulties which tend to prevent us from discovering the causes of our states of nervous tension, the most important one lies in the fact that in these states of tension we have always a great many different stimuli acting upon us. A great stream of sensory impulses is constantly pouring into the nervous system from the viscera and from the outside world; a great many thoughts, which in furn serve as stimuli, are formed as a result of these impulses; and emotion constantly modifies and distorts these perceptions and conceptions. How are we to tell which of the many stimuli acting upon us are to be looked upon as the causes of our tension and which are to be ignored?

Whether or not a given stimulus is a factor of consequence in producing a state of tension can often be determined by observing the effect of variations in the stimulus upon the tension. What I mean by this can best be shown by a simple example. Several years ago I found myself in a state of marked non-adjustment. I was irritable and discontented. I had just moved into new quarters where I was obliged to use as a study a room that was damp, dark and dingy. Was the stimulus afforded by this state of affairs the main cause of my dissatisfaction? I was not at all sure. Fortunately, after a short delay, I was able to exchange my distasteful quarters for others which were considerably more appealing to my taste and, with the change, my mood returned to normal. This settled the point. My nervous tension began when I entered my unpleasant quarters and disappeared when I left them. Here, therefore, was the stimulus to which my dissatisfaction was due.

There is probably no self-observing person who cannot recall similar experiences. Everyone knows what it is to have a state of dissatisfaction hang on for days or weeks and then something happens, some long drawn out and tiresome business affair is finally concluded, a danger of some sort that has been long threatening is removed, or some trying person with whom one has been obilged to associate takes his departure;

at once, with this happening, the mental barometer rises, the sun begins to shine, and one discovers, sometimes to one's own surprise, that it really must have been the stimulus afforded by this thing from which he has just been freed that was the cause of his tension.

Sometimes, before we can be sure of the effect of a certain stimulus, it must be applied and withdrawn a number of times. For example, a man eats a certain article of food and afterward there is produced a state of nervous tension showing itself in the form of bodily discomfort or pain. Obviously the man would not be justified in concluding from this single experience that the food is the cause of the pain; but if, on various subsequent occasions, he partakes of this food and always the pain follows, he is warranted in assuming that such is the case. Similarly, if on various occasions a man experiences bodily discomfort and every time he takes a dose of bicarbonate of soda the discomfort is relieved, he may be fairly sure that his discomfort is due to the stimulus afforded by the acidity of his stomach contents; or, if he has a state of nervous tension which always clears up when he has a sexual orgasm, he may reasonably assume that his condition of non-adjustment is due to the stimulus afforded by a bodily condition which the orgasm serves to relieve.

As a rule, when a state of tension is produced and we at once identify a certain stimulus as its cause, it is because on previous occasions we have had experience of the results to which such a stimulus may give rise. We have learned, for example, from repeated experience, that when some injury threatens we are likely to have a state of nervous tension showing itself in fear. So, when we perceive a danger and feel afraid, we at once assume that the fear is caused by the danger.

It is like a man who, finding a tire flat and a nail sticking in it, at once recognizes the nail as the cause of the trouble, because he has learned from previous experience that perforation by nails is one of the common causes of flat tires. As a matter of fact, so closely have we come to associate nails with flat tires, that when a man discovers a flat tire he at once begins to look for the nail which caused it. Similarly, when a man experiences fear he is very likely to look about for the danger which he assumes must have caused the fear and if, as sometimes happens, he fails to find any, he is puzzled and says that he cannot account for his fear, because he knows of nothing to be afraid of in the given situation.

As for the subjective causes of failure to discover the stimuli responsible for nervous tension, the root of the trouble usually lies in the lack of honest, well directed effort to locate them.

One of the chief reasons for the lack of such effort is what may be called an intellectual one. The average man does not believe that the pains and discomforts which occur in our states of non-adjustment are caused by stimuli or, if he does, his ideas on the subject are extremely vague. The pains of bodily ailments, such as cuts, burns, boils and indigestion, he knows are caused through the agency of the afferent nerve impulses to which these conditions give rise, and distress of mind is produced by sights and sounds which call up unpleasant thoughts or memories. The full significance of these facts, however, has not been clearly grasped, especially when connection between cause and effect is not obvious or when the cause is not of a concrete and sensory nature; the thing has not been thought through to its logical conclusion. So he concerns himself very little, if at all, with the question of what stimuli may be responsible for his states of nervous tension; and, because he fails to look for these stimuli, he very commonly fails to find them.

Another important factor is mental inertia, both of thought and feeling; in other words, it is laziness of the mind characterizing most people and arising partly from the lack of sound incentives and partly from the the lack of self-confidence in such matters. A serious effort to find true causes of tension is not easy for most people, and they prefer to accept someone's authoritative opinion rather than to examine it critically, even if it really is a prejudice or superstition. And once the attitude is thus formed, it becomes even more difficult to change one's mind on the subject.

Still another factor, although one which makes for error rather than mere ignorance, is to be found in the fact that the truth is often unpleasant so that one is impelled to reject it and to accept some other belief in its stead. This we see in the case of the person who is unhappy because he has not received social recognition from certain people but who will not admit this, even to himself, because he does not like to face the fact that the approval of these people is of so much consequence to him. He prefers to think that he is so big and they are so little that their airs of superiority can afford him nothing but amusement. Although he cannot shut his eyes to his unhappiness, he can nevertheless attribute it to some other cause than the right one, as for example to his kind-hearted concern for someone else's troubles or, if he has been reading Freud, to some unknown memory or desire in his unconscious self that wants to get out. Certain of the delusional ideas of the insane are to be explained in

this way; as, for example, that of a woman who complained that a certain man exerted an evil influence upon her, causing electrical currents to pass through her body. The real explanation was, of course, that the man served as a stimulus to her sexual instinct so powerful that every time she saw or thought of him. tension rose high and produced a sexual emotion which was painful. However, being a person with good oldfashioned ideas of what a lady's feelings ought to be, this explanation was one she found impossible to accept. She, therefore, explained the thrills and shivers called forth when she saw or thought of this man as due to electrical currents which he sent through her. and not to a sexual stimulus. There is, indeed, no end of disguises hiding the true stimuli whenever wishful thinking, or rationalization, is at work.

THE "FREUDIAN WISH"

It might be pointed out in passing that, in man's frequent failures to recognize the stimuli responsible for his states of tension, we have the explanation of his belief in unconscious-wishes, a belief which is the cornerstone of psychoanalytic theory. As we know, the situations affording stimuli which give rise to tension are, generally speaking, situations in which there is a need to be met. Thus a state of affairs where there is need of water in the tissues affords a stimulus which gives rise to the tension of thirst; while danger, or the need of flight, affords a stimulus which gives rise to the tension of fear. Generally speaking, therefore, explaining tension is a matter of finding the need lying back of it, for our conditions of need afford the stimuli to which tension is due. Now, man early in human

history recognized the close relationship between his needs and his states of tension or, to be more exact. between his needs and the various phenomena such as pain and restlessness, to which tension gives rise, and he sought to explain this relationship in his primitive way by assuming that he had within him vague, mysterious forces called wishes and that, whenever a need arose, one of these wishes awoke to activity and impelled him to satisfy it, causing him to feel unhappy and dissatisfied when he failed to do so. Whenever a state of unrest occurred, he sought to discover the need which caused it, or what came to practically the same thing the wish which, according to his theory, the need had awakened. When, however, he failed to associate a state of tension with the stimulus to which it was due, he assumed that a wish must nevertheless be there even though he could not find it; he assumed that it must be somewhere down in the dark where it was hard to find, that it must be in the unconscious. This way of explaining our failures to recognize the causes of our states of tension is false and misleading. It is as if a man were to say that he was suffering from an unconscious bellyache when he had an abdominal pain and did not understand the nature of the visceral disturbance to which it was due, or as if one were to say that an explosion of gunpowder was in the unconscious because he could not find, or was unwilling to study honestly, the facts which would lead to the discovery of who lit the fuse.

We thus see that the type of explanation here designated as the "Freudian wish" constitutes another form of subjective difficulties to recognize the causes of nervous tension. It consists in human inclination to accept mystical accounts as an easier way out of

perplexity than a thoughtful search for true causes or a scientific procedure of a careful investigation. A word like "unconscious" then becomes all-explanatory, simply because it is vague and loose and cannot be pinned down to concrete and tangible facts.

VICARIOUS ADJUSTMENT

Even if one is able to overcome all the above-mentioned difficulties, objective and subjective, and to discover the precise causes of the tension disturbing him, even if he is quite ready and willing to eliminate these causes, there may still remain before him a handicap of no mean importance, namely, that the stimulus responsible for the condition of tension simply cannot be removed.

As an example of this, consider the case of a man marooned upon a desert island without any means of sustenance. In such a case, the stimulus afforded by an empty belly causes generation of nervous energy and a resulting state of tension which, under ordinary conditions, would be relieved by filling the belly with food. But there is no food to be obtained, and so it is impossible to cut off the stimulus in this way. Neither can the man run away from his empty stomach, nor can he develop an immunity or attitude of indifference toward it. As a result, his nervous tension of necessity continues unrelieved. Until some new factor comes into play to upset the status quo, he remains in a state of non-adjustment.

The situation here is, in its main essentials, the same as that which we have in the case of every desire we can find no means of satisfying, every injury or deprivation from the pain of which we can find no means

of escape. Take, for example, the case in which we lose through death a dearly beloved friend. The circumstances of our friend's death and the thoughts which they call up serve as stimuli, causing generation of energy and a state of tension which manifests itself in the form of an intense desire for the return of the loved one. But the gratification of this desire is of course impossible. The dead cannot be restored to life; neither can we escape immediately from the associations and memories which we may look upon as the stimuli responsible for our state of tension; nor yet modify our mental processes so that we shall cease to be affected by them. These memories will tend to fade in course of time; certain changes will take place within us as a result of which they will cease to affect us so deeply; but such changes occur very slowly, and in the meantime we continue in a state of non-adjustment.

And what is true here is true also in those cases where one suffers the loss of wealth, good looks or social position, which he is unable to recover; or where one wants a certain woman who will have nothing to do with him, or the restoration of a leg that has been cut off, or relief from some painful illness that no physician can cure. In all such cases, we have a stimulus of some sort, producing a state of non-adjustment that remains unrelieved because the circumstances cannot be altered.

It would be wrong, however, to conclude that adjustment is impossible in all such cases. Relief from tension and the consequent attainment of pleasure and satisfaction is possible in many of these cases, although sometimes it happens to be a false solution of the problem, in so far as it relieves one tension and creates another. For instance, daydreaming is pleasurable and satisfying as a rule, yet it stands for escape from reality, for an adjustment that went astray, that merely covers some basic maladjustment. Such cases of the false solution of psychological problems represent what may be called vicarious adjustment.

But vicarious adjustment may occasionally do even better than that. It may offer real and considerable relief, precisely when the solution of a problem appears to be hopeless. To be sure, it does not, in this case, solve the original problem; it merely shifts the response from one field to another. But what of it? Whenever the causes of mental tension are such as to preclude their possible elimination, it may indeed be advisable to find a field of vicarious adjustment. This can best be illustrated by sublimation, as when the frustrated erotic drive of a young woman is redirected to give rise, for instance, to artistic activity, work in child guidance or nursing. Though the woman remains fundamentally non-adjusted with regard to her erotic drive, she finds, for all practical purposes, satisfaction and a sort of adjustment in her newly discovered endeavors.

It must be conceded, however, that vicarious adjustment results more frequently in a more or less serious personality fault rather than an advantage or merit. By concealing from view the true causes of tension and by substituting a false, or, in the best case, a different, solution of the problem, however satisfying it may appear, it perpetuates the basic non-adjustment and makes the identification of its causes more difficult than ever. Practically every neurotic finds relative happiness in some form of vicarious adjustment, but it is precisely this that makes him clips to the fattle way of salvation

and be immune or resistant to all the efforts of cure. Hence, merely to locate the reasons for and causes of tension is not enough. One must go on to decide whether a particular vicarious adjustment is preferable to the true one, by evaluating both adjustments in the light of actual conditions of life.

DIAGNOSIS

The difficulties of recognizing obvious or concealed causes of tension and of taking proper steps toward their removal should be taken into consideration by every person trying to escape maladjustment of any kind. It cannot be denied, however, that not everybody is capable of making a diagnosis of his own case. As we have shown above, human behavior is entirely too complex to be readily understood by an average man; much practice is required before even an able man learns to judge correctly the behavior of others, and the feat is even more difficult with regard to oneself. Moreover, a thinking attitude is comparatively rare and, even when it occurs, it is likely to take the misleading form of wishful thinking. Under these conditions, people may only pretend to be seeking a solution of their problems, while actually they fear their removal. Thus, a young man, for many years overprotected by his widowed mother, may claim desire for more independence, yet find actually that the very dependence on his mother is so satisfying that he has neither the will nor courage to alter the situation. In other cases, the recognition of one's problems is prevented by the tendency to seek self-excuses or by some other emotional quirk,

It is fairly obvious, then, that only few people are

enlightened enough to be of help to themselves, no matter how eagerly they are looking for the right way of thinking, feeling and living. A consistent and persistent effort at self-analysis is likely to change the situation. Nevertheless, it remains true that self-analysis is so full of pitfalls that most people in seeking relief from accumulating tension should turn to psychiatrists or psychologists for advice and assistance. But even the specialist must recognize that the diagnosis of mental troubles is often a question not only of knowledge and skill, but also of close and careful observation. He, too, must not yield to the temptation of choosing the shortcut in the understanding of cases referred to him for prevention, relief or cure, and to relegate the little understood causes of tension to the "unconscious."

CHAPTER II

THE METHODS OF ADJUSTMENT

We have seen that finding the stimuli responsible for our states of nervous tension is a matter of observing the conditions under which tension occurs and drawing from these observations such inferences as they warrant.

But how are we to free ourselves from these stimuli after we have found them?

Now experience goes to show that most of these apparently difficult situations are difficult only because we do not know how to deal with them or because we deal with them in the wrong way. Even if we approach them correctly, many different ways are open to us; but, on careful analysis, they all boil down to a certain limited number of methods or courses of action among which we must choose in making our adjustments. These methods may be looked upon as the instruments or tools of adjustments and we shall see as we proceed that failures in adjustment with their resulting mental ills may usually be attributed to the fact that these methods are wrongly or unskillfully employed.

There are, as we know, five distinct methods by which a stimulus may be cut off; namely: (1) accomplishment, (2) withdrawal, (3) modification of thought, (4) modification of expression, (5) disabling the machine. Whenever a man wishes to free himself from a stimulus which is producing in him a state of tension, he must do it by making use of one or another of these five methods. An understanding of the art of

adjustment is, therefore, an understanding of when and how each of these methods of adjustment should be employed. Let us consider them briefly in the order in which they are here named.

ACCOMPLISHMENT

The conditions which give rise to tensions are, in the main, conditions in which there is a need of some sort and, where such is the case, one way to cut off the stimulus is to do something that will meet this need. Thus the hunger stimulus, due to the lack of food, may be disposed of by eating and the fear stimulus, due to danger, may be disposed of by removing the danger together with its source. This is the method of accomplishment. One might also call it the method of gratification since in using it one is, as a rule, gratifying a desire to which the stimulus has given rise.

There are, of course, many needs which it is impossible for us to meet, many wrongs which cannot be set right, many desires which we may not gratify, and in these cases one must make use of some other method of adjustment.

The method of accomplishment is sometimes a method of weakness. Oscar Wilde once said that the best way to get rid of a temptation is to yield to it. In some instances, no doubt, this is a good way out of trouble. In others, it relieves one of tension only temporarily and, if used so consistently, the method may disrupt all the better traits of personality and lead to harm to oneself and others.

Much more significantly, the method of accomplishment is a method of choice. Whenever there is a lack one should, if possible, relieve the tension to which it

gives rise by supplying that which is lacking. Life can and should be a constant succession of achievements, of getting the things we want, or shaping life to our desires, and one of the foremost problems in mental hygiene is the problem of how achievement and the ability to achieve can be raised to the highest possible level. A lengthy discussion of this problem is, of course, impossible here. There are, however, several points of cardinal importance from the standpoint of the man or woman who wants to get efficient service from his own mental mechanism to which we may give at least a brief consideration.

Efficient action, except in simple reflex and habit reactions, consists of three stages: (1) deciding on a goal or objective; (2) laying out a plan or course of action by which this goal may be reached; and, (3) putting the plan into execution. One cannot act efficiently if this course of action is not intelligently planned, and one cannot plan intelligently if he does not know what result he is planning to bring about. The first essential to efficient action, therefore, is to know what you want, to have a clear and well defined objective. One of the reasons why our educational system is such an anarchic, inefficient and haphazard thing is. as Mr. H. G. Wells has well pointed out, because our educators generally do not know what they are trying to do. And what is true of education is true of most of the activities of most people, even the influential and supposedly intelligent ones. They don't know where they're going, but they're on their way.

But it is not enough that a man should have a clearly defined objective, it is also essential that his objective should be wisely selected. Many of the things we tend to make the objects of desire are things that are not

good either for ourselves or for society, and of the things which are harmless or beneficial, not all are of equal importance. There are many needs to be supplied, many wrongs to be righted, but we can supply these needs and right these wrongs only one at a time. It is important that we should take our objectives in proper order, that we should pick first that thing which most needs doing and do it, and then go on to the next.

It is also necessary in selecting an objective to pick one which is possible of accomplishment. Know what you want, let your want be for something that you can get. Someone may say at this point that to shoot high it is necessary to aim high, and that it is he who aspires to great things by whom great things are accomplished. To answer this objection it is enough to refer again to our old familiar analogy of the motor car. A car has certain capacities and limitations. It can perhaps carry a load of one ton safely enough, but not a load of two tons. It can be driven satisfactorily at thirtyfive miles an hour, but will go to pieces if driven continuously at fifty or sixty. Now suppose the driver of this car wishes to accomplish as much with it as possible; would it not be the part of ordinary common sense for him to study the limitations and capacities of his machine and make his aims and undertakings conform to them? Should we not consider the man a fool who could believe that it was a fine and noble thing, or that it made for greater accomplishment, to try to pile a two ton load into his one ton car, or to set fifty miles an hour as his standard of speed when his machine was not suited to be driven above thirtyfive? What is true of the automobile is true also of the human organism, for it also is a piece of mechanism with capacities and limitations by reason of which it

will break down or fail to give efficient service if too much is demanded of it. The best human engineer, the one who in the long run gets the most work out of his bodily machine, is not the man who thinks it a fine thing to let aspirations run away with his common sense, but the man who most accurately judges his own capacities and limitations and the difficulties which confront him and so sets his objectives or aims as to take fullest advantage of the capacities without overstepping the limitations.

I have said that one cannot act efficiently unless his course of action is intelligently planned; but how can one plan an intelligent course of action, how can he determine what things to do in order to attain an objective, when this objective is impossible of attainment? The first essential to successful effort is an objective within reach. The second is to find some way of reaching it. Broadly speaking, people may be divided into two groups, the truly strong and successful ones who select for themselves objectives which are within their reach and attain these objectives, whose lives therefore are lives of achievement, and the weak, visionary and unsuccessful ones who set for themselves impossible standards and spend futile lives in ill directed, comparatively useless effort or idle dreaming.

The second thing essential to a high level of achievement is concentration of effort. Success in warfare is largely a matter of being able to bring one's full strength to bear upon whatever point one happens to be attacking and the same is true in practically every other form of activity in which one may engage. But how is one to mobilize his mental forces? What must one do to bring his full strength to bear on the accomplishment of the task he happens to have in hand?

Consider the case which I have had occasion to describe elsewhere* of a young woman working her way through college who, according to her own admission. found the demands of sex so strong, the thoughts it called forth so obsessive that she was often quite unable to fix her mind upon her studies and would walk the streets for hours in an effort to find relief. Here we have a woman failing to concentrate her powers on the task in hand and so failing to realize her possibilities. And the reason for her failure is perfectly obvious: it is because she is being acted upon by two separate stimuli at one and the same time; one of these stimuli gives rise to an impulse to do a certain piece of work and the other, a sexual stimulus, gives rise to an impulse that conflicts with it. What we have in this case we have also in that of the man unable to work efficiently because someone is distracting his attention by playing the piano in the next room, and in the case of the man engaged in playing a game but unable to do himself justice by reason of the distracting stimulus afforded by the thought that someone is watching him, or that the result of the game is of very great importance. Broadly speaking, one may say that whenever there is mental blocking, whenever the individual fails to concentrate his efforts on the business in hand. it is because he is being acted upon simultaneously by two or more stimuli, giving rise to impulses which tend to pull him in different directions so that the forces liberated by one stimulus neutralize those liberated by another.

From this it is evident that concentration is a matter of regulating the stimuli by which our mental forces

^{*} A Biological Approach to the Problem of Abnormal Behavior, 378.

are called into action. It is a matter of subjecting ourselves to those stimuli which will call forth in greatest strength the forces of the mind which will serve to drive us in the direction in which we wish to go and of avoiding or freeing ourselves from these stimuli—thoughts, sights, sounds, or whatever they may be—which give rise to impulses tending to neutralize or obstruct such action. As to the various methods by which these disturbing stimuli may be cut off, that, of course, is the whole problem of mental adjustment with which we are attempting to deal in this chapter.

The third essential to achievement is continuity of purpose. It takes years of work to qualify for the practice of law or medicine, and more years on top of that before one can amount to much in these professions. It takes months or years to do a piece of research work of any consequence, write a worth while book, paint an outstanding picture, build a cathedral, or form a big business organization. To do almost anything of consequence, it is necessary to keep on working for a long time at one thing, to hold steadily to a single purpose.

But, as long as a man is struggling forward to the attainment of an objective, he is in a state of unsatisfied desire; that is to say, he is in a state of non-adjustment or nervous tension. Whenever a state of nervous tension is long maintained, it serves, as we know, to throw the pain mechanism into action, thus causing a depression (or slowing up) of all the vital functions. With this we associate a feeling of depression and also an impulse, growing stronger, as time goes on, to withdraw from the situation or form of action in which the tension occurs. This pain process, this psychological slowing up of the human organism and the associated

craving or impulse to discontinue the course of action connected with it, we call discouragement; and, in those undertakings where success is only to be attained after long continued effort, discouragement is, as we all know, one of the chief causes of failure. In fact, we even have what might be called anticipatory discouragement, a state of affairs in which the mere thought of the many things to be done, the long road to be traveled before reaching an objective, serves as a stimulus to throw the pain mechanism into action, thus producing a depression of the vital functions and an impulse to draw back, which results in the giving up of the projected undertaking before it is even begun.

So we are on the horns of a dilemma. Little in the way of achievement is possible without continuity of purpose; and yet continuity of purpose, the holding to a single objective over a long period of time, involves discouragement, a process of inhibition and general slowing up of the human machine which renders efficient action impossible. How are we to overcome this difficulty? How can we carry on with those undertakings which call for long continued effort, when such effort tends to prevent one from carrying them on effectively?

If we consider the nature of the work that goes into the erection of a great building, we see that it consists of doing a great many things, one at a time, lifting out first one shovelful of earth and then another shovelful, or blasting out one piece of rock and then another piece, until a suitable excavation has been made for the foundations, then laying one stone upon another stone, one brick upon another brick, until the walls have been erected, and so on through the first stage of the procedure, then the second, third, until the whole edifice has been completed. Similarly in the acquiring of a professional education, the writing of a book, the carrying out of an elaborate piece of research, the building of a great business organization. Every large and apparently difficult piece of work that we may attempt, every achievement that calls for long continued effort, may be seen to be, if we take the trouble to analyze it, not one single and tremendously difficult creative act, but a compound thing formed by the combination of a great many separate acts or achievements, no single one of which is difficult in itself or extends over a particularly long period of time, although when these separate acts are lumped together the result is quite imposing.

This being so, the method we must follow to escape discouragement in any extensive undertaking is clear and obvious. We must first take stock of our undertaking, analyze it, break it up into its constituent parts, and then perform these parts as so many separate and distinct undertakings. Suppose one were undertaking to climb a mountain ten thousand feet high. If he were to attempt such a climb as a single sustained piece of bodily and mental action, he would undoubtedly fail from fatigue and discouragement, for neither the muscles nor the nervous system is built to bear such a long and sustained effort. The thing to do, the thing any competent mountaineer would do, would be to plan his ascent, to break it up into a number of easy stages, each of which would be a separate achievement in itself. Thus treated, what would otherwise be an impossibly difficult undertaking, becomes a comparatively easy matter. As a matter of fact, of course, this method of dealing with a long and difficult piece of work by breaking it up into its constituent parts, taking

one part at a time, fixing attention upon it, shutting out distracting stimuli, in short, concentrating all one's forces upon it until it is completed, would be the only really efficient method to employ, even if there were no such thing as discouragement or fatigue against which it was necessary for one to protect himself.

Pain comes with prolonged nervous tension or unsatisfied desire; pleasure comes with fall of tension or the satisfaction of desire. But before tension can fall it must rise; before a man can satisfy a desire, the desire must be created. The conditions productive of the maximum of pleasure are, therefore, those in which a man has a great many desires following quickly upon each other, quickly produced and quickly satisfied, in which, in other words, there is a rapid succession of rises and falls of nervous tension; and, since pleasure means a speeding up of the vital functions with increased vigor of thought and action, it is only by maintaining those conditions which are conducive to pleasure that we can hope to raise achievement to its highest level. Now this is what we tend to do when we break a large undertaking, which would take a long time to complete, into a number of small ones, each of which can be quickly brought to a successful conclusion. Continuity of purpose, the holding steadily to a single objective, is essential to a high order of achievement; but such an objective should be used, not as something to strain and struggle for, but as something on which to line up the brief individual efforts or small achievements which must of necessity make up our behavior. It should be used as an aiming point to keep us always moving forward in the same direction, as something to steer by.

When a man thus breaks his work up into little bits

and finds his satisfaction in the doing of each of these separate bits, rather than in the final reward to which they lead, he is making his work into play, for the essential difference between work and play is not in the nature of the actions performed nor in the amount of effort expended, but in the fact that work is something we do to reach a certain objective, to escape some punishment or win some reward, while play is something we do for the satisfaction to be found in the doing of it, for the pleasure of achievement that comes with the performance of each individual act. There are, of course, many people who find no satisfaction in a game except when they win it, who in every case are simply out to get a prize. But people of this sort are merely reversing the process of making play out of work: they are making labor out of pleasure.

WITHDRAWAL

When, as a result of any stimulus, energy is generated, this energy as a rule first tends to find outlet in behavior likely to modify the situation. But, if this behavior does not lead to adjustment, the sustained nervous tension throws the pain mechanism into action, thus inhibiting the tendency to such behavior and impelling one to draw away from the stimuli to which the disturbing situation gives rise. One seeks to prevent these stimuli from falling upon his sense organs.

Consider the case of a man placed in the constant society of a woman whom he desires in vain to possess. Although he will be at first strongly impelled to seek this woman's company, to go where he can see and speak to her, he may, after a time, if he makes no

progress with his suit, begin to show quite an opposite form of behavior. Instead of seeking her out, he may withdraw himself as far as possible from her. This method of obtaining relief from tension by withdrawing from the stimulus responsible for it, is one which is employed quite frequently. The man in prison may, for a time, spend his energies in attempts to escape; but, if these efforts fail to meet with success, he may arrange the furniture of his room so as to conceal the barred doors and windows, thus freeing himself from the stimulus which the sight of them affords. The man who fails to gratify his desire for wealth and luxury may avoid the society of those better off than himself, thus escaping the dissatisfaction which the sight of their wealth serves to produce.

This method of making an adjustment we call the method of withdrawal, and although useful or even necessary on occasion, it is, like the method of accomplishment, not infrequently misused. The misuse of this method of adjustment is conspicuously seen in hermits and recluses—people who in the presence of others experience sexual passions, ambitions and desires of one kind or another from which they escape by cutting off themselves from association with their fellows. In so doing, they may succeed in securing a certain degree of peace of mind, but it is not a very adequate or satisfactory form of adjustment, because it is one which cuts them off from many opportunities for usefulness and from the social contacts which man, by reason of his gregarious tendencies, finds necessary for the maintenance of his own health and happiness.

A situation in which the method of withdrawal is usually the right one to employ is that in which the demands made upon a man are of a kind to which he

cannot adequately respond. Consider, for example, the by no means uncommon case of the "highly strung," conscientious student who enters upon a course of work in school or college which is beyond his ability. The demands made upon him in this course constitute a stimulus causing energy to be generated and thus maintaining a state of tension which tends to continue until the work demanded has been successfully performed. But as the task undertaken is beyond his ability this unsuccessful outcome is never reached. His work remains always in an unsatisfactory condition and this fact "preys upon his mind," which is only another way of saying that the recognition or thought of this unsatisfactory state of affairs continues to operate as a stimulus, maintaining a state of tension or nonadjustment which is always productive of harm and which, in certain cases, may ultimately result in what we are accustomed to speak of as a nervous or mental breakdown. The right and proper course of action for a person who finds himself in a position such as this is to withdraw from it as soon as possible and find some other environment where the demands made upon him will be more in keeping with his abilities. Mental well-being is largely a matter of finding a suitable environment in which to function, and that environment is not suitable which keeps a man in a constant state of nervous tension by making demands upon him with which he cannot comply.

Accomplishment and withdrawal are two very closely related methods of adjustment, so much so that no really clear outline of distinction can be drawn between them. Generally speaking, we may say that in the method of accomplishment we are trying to make over our present environment so that it will be suited to

our needs, whereas in the method of withdrawal we are trying to achieve the same result by moving out of our present environment into a different one which we hope will prove more satisfactory. The difference between these two methods is more or less like the difference between repairing a house which one finds to be unsanitary and the alternative procedure of moving out of it into a better one.

Modification of Thought

The third form of adjustment with which we have to deal is that which is attained through the modification of thought.

In a large proportion of the situations to which we react, the sensory stimulus giving rise to the reaction does so through the agency of the thoughts or memories it serves to call up. The sensory stimuli afforded by the situations of life serve to call forth our thoughts, but it is the thoughts thus called forth to which we react rather than the situations themselves. For example, one may say of a certain man that he is in a state of nervous tension because he has been told that his wife is seriously ill. This verbal message which he has received would have affected him little, however, if he had not understood it. It is not the actual words that he has heard spoken but the train of thoughts or memories which these words have set in motion that is the cause of his tension. We live, so to speak, in a world of our own thoughts.

The role of the sensory images in such cases may be compared to the part played by the percussion cap in firing a gun. In the case of the gun, pressure of a finger on the trigger brings about the explosion of the cap which causes the explosion of the propellent charge. In the case of tension, the sensory stimulus calls up the thought or mental image which in turn serves to bring about the explosion of nervous energy to which action is due. If one wishes to prevent the explosion of the powder in the gun but cannot prevent the trigger from being pulled, he may achieve the same result by tampering with the cap. Similarly, if one wishes to prevent the generation of energy in the nervous system but cannot free himself from the external stimulus giving rise to it, he may in many cases achieve the same result by modifying the thought process through which the stimulus causes the energy to be generated.

We shall here consider the ways in which thought or memory may be modified to give relief of tension under three headings, namely: (1) distortion, (2) inhibition and (3) reconditioning.

Distortion:—When in thinking of anything we form a mental image which is productive of tension, we may sometimes obtain relief by altering it in such a way as to make it less disturbing, that is to say, by so shaping this image as to make it fit our desires. For example, take the loving mother of a wayward son who cannot face the fact that her son is responsible for his guilty behavior but contends that he is the victim of circumstances beyond his control. Or take the man who, suffering from the loss of a loved one, visits a spiritualistic seance and convinces himself that the voice addressing him in the darkness is the voice of the departed one.

This process of distorting our mental pictures of ourselves and of the world in which we live so as to make them more conducive to our peace of mind is

one of the commonest of all methods of adjustment. People use it constantly without any clear realization of the fact that they are dong so. Often this modification of thoughts constitutes distortion of evidence. Consider the case of the barren woman. Thoughts of having children serve as stimuli to awaken within her longings which cannot be gratified. How is she to find relief from the dissatisfaction and pain to which these thoughts give rise? What she can and sometimes does do when she thinks of having a child is to disregard the pictures of the more agreeable aspects of the experience and call up instead the unpleasant ones. She thinks of the sickness of pregnancy, the unattractive appearance of the pregnant woman, the pains and dangers of childbirth, the invalidism which she has known to follow from it. She calls up pictures of the dirty and disagreeable tasks which, were she a mother, she would have to perform and the discomfort and annoyance of being kept awake at night by a bawling infant. In thus modifying the thought of having a child by stressing the unpleasant aspects of it, she frees herself, in some degree at least, from the craving which it serves to arouse. She pictures herself as being more fortunate than the women who have children and thus she finds satisfaction.

Apart from such cases, where distortion of evidence has extenuating circumstances, the method is not to be recommended. If we are to overcome the obstacles that confront us, if we are to deal successfully with the problems of life, we must understand these problems, we must exercise our intelligence; but we cannot understand them, we cannot exercise intelligence in dealing with the problems of life, if we refuse to see life and its problems as they really are. This form

of adjustment we may, on the whole, cross out of our reckoning except as an unsatisfactory type of reaction from which none of us is entirely free and against which we must be constantly on our guard. We should not forget also that a large part of the error in our philosophic and religious doctrines is to be attributed to it. It is also, as we know, responsible for many of the delusions of the insane.

Inhibition:—The simplest and the most obvious way in which to modify our thoughts is, of course, by the process of inhibition; that is to say, by the elimination of those ideas which are productive of nervous tension and by calling up other thoughts in their stead. Thus, if a man is disturbed by the thought of some wicked and foolish act which he committed yesterday and which it is impossible for him to undo, he may get relief from the tension it causes by inhibiting it and calling up instead the thought of some wise and useful act which is to be performed today. Or, if a man wants his dinner and cannot have it, he may find a certain amount of relief from tension in inhibiting the thought of it; for, although the thought of food is not the sole or primary cause of hunger, it nevertheless serves as a secondary stimulus to increase its intensity. This method of inhibition is one of our most valuable ways of obtaining relief from tension and may be used with advantage in practically any case where we have a state of affairs which is productive of tension, but which cannot be at the moment corrected.

Here as anywhere else we should not, of course, act without discrimination. There are many cases in which this method of obtaining relief from tension is not suited to the requirements of the situation; in fact, if so then used, it must be looked upon as a mal-adjust-

ment. For example, take the case of a woman who one day discovers in her breast the beginning of a growth of some kind, possibly a cancer. The thought of this possibility is painful to her. It produces in her a state of nervous tension which manifests itself in consciousness in the form of fear and horror. In such a state of affairs, a woman may and commonly does find relief from tension by inhibiting the thoughts to which it is due. She "looks on the sunny side." But, while she is thus keeping her eyes averted from the unpleasant possibilities suggested by the presence of this tumor, the tumor itself continues to grow and spread out its tentacles until finally it can no longer be ignored. By this time, however, the possibility of eradicating it has passed by: the disease has become incurable.

In most cases, to be sure, there is nothing wrong with "looking on the sunny side" of things and with inhibiting unpleasant thoughts in general. This way of making an adjustment has many applications. Its big difficulty, however, lies in the fact that the mental images which are responsible for our states of non-adjustment may prove rebellious and refuse to be inhibited. We all know from experience what it is to struggle in the grip of thoughts or memories which cause distress of mind but from which we are unable to free ourselves. Let us consider the cause of this difficulty and see what is to be done about it.

Since we assume that all mental activity depends upon the flow of energy through the central nervous system and that the calling up of a particular thought or memory depends on the flow of energy over a particular combination of paths, we must assume that the replacing of one thought by another is a matter of deflecting the stream of energy responsible for the thought from one system of paths into a different system, more or less as a stream of water is deflected from one channel into another.

Now, in order to divert either a stream of nervous energy or a stream of water into a different channel from that in which it tends to flow, a certain amount of resistance must be overcome and force or pressure must be applied to overcome this resistance. Whenever an attempt is made to inhibit one thought and replace it by another there is a conflict between two forces, the force which is operating to turn the stream of nervous energy causing the thought into a new channel and the resistance which this deflecting force has to overcome. Whether or not, in any given case, we succeed in replacing one thought with another depends on the relative strength of these two forces. When we fail, it is because the resistance to be overcome is greater than the deflecting force; and if we are to turn failure into success it must be by bringing about an opposite state of affairs, a result which can only be achieved in one or the other of two different ways, namely, by lessening the resistance to be overcome or by increasing the strength of the deflecting force.

The resistance to be overcome in deflecting a stream of water from its path will depend largely on the nature of the channel into which we try to turn it; and the same holds true when we try to turn into a different path, the stream of energy which gives rise to thought. There are things that are easy to think about and things that are not so easy. If a student is trying to free himself from lascivious thoughts by deflecting the energy giving rise to them into thoughts of Latin grammar, he will probably find the resistance to be

overcome much greater than he would if he tried to replace them with thoughts of tennis or football. In this we find the key to the question of what can be done to lessen the resistance which makes it hard to replace one thought with another. Always when one tries to replace a harmful thought with a harmless one and finds the resistance to be too strong he should ask himself the question, Am I trying to divert the stream of energy responsible for this thought into the path in which it can most readily be made to flow? Or, in other words, Is there not some other alternative to the thought that I am trying to inhibit which could be called up more easily?

So much for decreasing resistance. But what can we do to increase the deflecting force?

We know that, if we have two stimuli which applied separately tend to call forth two different forms of thought or action and if we apply both of these stimuli at the same time, we are likely to get one or the other of the reactions they would call forth separately but not both together. One of the stimuli, the prepotent one, tends to inhibit the reaction to which the less powerful stimulus, acting by itself, would give rise. This phenomenon we look upon as a manifestation of the law of confluence. In other words, we look upon it as due to the tendency for energy generated by one stimulus to serve as a deflecting force which will draw the stream of energy generated by another stimulus into the same path with it.

We saw elsewhere, in discussing the effects of non-adjustment on the processes of thought, how this tendency for one stimulus to inhibit the thoughts called forth by another may seriously lessen a man's capacity for intellectual achievement, as for example, where a

sexual stimulus renders a student incapable of thinking about his studies, making him think of sexual things instead. But, if distracting stimuli may be called into play to turn the stream of nervous energy away from thoughts of things that we should think about, they may also be utilized to turn the stream of energy away from thoughts of things we should forget. If a boy is trying to replace lascivious thoughts with thoughts of football, he will find it easier to do so if he goes to a football match than if he remains in his room at home. In such case the stimuli afforded by the sights and sounds of the football field will serve to augment whatever other forces may have been brought into play to turn his thoughts from sex to football.

Here we have our answer to the question of what can be done to increase the strength of the deflecting force by which one form of thought is replaced with another. If a person encounters heavy resistance when he tries to forget a certain thing, he may make it easier to turn his back upon it by exposing himself to a stimulus of some kind which will tend to give his thoughts the turn he wants them to take. And we know, of course, that people are constantly making use of this method of procedure to get away from disturbing thoughts not because they have, like us, worked out a theory which shows them that this is the thing to do but simply because, in the trial and error of everyday experience, they have found that this method works. Thus a man sitting at home troubled with thoughts of business difficulties which he cannot there forget will go to the theatre, seek out his friends or enter into some game because he has found that such distraction helps him to "throw off" the thoughts that trouble him. Similarly, after the death of a loved one, a person will often travel or seek a different environment because he has found that when exposed to the distracting stimuli of new surroundings he is less unhappy than where every familiar scene or every familiar object reminds him of his loss.

To sum up the whole matter in a nutshell, we may say, therefore, that, when we have occasion to free ourselves from disturbing thoughts but encounter resistance which we find it hard to overcome, the thing to do is, first, to pick out those channels of thought into which our nervous energy is most readily diverted and then seek to expose ourselves to the stimuli which will prove most potent as a means of turning our thoughts into these channels.

It may be noted that, although we are in agreement with the psychoanalyst in believing that thoughts and memories play an important part in producing abnormal mental reactions, our ideas as to how we should deal with them are very different. We hold that when a thought or memory is causing trouble the thing to do is to forget it. The Freudian, on the contrary, believes that it is the forgotten memories which are the chief cause of trouble and that in order to effect a cure they must be recalled. This he undertakes to do by means of his psychoanalytic technique.

The assumption that forgotten memories may cause symptoms of nervous or mental disease is, from the analyst's point of view, a perfectly reasonable one, for he thinks of a memory as a thing which has its abode in a dwelling place called the mind which is divided into two rooms, the conscious and the unconscious; and forgetting a memory is, for him, a matter of pushing it back into the unconscious where, although no longer visible, it may still cause a disturbance. We,

however, have a very different idea of memory from this. According to our way of thinking a memory is not something that lives in a tank called the mind as a gold fish lives in an aquarium; rather it is a form of action, and to forget it is to discontinue this form of action so that it ceases to exist. We therefore believe that to inhibit a disturbing thought or memory is to get rid of it and thus to remove a cause of mental abnormality. The psychoanalyst, on the other hand, believes that in doing this we merely drive it inward with the result that it becomes much more troublesome than it was before.

The most important fact which the psychoanalyst seeks to explain by means of this theory of forgotten memories is the fact that sometimes evidence may be adduced to show that a nervous symptom has had its origin in a so-called psychic trauma. For example, when a man has claustrophobia and in the course of the analysis recalls that he once was locked in a room with a savage dog and that his fear of enclosed spaces developed after this event, it is assumed by the psycho-analyst that the buried memory which has been un-earthed is the cause of the symptom. Personally, I should be inclined to look upon this explanation with more favor if I had not found in my own experience that a considerable proportion of the patients who come complaining of phobias come with a clear memory of the circumstances under which their phobias developed. More than once I have had a patient tell me of his phobia and of the event which gave rise to it in practically the same breath. Moreover there is nothing strange or surprising in the development of such fears; we have already explained them as causes of wrong conditioning. We agree with the analyst in assuming

a connection between the "psychic trauma" and the symptom; looked at from our point of view, however, it is the trauma itself, and not the forgotten memory of it, which causes the trouble. The psychoanalyst who, on tracing a connection between a mental deformity and a psychic trauma which the patient has forgotten, assumes that the forgotten memory is the cause of the deformity may be compared to the surgeon who, on discovering a connection between a bodily deformity and some forgotten accident of childhood, assumes that it is forgotten memory of this accident and not the accident itself which has caused the damage.

Reconditioning:—The nature of a man's behavior is determined largely by his acquired likings and aversions, by the tendencies which he has developed in the course of his experience, to reach out to this thing and draw away from that. These tendencies formed by the process of conditioning, although for the most part suited to his needs, are not invariably so. Sometimes the process of conditioning, working as it does blindly and in accordance with fixed laws, serves to produce in a man tendencies to reach out or cling to things which are not suited to his needs and to avoid or shrink from things which are. We have seen that the tendencies to fear that we call phobias are of this sort and also the tendency to cling to outworn practices and beliefs. Now, when a person fails to adjust himself to a situation, the root of the trouble is not infrequently to be found in some such tendency.

For example, consider the case previously related of the woman who, as a child, has been locked in a room in a burning building with other children and who, because of this experience, had developed a fear of crowds and enclosed spaces. This woman's fear, by preventing her from going to theatres and other places of public entertainment and from visiting in the homes of her friends, forced her into a manner of life in which her craving for gaiety and social intercourse remained unsatisfied. Moreover by shutting her off from such social intercourse it prevented her from making the acquaintance of men who might have fallen in love with her, with the result that she was completely cut off from the opportunities she would otherwise have had of getting married and thus prevented from satisfying the demands of her sexual and maternal instincts.

As a second example, consider the case of a man engaged in a business which he has followed for many years. New and improved methods have recently been introduced in this line of business which have been adopted by his competitors, and which he also must adopt if he is to carry on successfully. As it happens, however, certain events have transpired which have served to produce in him a strong aversion to these new methods, and an equally strong love for the old ones. He, therefore, insists on sticking to his old ways of doing things, with the result that he is no longer able to make ends meet; he falls into debt and is harassed by his creditors, a condition of affairs which, of course, serves to produce in him a state of high nervous tension.

What must one do in any of these cases in which he has developed a liking or aversion that keeps him in a state of non-adjustment, by preventing him from taking the course of action which he must take in order to meet his needs? Obviously, get rid of it. But how is this to be done?

Consider the ballet dancer who is learning a new

dance. The dance begins on a certain beat. This is a signal or stimulus to which he must respond by assuming a certain bodily position. After that, beat follows beat, measure follows measure, his companions assume one position after another and, to the stimulus afforded by each of these occurrences, the dancer must respond by performing a certain movement or by holding a certain posture. Learning the new dance is, therefore, a matter of learning to react to certain stimuli with certain forms of behavior, and what happens in each of these reactions is that the stimulus acts on the receptors causing the generation of energy which follows a certain path or system of paths through the nervous system to the effectors by which the response to this stimulus is produced. Every time the dance is repeated the nerve impulses wear deeper the channels through which they flow until each response has become a habit and the whole complicated series of reactions is performed with smoothness, accuracy and ease.

But suppose, at an early stage of this learning process, the dancer responds to a stimulus in the wrong way. He steps backward where he should remain poised on his toes, or takes a step forward where he should step back. When, on a second occasion, he again comes to this point in the dance he is likely, unless something happens to prevent him from doing so, to repeat this wrong act; and, having reacted in this way twice, he is still more likely to do so on the third occasion and so on until in the course of time there has become firmly established a habit of reacting to a stimulus in a wrong way which mars the harmony and beauty of the dance.

That which we have described as taking place in the learning of a ballet is much like that which takes place

in what Havelock Ellis calls the dance of life. For life, like a ballet, is a succession of movements and postures called forth in response to stimuli afforded by the movements of our fellows and what we may call the music of circumstance, a music often hard to follow and not to our liking but with which nevertheless we must keep in step if we are to keep out of difficulties. Also the movements and postures which make up the dance of life are like the steps of the ballet in large part, learned reactions; they are responses to stimuli which have been repeated day after day, year after year, until they have become fixed habits. And in the dance of life, as in the ballet, the habits thus acquired are sometimes wrong habits; they are sometimes tendencies to forms of action not suited to the requirements of the situations which call them forth.

Such are the likings and aversions, the ill effects of which we have just been considering. We know—or at least are justified in believing—that what we call an emotion is, in one of its aspects, simply a combination of bodily movements or the blend of sensations to which these movements give rise. To respond to a certain stimulus with a certain emotion is to assume in response to it a certain attitude or posture; it is to react to it with a certain form of behavior. The person who has developed the habit of reacting to the sight or thought of something useful by drawing back in fear or aversion is like the dancer in the ballet who has acquired the habit of stepping backward in response to a signal to which he should respond by remaining stationary or by stepping forward.

When we look at the matter in this way we can readily see what must be done to get rid of a wrong liking or aversion. The ballet dancer who has learned to react to a certain stimulus in the dance with a wrong posture or movement must first clearly recognize that this reaction is wrong and then practise to correct it. He must go through the particular passage in the dance in which the error occurs over and over again, inhibiting at each repetition the wrong posture or movement and performing the right one in its place until a new and satisfactory habit has been formed. And, as in the ballet, so also in the dance of life. When a man finds that he is marring the harmony of life by assuming an attitude of fear or aversion in response to a stimulus to which he should react with pleasure, he should practise to break this bad habit by exposing himself over and over to this particular stimulus, each time striking the attitude or posture which he wishes to develop.

Since what we call an emotion is either a combination of movements performed by the muscles or a blend of feelings to which these movements give rise, control of the emotions is largely a matter of muscular control; it is a matter of being able to assume in each situation of life the attitude or posture which is required. If the person who has an aversion to the telephone, instead of giving in to that aversion and drawing away from it would make a practice of using the telephone fifty to a hundred times a day, he would presently find that this tendency to shrink from using it has entirely disappeared. If the businessman with a dislike for modern business methods would frankly recognize the fact that this attitude is wrong and throw all his energy into the task of studying and introducing these new methods into his own business, he would, in the course of time, be cured of this dislike. If the woman who, as a child, was locked with other children in a

burning building and subsequently developed claustrophobia will start visiting in her friends' homes repeatedly, if she will attend theater performances as often as possible, always assuming the attitude of a person doing perfectly ordinary acts which are done by people every day, she will, in course of time, find that her fear of enclosed places and the terror of something, she hardly knows what, gradually disappears.

This principle holds true wherever one has acquired a tendency to react in the wrong way. As a matter of fact, we see people around us continually making use of this method with excellent results. For example, take the boy who is learning to dive. When he first steps out on the diving board and contemplates the prospect of jumping head first into the water he experiences an emotion of fear, his inclination is to draw back, but he wants to be able to dive like the other boys; and so he inhibits this inclination, assumes a more courageous attitude and leaps forward. The result of this method of procedure is that, unless he meets some mishap, his tendency to fear grows less and less until he is completely rid of it.

People as a rule are more inclined to use this method of procedure to free themselves from their fears than to get rid of any other wrong emotional tendency. That is not because the method is less efficacious in dealing with these other tendencies but because people have, as a rule, less desire to change them. When a man has a fear of something which cannot harm him he recognizes this fear as an unpleasant, useless thing and wants to get rid of it. He seldom, however, wants very much to overcome the affection he feels for this person or thing or the disgust he feels for that, although these likes and dislikes may give rise to

results which are just as harmful as his fears. His attitude is generally that of the American soldier who said, "I'm glad I don't like slumgullion because if I liked slumgullion I'd eat it and I don't like slumgullion."

Now, since control of the emotions is in large part at least a matter of muscular control, one might think that it would be easy to achieve. As a matter of fact, however, we all know from experience that very often it is not. We frequently fail in our attempts to perform those movements or assume those psycho-physical attitudes which will produce, or more properly speaking are, the emotions we desire. Let us then consider the major difficulties responsible for such failures and determine what can be done to overcome them.

The first difficulty lies in the fact that many of the muscles called into play in giving rise to our emotions as, for example, those entering into the composition of the heart, blood vessels, stomach and intestines, are what we call involuntary muscles. We have no immediate or direct control over them. When we try to inhibit their action or to call forth from them action of a different sort, they will not obey our demands. Suppose, for example, I try to inhibit an emotion of terror and adopt an attitude of indifference instead. I may be able to control the voluntary muscles of my arms and legs and my facial muscles to the extent of producing some outward semblance of the attitude which I am trying to adopt but my heart continues to beat violently, my face remains pale, and the hair of my head continues to stand on end because the muscle cells of the heart and blood vessels and the muscles which lie at the roots of my hair will not obey orders.

But, although lack of immediate or direct control

over many of the muscles which function in giving rise to emotional behavior renders control of this behavior more difficult, it does not render it entirely impossible. The action of all the involuntary muscles is governed by stimuli coming, some of them from inside the body, some of them from without. So we control them, to some extent at least, by applying to ourselves stimuli of a kind which will tend to call forth the forms of action we desire. This we do, whether we realize it or not, every time we make an attempt to assume a certain posture. When a man, in the presence of an enemy before whom he feels inclined to cover, draws himself erect, clenches his fists and his jaws, sticks out his chest and, saying to himself, "I'm a better man than you and I'm going to smash you," strides boldly forward he has, by the thoughts or mental images which he has called up, and by the muscular movements which he has performed, applied to himself a combination of internal stimuli which tend to act upon the involuntary muscles in such a way as to make them play their part in giving rise to the posture he is trying to assume.

in giving rise to the posture he is trying to assume.

Always when we try to inhibit a wrong form of emotional behavior and replace it with a right one, there is a conflict taking place within us between two forces, the force which is operating to give rise to the wrong form of action, and that which is operating to call forth the right one. Whether a man's attempt to react as he should is successful or not depends on the relative strength of these two forces. When a man who has developed a fear of open spaces tries unsuccessfully to overcome this fear, when he shrinks back in spite of himself, it is because the force that is operating to call forth the fear reaction is the stronger of the two. What is to be done in such a case?

When a man suffers from an agoraphobia, the strength of the fear impulse called forth in response to the stimulus afforded by an open space will vary with circumstances. For example, the intensity of the fear will, generally speaking, be less in a small open space than in a large one; it will be less if the man is at the edge of the space under the shelter of a building than if he is out in the middle of it; it will be less if he has a companion with him than if he is alone. This fact is of fundamental importance because it makes it possible for him to regulate the strength of the force with which he must contend in fighting to overcome his fear so that it will always be weaker than the force he can bring against it. If he finds the strength of the force at his command is not sufficient to carry him out alone into the middle of a big open space, he can begin by going out into a small space or practise walking about the edge of the big one. When he has mastered this, he can tackle something a little harder, and so on until he is able to go anywhere. The situation is much like what we would have in the case of a general who has only a small army under his command with which to overthrow a large one but who has the overwhelming advantage of being able to dictate as to how large a part of his enemies' forces should be brought against him at any one time. Under such circumstances, he can resolve the struggle into a series of small engagements, in each of which he will attack and destroy a force weaker than his own until presently he has wiped out the whole of the large army which at the outset was arrayed against him.

This method of attacking and destroying the enemy's forces piecemeal can be, and as a matter of fact is, used in overcoming fear tendencies of practically every de-

scription. The person afraid of high places may begin by habituating himself to places where the height is not so great and then by degrees work up to dizzy heights that at the outset would have seemed impossible. The child afraid of water may begin by wading in up to his ankles, gradually working out to deeper water as his confidence increases. When a man fails to overcome a fear tendency or any other form of aversion or liking, it is generally because the desire to get rid of it is not sufficiently strong or because he does not believe in his ability to do so. Faith is as essential to success here as in any other field of action. When a man thinks that what he is trying to do is impossible, this thought serves as a negative stimulus. It releases an impulse to draw back from or discontinue the attempt.

Having considered the process of reconditioning by which our emotional tendencies may be modified to make them conform to our needs, it might be well to explain why we look upon this process as a modification of thought. The part played by thought or memory in liberating the nerve impulses which give rise to action has been compared by us to the part played by the percussion cap in the firing of a gun. It was pointed out that, if one wished to prevent the release of a charge of energy in the nervous system but could not free himself from the external stimulus responsible for it, he might achieve the same result by modifying the thought process through which the stimulus caused this energy to be released just as one might prevent the propellent charge in a gun from being fired by tampering with the cap. One way of doing this, we have seen, is to get rid of the thought in question, either by distorting or inhibiting it; but that is not the only way.

The reason why one thought or memory calls forth one particular response and another a different one is because of certain bonds of association, certain paths worn in the brain which serve to link up the memory record with the group or system of neurons from which the impulse to action is liberated. This being so, another way to deal with the thought process, to prevent it from giving rise to a certain wrong form of action, is to modify the connections on which the nature of this action depends, and that is what we do in this process of reconditioning.

Modification of Expression

In this method of adjustment, we find relief from tension through the cutting off of stimuli of expression. Its use is, perhaps most strikingly, seen in what people are accustomed to speak of as the practice of "self-control" or the exercise of "will-power" in dealing with their emotional reactions.

Consider, for example, the case in which we see or hear something that serves to produce in us the reaction of anger. In such a case, the sight or sound, which is the primary stimulus afforded by the situation, causes energy to be generated that finds outlet in certain bodily changes. Our breath comes faster; our heart action is accelerated; we hold our bodies tense, clench our fists, speak in an angry tone of voice and perhaps strike out at that which has angered us. These changes constitute our expressive response to the situation and the stimuli afforded by this response cause more nervous energy to be generated so that the reaction is intensified and prolonged. Now when, by the so-called exercise of will-power, we seek to check a reaction such as this,

what do we do? We take advantage of the fact that the bodily movements and changes which make up this expressive response are, to some extent at least, under voluntary control. We, therefore, inhibit the impulse to clench our fists, to scowl, to grit our teeth, and to speak angrily. Instead, we compel our bodies to relax, we smile, we speak in gentle tones, and extend our open hands in friendly gesture. In short, we inhibit the hostile posture, and in so doing we free ourselves from the expressive stimuli by which the emotion of anger is maintained.

The fact that our emotions may be and frequently are controlled through the modification of the expressive stimuli to which they are so largely due, was very clearly pointed out by William James a half century ago. "Everyone knows," says James, "how panic is increased by flight, and how the giving way to the symptoms of grief or anger increases these passions them-selves. Each fit of sobbing makes the sorrow more acute and calls forth another fit stronger still, until at last repose only ensues with lassitude and with the apparent exhaustion of the machinery. In rage, it is notorious how we 'work ourselves up' to a climax by repeated outbreaks of expression. Refuse to express a passion and it dies. Count ten before venting your anger, and its occasion seems ridiculous. Whistling to keep up courage is no mere figure of speech. On the other hand, sit all day in a moping posture, sigh, and reply to everything with a dismal voice and your melancholy lingers. There is no more valuable precept in moral education than this, as all who have experience know: if we wish to conquer undesirable emotional tendencies in ourselves, we must assiduously and in the first instance cold-bloodedly, go through the *outward* motions of these contrary dispositions we prefer to cultivate. The reward of persistency will infallibly come, in the fading out of the sullenness or depression and the advent of real cheerfulness and kindliness in their stead. Smooth the brow, brighten the eye, contract the dorsal rather than the ventral aspect of the frame, and speak in a major key, pass the genial compliment and your heart must be frigid indeed if it does not gradually thaw!"

This method of getting rid of a troublesome emotion, impulse or desire by striking an attitude or by the exercise of self-control, is one which is used constantly by everybody who is possessed of any strength of character, and it is unquestionably a right and normal method of procedure to follow in dealing with the many disturbing impulses, emotions or desires which can and should be dealt with in this way. It is a mal-adjustment, however, when by means of it we inhibit an impulse to which we ought to yield, or when in the using of it we strike a wrong attitude or adapt a wrong belief.

A very simple and common example of such mal-adjustment is that afforded by the person who, being moved to pity by the sight of suffering he should struggle to alleviate, assumes an attitude of callous indifference and passes by on the other side. The misuse of this method of adjustment is exemplified also by the case of a person who is ashamed and unhappy because of some wrong act which he has committed and who attempts to find relief from his shame and distress, not by making amends or seeking forgiveness for the wrong that he has done, but by assuming an attitude of contempt for the ethical principles which he has violated and for the good opinion of his fellow men.

We sometimes see this type of reaction displayed by the woman of conventional upbringing who, having once yielded to the temptation of a lawless love, has become, in her own eyes at least, a social outcast. Such a one may seek to make her adjustment by laughing to scorn the narrow and outworn code of sexual morality against which she has offended, and by plunging, in a spirit of bravado, into sexual excesses for which she has no real appetite. It will be seen that what the woman is attempting to do is, in the language of the "individual psychologist," to compensate for a feel-ing of inferiority by adopting an attitude of superiority or aggression. Now this type of reaction is essentially the same as that of the person who attempts to over-come the fear or misgivings arising from a sense of bodily weakness or mental inadequacy by adopting an excessively bold or domineering attitude. Adler and his followers, since they look upon such feelings of inferiority as the root of practically all our mental ills, tend to lay great stress upon the importance of this type of reaction. Looked at from our point of view, however, the feelings of physical, mental or social inferiority which may lead to such forms of behavior, have not the same profound significance that they have for Adler and his school. For us, lack of self-confidence is only one of many causes to which nervous tension or dissatisfaction may be due and the attempt to get relief from such tension by assuming an excessively bold or aggressive attitude, is only one of many forms of mal-adjustment.

It may be useful here to mention, in passing, that, although we have here found it convenient to discuss modification of thought and modification of expression as if they were two separate and independent methods

of getting relief from tension, the fact of the matter is that in actual practice they are probably always associated. For example, we know that, when one tries to overcome the emotion of anger by an effort of the will, he not only tries to inhibit the impulse to speak angrily or scowl at the person who is the object of his anger, he also tries to inhibit the tendency to think evil of him and he tries to put away all ideas of revenge. Similarly, the man who is struggling to conquer the fear to which a certain situation has given rise, will not only assume a bodily attitude of nonchalance and ease, he will also tell himself that everything is all right and that there is nothing to be afraid of. He will, in short, call up a mental picture or thought that is in harmony with the attitude he is trying to assume.

We can easily see, of course, that the method of adjustment through modification of expression could hardly be kept separate from adjustment through modification of thought, when we bear in mind the conclusion to which we have here come, namely, that with every thought goes, in all probability, a certain amount of either explicit or implicit behavior, and that thinking and acting are really little more than two aspects or parts of a single process.

DISABLING THE MACHINE

The four methods of mental adjustment thus far considered are methods in which tension is relieved by cutting off the stimuli that produce it. The method of accomplishment affords relief from tension by cutting off the primary stimuli, both internal and external; the method of withdrawal is an alternative method of getting relief from external primary stimuli; modification

of thought and modification of expression are the methods by which we get rid of ideational, expressive and postural stimuli. But there are times when these various methods of adjustment do not prove efficacious or seem possible, when we are unable to free ourselves from the stimuli which are causing nervous energy to be generated, and in these cases there is still another method of procedure which may be used. Failing to free the mechanism of behavior from the stimuli which are acting upon it, one may still obtain relief from tension by crippling this mechanism so that it will not be affected by them.

An amusing example of this method of making an adjustment by disabling the machine is that which Rabelais gives us in his tale of "The Man Who Married a Dumb Wife." The man in this tale was foolish enough to have a surgical operation performed upon his wife with the result that her tongue was loosened and she talked incessantly. The stimulus afforded by the constant clatter of her tongue produced in her husband a state of nervous tension from which he could find no relief. He tried, therefore, to persuade the surgeon to perform a second operation on the woman's tongue which would tie it up again. But, finding this impossible, he followed what seemed to be the only course of action left open to him: he had an operation performed upon himself that rendered him stone deaf and so, we are told, he found a blessed relief.

But, someone may say, this is a method of making an adjustment that would never be used outside of a story book. As a matter of fact, it is a method which actually is used quite frequently. If, as a result of a disease process in some part of the body, we have a stimulus which acts upon the central nervous system through a single afferent nerve, and if there seems to be no better way of obtaining relief, the services of a surgeon may be enlisted to cut out a piece of this nerve so that it will no longer be capable of carrying into the central nervous system the stimulus to which the tension is due. This surgical procedure for the disabling the mechanism of behavior is not used, of course, a great deal.

The much more usual way is by the use of substances or drugs which produce chemical changes in the nervous system that cause temporary disablement. Whenever a man seeks relief from his troubles in alcohol or in the use of narcotics, such as morphine, he is making a mental adjustment by disabling the machine. Now this method of making an adjustment, although valuable on occasion, is also, like the four other methods already considered, liable to be misused. As an example of its misuse, take the case of the man who, finding his affairs in poor shape, goes out and gets drunk, so disabling his brain that for a few hours at least these affairs cease to disturb him. The trouble with this reaction is that, while it injures the man's health, it does not lead to a solution of his difficulties. He wakes up the next morning to find his troubles still with him and his brain in such a state that he is less capable of dealing with them than he was the night before.

In a large proportion of cases, the excessive use of alcohol and the use of habit forming drugs are to be regarded as mal-adjustments of this kind. Of course, the tendency to such forms of behavior is increased by the fact that the constant use of the drug produces certain chemical changes in the body by reason of which its continued administration becomes in some

degree a physiological necessity. Suicide also, in a large percentage of cases, may be looked upon as a more extreme form of the same kind of mal-adjustment. Here, however, instead of a temporary or partial disablement we have the complete destruction of the mechanism of behavior, as a result of which it forever ceases to be affected by those stimuli which give rise to dissatisfaction and pain.

Here then we have the basic ways of adjustment, the courses of action by means of which it is possible to get relief from nervous tension. Whenever in any situation a man succeeds in making an adjustment, it must be by the use of one or another of these five different methods of procedure. They are, as I have already said, the tools or instruments of adjustment. Happiness and contentment, mental health and success in life are the words that come to us when they are properly and skillfully employed; unhappiness, mental abnormality and failure are the penalties that are meted out to us for their misuse. Our aim in this volume, therefore, must be to show how these methods of adjustment may be most successfully employed in the various difficult situations of life which we are called upon to face.

CHAPTER III

SHAPING ENVIRONMENT TO FIT THE ORGANISM

Adjustment is a process involving many variables. Some of them may have been relatively fixed so early in human history as to require hardly any practical consideration nowadays, for instance, the earthly conditions of life. Others—exemplified by physical environment in general—leave us rather helpless as little can be done about them, except by way of traveling and protection against the elements. Still others—including the animal and vegetable kingdom—have been so subordinated to man's daily interests as to require comparatively little consideration in our age of power and specialization.

The two essential ultimates in the problem of adjustment are the individual and his cultural milieu. Both are variables, of course, and in a way that demonstrates their close mutual dependence. That is to say, one's cultural milieu molds one's personality in a very thorough manner through language, custom, laws, public opinion, and institutional life. The combined power of the individuals to change their cultural milieu is equally thorough, and it is difficult to say whether man shapes his social milieu or the other way around. It is a question of mutual interrelations.

In any complex structure the soundness and efficiency of the whole is dependent upon the soundness of its individual parts. This whole is formed of men and women, and it is on the health and efficiency of these individual men and women that the health and efficiency of the social organism as a whole depends. But to be healthy and efficient, the individual human being must be in adjustment, he must not suffer too much from unsatisfied desire. So one of the requirements of the group is that the desires of its members shall be satisfied, that they shall not be left in a state of nervous tension or non-adjustment.

But the course of action by which a man satisfies his desires may be one which prevents other people from satisfying theirs. It may be action which conflicts with the interests of the group as a whole. As, for example, where one satisfies his craving for the good things of life by stealing from his fellows. Looked at only from the standpoint of the thief, this may be satisfactory behavior, for by means of it his nervous tension is relieved, his individual needs are provided for. But it is not satisfactory from the standpoint of the group as a whole. It is anti-social behavior. It is a form of maladjustment, and as such must be prevented. So what we aim to do in social hygiene is to enable each individual to attain satisfaction of his own desires but only in such ways as are conducive to the welfare of the social body as a whole; or, to state it the other way around, our aim is to make each individual act in such a way as will contribute as much as possible to the welfare of the group and to find his personal satisfaction in so doing.

So much for our objectives, but how are they to be attained? Whether or not a man behaves in a satisfactory way will depend on two things: (1) the nature of the man himself, his behavior tendencies or personality, his individual needs, his capacities and limitations; (2) the nature of the environment in which

he is placed, the stimuli to which this environment gives rise, its demands and requirements and the opportunities it affords for obtaining satisfaction. So the problem of obtaining satisfactory behavior is the problem of establishing and maintaining harmony between the human organism and its environment, a result which is to be attained partly by shaping the environment to fit the organism and partly by shaping the organism to fit the environment. Let us in this chapter consider the question of how we must shape the environment to fit the organism.

REGULATING STIMULI TO PRODUCE USEFUL BEHAVIOR

The first thing to be considered in shaping the environment to fit the organism is the question of what kind of environmental conditions will afford the stimuli necessary to inhibit those forms of action which are productive of harm to the group and call forth those which are necessary or useful.

We know that in the long run the forms of action in which our nervous energy finds outlet are determined by the method of trial and error. When, as the result of a stimulus, energy is generated in the nervous system, it finds outlet by the path of least resistance. If the form of behavior first called forth does not give relief of tension, the pain or withdrawal mechanism is thrown into action, the unsuccessful form of behavior is discontinued and some other form substituted. If this in turn proves unsatisfactory it too is inhibited, and so on, until a form of behavior is hit upon which does bring satisfaction and the pleasure to which satisfaction gives rise. When a man thus hits upon a course of action which brings satisfaction and pleasure, he is con-

ditioned thereby; a tendency is formed to act in this way, which grows stronger with each successful repetition of the action. And the man's fellows, when they see him behaving in this way with satisfying results, are impelled to imitate him. So it works out that the whole group gravitates toward those forms of action which are productive of pleasure and satisfaction, and away from those which leave wants unsatisfied or give rise to pain.

This being so, an environment in which the individual can adjust himself or find satisfaction by some form of anti-social behavior, will obviously tend to develop behavior of this kind. For example, if conditions of life are such that wealth and social position may be obtained by resorting to some dishonest practice, we may take it for granted that this dishonest practice will become prevalent among those whose dominant desire is for wealth and social position. If, on the contrary, such behavior does not lead to satisfaction, if instead of fame and fortune it brings humiliation and poverty, we may be sure that it will not become popular. Here obviously is our answer to the question of how we must shape our environment to prevent anti-social behavior. We must so arrange things that the individual will not find satisfaction or pleasure in behavior of this sort, but rather dissatisfaction and pain. We must strive so to fix things that, whenever a man commits an anti-social act or even contemplates doing so, he will expose himself to stimulus which will throw the pain mechanism into action thus causing him to draw back.

Now this, of course, is the state of affairs we are trying to bring about when we inflict punishment for wrong-doing. In the final analysis, punishment is simply a matter of making wrong forms of action unpleasant and unprofitable so that people will not resort to them. From the fact that all kinds of wrong-doing are here looked upon as psychopathic, one might perhaps jump to the conclusion that we do not believe a man should be punished for his sins. Nothing could be farther from the truth. Punishment, the throwing of the pain mechanism into action as a means of inhibiting wrong forms of behavior, we must regard as an absolutely essential procedure in mental management. But we believe that, to get satisfactory results from this method of procedure, we must use it intelligently. And we must not lean too heavily upon it. We must not think that we can disregard the problems of heredity, education and bodily health, and then escape the wrong forms of behavior to which bad heredity, bad education and physical disease give rise, merely by punishing the wrong-doer. Also we reject in its entirety the primitive retributive theory of justice which still persists—an eye for an eye and a tooth for a tooth. One of the chief reasons why punishment has been so stupidly applied in the past and with such unfortunate results is to be found in this theory which degrades what should be an intelligently applied measure for social betterment into an act of spite.

It is this retributive theory of justice, which lies at the root of the belief that an "insane" man should not be punished. The sane man, it is held, when he does wrong, does so of his own free will. Therefore, if he injures society, society has the right to get even by injuring him. But, so it is argued by the proponents of the retributive theory of justice, if a man is insane, he is not responsible for a wrong committed. It is the disease from which he suffers, not the man himself,

that is the true cause of the crime. There is, therefore, no score against such a one for which he may be called upon to make payment in suffering; there is no "wrong to be righted." To our way of thinking, such reasoning as this is obviously absurd. The question, with us, is not whether or not we are entitled to wreak our vengeance upon this man, whether or not he deserves punishment. It is rather: will punishment improve the situation and is it the best treatment to use? Some people may be shocked at the idea, of using punishment as a form of mental therapy. From our point of view, it is not only cruel but stupid to use it in any other way.

From the problem of preventing the individual doing the things he should not do, we pass to that of making him do the things he should. How are we to shape the environment so that the individual may be impelled to do his share in carrying on the work of the group? The answer to this question is at once suggested by our answer to the previous one. Since man turns from those forms of behavior which bring dissatisfaction and pain and toward those which bring satisfaction and pleasure, the thing to do is to arrange matters in such a wav that those forms of action which are conducive to the welfare of the group will be those in which satisfaction and pleasure will be found. In other words, we must see that right doing is rewarded. But how are we to accomplish this result and what rewards are we to offer?

The chief contribution which the average man makes to the requirements of the group is in the carrying on of his daily work in the office, factory or shop. In this daily work one man is occupied in making shoes for other people to wear, a second is baking bread for other people to eat. No one is occupied in the satisfaction of his own requirements; each is, or should be, contributing something to the needs of society as a whole. But a man neither would nor could continue to make such contribution for very long if it were not for the monetary or material gain it brings him. Each person makes a contribution to the requirements of the group in the performance of one particular task and in return is rewarded with money to be exchanged for the various things which will meet his own personal needs and in which he can find satisfaction and pleasure.

Obviously the proper distribution of this material reward which each one must receive in return for his services is of fundamental importance from the standpoint of social health and efficiency, and the big problem which confronts us is, how can things best be arranged to produce a state of affairs in which this material reward will be so apportioned as to impel each member of the group to turn his energies into those channels in which he can be of most use and to put forth the best effort of which he is capable?

A reward to be worth anything must satisfy a demand or craving and, after the demand for those things essential to bodily well-being has been satisfied, the strongest demand remaining is probably that for prestige or approval, the craving to belong to or be accepted by the group as a member in good standing. This hunger for approval shows itself in many different ways. It shows itself in the desire a woman feels to be well dressed and have as fine a house as any of her friends. It shows itself in the desire for sinlessness or moral superiority and in the desire to hold a prominent position in the business or professional world. In other words, vanity, morality and professional ambition, all are caused by it. We have here found it con-

venient to distinguish between the monetary reward and the reward of prestige but, as a matter of actual fact, when a man seeks wealth or material possessions as the reward of his labor, it is largely because in these things he finds the means of satisfying his craving for prestige. For money is, in the minds of most people, the symbol of success. If one wishes to go through the world receiving deference and respect from people generally all along the road, the easiest and surest way to attain this result is to acquire wealth and make a liberal display of it.

Now since, after the necessities of life have been provided, prestige or approval is the goal toward which men's efforts tend to turn, it is obviously essential that, if we are to have people spending their energies in doing those things which are most worth while, we must so arrange conditions that in doing these things they will win more prestige than they would in those courses of action they might otherwise be tempted to follow. Getting people to do the right thing is largely a matter of giving honor where honor is due. But the courses of action that people must follow, the forms of work in which they must engage if they are to serve the group according to its needs, are of course extremely varied. One man must preside over a college or banking institution, a second must sweep its floors or polish its windows, a third must shovel coal into its furnaces. And each of these men, if he is to be made to render his own particular form of service to the best of his ability, must receive his own due share of approval or prestige. There must be honor and respect given to workers of each and every class and full recognition of the fact that no kind of work which society requires of its members for its own well being, is to be regarded as menial or low. This is no mere matter of high-flown sentiment but one of common sense and efficiency because, for any man to do a good job, he must himself take pride in his work, and this is impossible unless its importance and dignity are recognized.

But, although material benefit and prestige are important factors in determining the direction of a man's activities, there is still another thing almost equally important to be reckoned with. When a man makes love to someone else's wife or neglects his business to go fishing, it is not because he expects to win profit or glory in so doing, it is because he finds satisfaction and pleasure in the act itself. And what is true of such actions is true in a greater or less degree of everything else a man does whole-heartedly and well. The true artist paints pictures, not so much for the profit or glory his pictures bring, as for the personal satisfaction of painting them. The successful trader works and schemes to make money on a transaction, not so much for love of the things which the money will buy, as for the joy of putting through a successful deal. The true mechanic finds pleasure in fixing a machine and is not dependent for this pleasure on the pay in money or approval that he receives for his services. So, if we want the individual to give society the best that is in him, we must arrange things in such a way that his efforts will bring not only the rewards of prestige and material gain but also the joy and satisfaction that is to be found in doing.

But how is this to be done? Always in work we have a stimulus giving rise to a state of tension and a resulting outflow of energy in action directed toward the attainment of some goal or purpose. When the

action is successful, when the goal is attained, the stimulus is cut off, the tension falls, and, with the fall of tension, the pleasure mechanism is thrown into action. Here we have the explanation of why a man finds pleasure in his work. If the artist finds pleasure in painting, it is because a stimulus of some sort acts on him, giving rise to a state of tension from which he finds relief in the act of painting. If a man finds pleasure in making love, it is because a stimulus acts upon him giving rise to a state of tension which is relieved by love-making. Obviously, therefore, if we are to give the individual pleasure in his work, we must arrange things so that his efforts will bring about relief of tension; in other words, that they will meet with success. We must see that his work is not too hard for him. But at the same time we must also see that it is not too easy. The skilled marksman will find no satisfaction in shooting at the side of a barn, nor the highly trained mathematician in doing a sum in simple arithmetic. For tension to fall and be productive of pleasure, it must first rise, and that task will not be productive of tension which affords no substantial obstacles to be overcome. There is no thrill in any task which does not impose some strain upon us: for a man to get the maximum of pleasure out of his work, it must be of a kind which calls for the best that is in him. It must be hard but not too hard.

So if we are to make people find joy in their work we must give to each of them work suited to his abilities and as we have many jobs, some hard, some easy, some calling for this kind of ability, some calling for that, and as we have people with an equally wide variety of degrees and kinds of ability to fill them, it is obvious that we must study and classify both jobs

and men so that each individual peg may be placed in a hole which fits it. How this is to be done is a question about which we shall have something to say presently when we come to discuss the subject of education.

If a man is to find pleasure in his work, it is essential that the work should be suited to his abilities, but this in itself is not enough. The pleasure of work comes from achievement. A man sees an objective ahead of him, strains toward it and on reaching it experiences relief of tension and the joy of success which is immediately followed by an impulse to repeat the experience by pushing on to the next objective. But, if conditions are such that one cannot see anything accomplished as a result of his action, he will not experience this pleasure of achievement. In such case, his interest will flag, he will stop working if he can, and if he is obliged to go on, he will probably do as little as possible. This is what we have in those government offices and business organizations in which a man is a mere cog in the machine, a prisoner moving forward in lock step with no opportunity for personal initiative. An absolute essential to satisfactory work is freedom of action and opportunity to see the results to which the action gives rise. One of the problems that must be solved in the building of any efficient organization is that of binding the individuals composing it into an harmonious whole, and at the same time, making the machine sufficiently flexible to permit each of these individuals to give the best that is in him, with the joy and satisfaction of seeing the results which follow from the efforts which he puts forth.

Other factors requiring brief mention that play a part in determining the pleasure a man finds in his

work are: (1) physical surroundings. There is more pleasure in working in a cheerful comfortable room than in a dreary and uncomfortable one. (2) Companionship of others similarly occupied. Interest begets interest. Work, which grows dreary and monotonous when carried on in solitude, may be great fun when a whole group is doing it together. As a rule, a man needs the heat afforded by the enthusiasm of his fellows to keep his own enthusiasm alight and burning. (3) Freedom from distraction. It is hard to be happy and contented in the performance of any task when some powerful stimulus is acting upon us to turn our thoughts and energies into another channel. A boy in the classroom is not likely to find much pleasure in his studies, when he hears the shouts and laughter of his companions outside gathering for a thrilling game of football. A man will not get up much enthusiasm over the work of increasing the profits of the corporation for which he works, when all the time, at the back of his head, there is the disturbing thought of a crisis in his domestic affairs which is calling for immediate action.

In what has here been said of the problem of making the individual do the things he should, we have, of course, been answering the question, constantly in the minds of employers of labor, of how they must deal with their employees to get satisfactory service. Take any healthy individual of reasonably good mental habits. Give him work suited to his abilities. Give him freedom to go ahead in this work with opportunity to see the results of his labors. Protect him from distracting stimuli that would create a conflict or draw his energies off into other channels than that in which they should flow. Give him an agreeable place in which to work and association with others occupied in the

same work as himself. Give him an adequate monetary reward, and the prestige and respect to which he is entitled for useful work well done, and you will presently have him giving the best that is in him and finding joy in the giving of it.

PROVIDING THE MEANS TO MENTAL ADJUSTMENT

Having considered the environmental conditions we must have to call forth the forms of behavior which are necessary from the standpoint of the welfare of the group, we now wish to examine the conditions necessary to enable the individual members of the group to make their own personal adjustments.

Mental adjustment is attained in either one or the other of two ways, by modifying the situation to conform to the demand, or by modifying the demand to conform to what is possible of attainment; or, in other words, by making accomplishment fit desire or by making desire fit accomplishment. But there are some cravings which can only be satisfactorily dealt with by the method of accomplishment, and when conditions are such as to render it impossible for a man to satisfy them in this way, he must either make a mal-adjustment or remain in a state of unrelieved nervous tension. Such conditions are, of course, quite common and so we have produced a great many nervous and mental disturbances, a great deal of bodily ill health, a great deal of pain and misery, and a great loss in efficiency. Obviously, if we are to shape our environment to suit our needs, if we are to raise human happiness and efficiency to its highest level, we must do what we can to correct these unwholesome conditions. We must extend the possibilities of achievement in such ways as

to enable each individual to gratify those demands which need to be gratified. Let us consider briefly the more important of the demands or cravings which cannot be satisfactorily met except by the method of attainment, the obstacles which stand in the way of their gratification, and how these obstacles are to be dealt with.

The first craving to be reckoned with is the craving for physical well-being. Unsatisfactory conditions existing within the organism, such as may result from insufficient food or water, excessive heat or cold, or pathological conditions such as a gastric ulcer or a diseased tooth, afford stimuli giving rise to nervous tension which shows itself in the form of pain or discomfort and desire to escape from this pain. Obviously here is a form of craving or non-adjustment which, in at least a large proportion of cases, can only be satisfactorily dealt with by the method of accomplishment: the only adequate way to deal with the cravings of hunger and thirst is by food and drink. But one cannot gratify the desires of hunger and thirst if food and drink are not obtainable; nor can one relieve the pain of disease by medical treatment, if one is living under conditions in which there is no adequate medical treatment to be had. For our environment to be suited to our needs. for it to make satisfactory adjustment possible, it must be one which brings within the reach of everyone the things necessary to his bodily welfare, such as food, drink, shelter and medical attention when he is ill. The obstacles which stand in the way of people gratifying these bodily demands today are, of course, in large part, economic difficulties and the problem of removing them is largely an economic problem.

The second form of craving which calls for con-

sideration is the craving of sex. The obstacles which stand, or have stood, in the way of the gratification of the demands to which sexual stimuli give rise are to be found in the main, not in economic conditions which place the means of satisfaction beyond the reach of the individual, but in the restrictions placed upon him by social customs and the moral code. The moral code says that it is wrong to have sexual intercourse outside of wedlock, and custom decrees or did decree until recently that a man shall not marry until he is able to support a wife. As most men, during the early years of adult life, do not earn enough to keep a wife in the style in which they think she should be kept, this means that during these years, when the sexual appetite is strongest, they are unable to gratify it in a normal way, without doing violence to the moral code. And what is true of the man is equally true of the woman. who cannot marry until she finds a man both able and willing to support her, and who may be left her whole life through without having a chance to get married at all. Even after marriage, the individual may be unable to gratify his sexual desires if, as not infrequently happens, he finds himself united to one with whom a satisfactory sex life is impossible, or if he is deterred, by his own conscientious scruples or by the scruples of other people, from making use of scientific methods of birth control.

Cut off by the self-imposed restrictions of society from the normal means of satisfying their sexual cravings, different people react in different ways. Some men, in defiance of the moral law, gratify their desires by seducing "respectable" girls, thus exposing them to humiliation and disgrace, the social ostracism, with which, during the period now drawing to a close, it has been customary to punish those who allow themselves to be seduced. Other men make their adjustment by going promiscuously with disreputable or "fallen" women, often paying in money for the privilege of sexual intercourse, so that we have developed the terrible scourge of venereal disease and the shameful practice of prostitution. Some men, by reason of constitutional tendencies or external circumstances, are so unfortunate as to find their avenue of outlet in the form of pervert sexual practices which render them objects of horror and derision in the eyes of their fellow men.

Of the remainder of those denied physiological outlet for their sexual impulses, a large proportion are driven to the practice of masturbation with its resulting breakdown of morale. The young man finding himself unable to discontinue the practice of masturbation which he looks upon as shameful and destructive both to bodily and mental health, loses his self-confidence and self-respect; hypochondriacal ideas, ideas of unworthiness and other unwholesome tendencies develop, which in extreme cases may go on to the production of a neurosis or psychosis. As for those who do not resort to any of these unwholesome methods of relieving tension, or who resort to them only on rare occasions when the pressure of nervous energy rises unusually high, they of course remain, at least during a considerable part of the time, in a state of non-adjustment. They live in a condition of unsatisfied sexual desire, which is not only humiliating and distressing, but destructive to health and efficiency, and an important factor in the formation of so-called nervous and mental disease.

One result achieved by preventing the normal grati-

fication of sexual desires is, of course, an unwholesome and exaggerated interest in things sexual. If there were a land where it was looked upon as indecent to eat, talk, or even think about food, where laws were enacted and social restrictions imposed to keep a large part of the population in a state of perpetual hunger; we should no doubt find the minds of the inhabitants of that land deeply preoccupied with thoughts of food. Young men and maidens would lie awake hungry in their beds at night, ruminating on the thoughts of things alimentary. Smoking room stories which dealt with this subject, and which were therefore regarded as improper, would be snickered over and listened to with keen interest. There would be any number of Peeping Toms prowling about wherever there was a chance to see or smell a roast of beef; while books and plays having to do with the pleasure of the table would make a strong appeal to the sensually minded populace and, in the interest of public morals, would have to be suppressed by the police.

Another result of that state of affairs which prevents young people from gratifying their sexual hunger in a normal way is to so warp and distort their minds, to produce in them such unwholesome sexual desires and aversions, that they become more or less unfitted for a normal sex life, and find it unsatisfactory when the opportunity to lead such a life is presented to them. The man who, in his search for sexual satisfaction, takes to homosexual practices is conditioned thereby. He develops a taste for this kind of thing and if, as sometimes happens, such a one marries, he is likely to find that a woman does not satisfy him. Similarly the man, who for years has found his sexual satisfaction in the practise of masturbation with its associated

dreams and phantasies, is likely to discover that real ordinary flesh and blood, when it is offered to him, does not come up to his dreams and is tempted to return to his old auto-erotic practices. So we have men turning away from their mates to continue the practice of masturbation, even after they are married. And so also with the man whose sexual habits have been loose and promiscuous, who has been accustomed to the excitement of always running after some new woman. Such a one commonly finds it hard to settle down as the faithful husband of a virtuous wife, and is likely to develop into either a discontented husband or an unfaithful one.

What applies in the case of the man applies also, of course, in the case of the woman, although here the mental distortion and resulting marital disharmony may show itself in a somewhat different way. For example, in many women the demand for sexual intercourse is not very strong, or at any rate the forces which operate to hold this demand in check are stronger. In these women, the tendency for the normal sexual urge is inhibited, and there develops instead an attitude of disgust and aversion to the sexual act, blended with a conditioned fear of its consequences, which is just as inimical to normal marital relations as are the other forms of mental distortion which we have already mentioned.

So we see that the restrictions which society has set up to prevent the gratification of sexual desire are productive of a vast amount of misery and disease; and, as long as these restrictions are maintained, we must expect a continuance of this misery and disease, with its resultant diminution of capacity for achievement. What is to be done about this matter? Are we

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to cast off all of our so-called moral restraints, and each and every one of us do exactly as his fancy dictates? Such a course of action would be absurd. The mechanism of behavior being what it is, many sexual impulses and desires are bound to arise which conflict with the best interests of the individual or the group, and such impulses must be suppressed, just as must those undesirable impulses which are not sexual.

But, in the imposition of restrictions on such impulses, we must, if we are to attain satisfactory results, be guided, not by superstition, prejudice and tradition, but by open-minded intelligence and a scientific knowledge of the facts. The facts with which we must reckon are of two kinds, sociological and psychological; we must take into consideration the ever changing requirements of a rapidly developing social organism on the one hand, and the needs and limitations of the individual human organisms composing it on the other. In so far as possible, the restraints placed upon sexual behavior must be adequate to our social needs, and at the same time of a kind which does not render normal mental adjustment impossible. As in the erection of a building, so in the construction of the social edifice, we must take into consideration the nature of the material with which we have to build, its capacities and its limitations. Otherwise we shall build very badly and, in all probability, have it presently tumbling about our ears.

The restrictions at present placed by society upon sexual behavior are unsatisfactory and should be changed, but, in the changing of them, drastic or extreme measures are to be avoided. The best results are to be attained, not by seeking to demolish the present system of social restraints and constructing an entirely new one, but by proceeding tentatively and with caution to make such changes in it, from time to time, as are seen to be advisable. At present there are three changes which are obviously necessary, and which, moreover, are in the process of being brought about.

The first of these is the giving up of the idea that a man should not marry until he is "able to keep a wife." Conditions used to be such that, generally speaking, a woman was obliged to depend upon some man for protection and support. This usually meant that her father or some other male member of her family was obliged to provide her with shelter, food and clothing until a husband could be found to whose shoulders the burden of her maintenance might be transferred. Under such conditions, it was obviously necessary for a man to remain in a state of single blessedness until he acquired the financial means essential to the carrying of such a load. Today these conditions no longer prevail. The modern young woman does not sit idle in her father's home waiting for some man to come along onto whom her family can unload her. As soon as the years of schooling are ended, she, like her brothers, usually takes up some form of remunerative employment and becomes self-supporting. Now when such a young woman, earning perhaps barely enough to support herself, loves and is loved by some young man similarly situated, it is obviously absurd for them to go on living separately, each one suffering from the need of companionship and sexual satisfaction which the other can supply, when the only obstacle to their union is a mouldy and outworn convention handed down from a previous generation. As a matter of fact, of course, a great many young people are beginning to enter into marriages of the kind here suggested, and

there is little reason to doubt that a constantly increasing number will do as time goes on.

But, if people are to marry young, and everyone is to be permitted to gratify his sexual desires in a normal way, it is of course necessary that proper scientific measures should be taken to control the birth rate. The second change of which we stand in need is, therefore, the removal of the obstacles which at present stand in the way of scientific birth control, obstacles which man erected in times past by reason of his superstitions and ignorance, and which never were justified by any real necessity, except the necessity of keeping up a birth rate sufficiently high to regain the losses caused by the famine and disease which superstition and ignorance again made possible, and to provide a pious and ever warring world with an adequate supply of cannon fodder.

The third need is, of course, the need of better laws and more satisfactory methods of procedure in the matter of divorce. It is an old saying that to err is human. The human organism, like every other form of life possessed of a nervous system, must make its adjustments by the method of trial and error. This tendency to err, this inability to hit the nail on the head always at the first whack, is to be found just as much in the business of matrimony as in anything else. Here as elsewhere mistakes are inevitably of frequent occurrence. Men and women, boys and girls are certain to blunder into marriages, in which a satisfactory mental adjustment is impossible. Everyone who has been about much in the world has seen many lives, which otherwise might have been useful and happy, ruined in this way.

What are we to do about such blunders? Since we cannot prevent them from taking place, the logical

course to pursue is to make the business of righting them as simple as possible. It is obvious, however, that this was not the viewpoint of those responsible for our present cumbersome and archaic machinery for the severing of unsatisfactory marriage ties. Constancy may be a beautiful thing, but when the ideal of constancy is pushed to the point where, instead of helping a man rectify his mistakes, it requires that these mistakes shall be perpetuated to his lifelong detriment, and to the resulting injury of the social organism to which he belongs, it is being pushed altogether too far. Of course, to understand the significance of our present marriage laws, it is necessary to bear in mind that they are in large part relics of the day when a woman was a piece of property. They were originally designed, partly to protect the man in the possession of this property, and partly to prevent him from ill using it, more or less as today we pass laws to prevent the man who owns a cow from treating it badly or leaving it to die of hunger and exposure.

There are, of course, many who, while they realize that existing conditions are far from satisfactory, shrink from making any change in the old-fashioned customs and restraints governing sexual behavior, fearing that, if they do so, they may upset the apple cart, and that our last condition will be worse than our first. For the benefit of such, it may be worth while to point out that, whatever we may think of the merits of these old restrictions, the time has now come when they can no longer be maintained because the old beliefs and customs which made them possible have now passed away. We must march forward with the times and re-frame our laws of conduct in conformity with our increasing knowledge and changing needs. Otherwise

we shall presently find that our old outgrown laws have been simply discarded and that we have no laws at all. Our present day immorality is due, in large part at least, to the fact that our moral code is manifestly unsuited to our needs and people have come to look upon it with contempt. If our moral leaders are to retain their leadership they must keep up with the procession.

A third demand which can be satisfactorily dealt with only by the method of attainment is the demand for social intercourse, the craving to mix with one's fellows and to be approved and accepted by them as a member of the group.

This demand is a very powerful one. In most people it would seem to be even stronger than that of sex. At any rate, there are few who, if called upon to make a deliberate choice between satisfying their sexual demands and retaining their places as respectable members of society, would not choose to retain their social position and let the demands of sex remain unsatisfied.

Moreover, there can be no doubt that failure to satisfy this social craving is one of the most important causes of mental disorder. The man who lives entirely by himself or for himself is probably never a contented or happy one. Not only does he suffer the pain of lone-liness in being estranged from his fellows, he also tends to develop a suspicious and antagonistic attitude toward them. He tends to think that people are against him, and his feelings of antagonism and ideas of self-reference not infrequently grow in strength and complexity until we have well developed ideas of persecution. A large number of the cases in our hospitals for the insane are cases of people who have failed to find normal satisfaction of their social craving. They are

people who have gotten out of harmony and out of contact with their fellow men, and, partly at least as a result of this estrangement, have become so warped in their habits of thought and action that they can no longer function as part of the social organism.

Of course, when an individual fails to satisfy his social craving, it is often because of defects in his own personality which render him unable to live harmoniously with his fellows. Not infrequently, however, it is due, in large part at least, to circumstances over which he has little control.

Take, for example, the case of the woman who, by reason of something in her parentage, morals or manners, is rated as undesirable and left out of the social life of the community in which she lives. Or take what we have in a college where, if a student is to participate in its social life, he must belong to a fraternity, and where a certain number of students, rated by campus standards as the less desirable, are always left out in the cold. A college or a community where an individual is thus treated is for him an unwholesome environment. An environment to be suited to a person's needs must be one which will provide him with the social facilities he requires.

A fourth demand which should be gratified is that which is sometimes spoken of as the demand for self-expression. By this we mean the craving to exercise one's powers in the doing of something, in some form of achievement. No environment is to be looked upon as satisfactory which does not give the individual work which is suited to his abilities and in which he can satisfy this craving. In this connection, it might be noted that the growing interest in the study of the individual to ascertain his particular abilities and tastes

is certainly a step in the right direction. It would seem to guarantee that in the future the individual would be given greater opportunity to develop his particular abilities and powers to an extent that, for instance, earning his daily bread may become less of a drudgery and more of a joy than in the past. The man who asked the question, "Why are there so many bright, interesting children and so many stupid grown-ups?" pointed the moral and adorned the tale of our regimented educational methods. These methods have not trained the youth in a way that permits and encourages the expression and development of their individual abilities. The craving for self-expression will stand a much better chance of being satisfied when our educational methods take greater cognizance of individual abilities.

The fifth and last demand which needs to be gratified is the demand for security. As long as a man has some danger hanging over him which impresses him as serious, the stimulus which it affords serves to maintain a state of tension, manifesting itself in anxiety which is destructive to health and efficiency. In so far as possible these sources of anxiety should be removed. Probably the chief source of such anxiety in our modern civilization is the economic hazard, the danger, always present in the minds of so many wage earners, of being turned out of their jobs and left without sufficient means of livelihood for themselves or their families. It is desirable, not only from the standpoint of the worker, but also from that of his employer, that this hazard should be removed. A man will give much better service who has the comfortable assurance that, if he is honest and faithful in the discharge of his duties, he will be taken care of.

The question of how this is to be done is one of the big issues today. Can it be done under capitalism or is it only possible under socialism? The question is one with which we are not here concerned. Our concern is with what is essential to mental well-being and not with the question of what form of social and economic organization will give us these things we require. It is not for us to say how we are to attain economic security. It is for us to point out, however, that economic security is essential to mental health and that any social system which fails to give it is basically unwholesome and unsatisfactory from the standpoint of mental hygiene.

CHAPTER IV

SHAPING ORGANISM TO FIT THE ENVIRONMENT

In the preceding chapter we briefly examined some of the principles which must guide us in shaping our social structure so that we may get the best possible results from the human material with which we have to build. In this chapter we shall consider the question of how we are to shape the personalities of people, or rather to help them shape their own personalities, so as to make them into the kind of building material of which a satisfactory social structure can be made.

The nature of a man's personality depends on many factors of which three are outstanding, namely: (1) heredity, (2) education and (3) health. Shaping a man's personality is obviously a matter of controlling to some degree these three things on which human personality so largely depends. Let us consider them in reverse order.

HEALTH

This factor we shall barely touch upon. We cannot here go into the question of research, discovery and progress in general in the field of medical science and hygiene, theoretical and applied; nor is it proper in this volume to discuss details of health and varieties of disease. We wish merely to state that maintenance of the health of a group is, in the main, a matter of each person conducting his own individual life in ac-

cordance with the laws of health. But, for a person to live according to these laws, two things are necessary: First, he must know what they are; he must be given such instruction in regard to his own body as will enable him to proceed wisely in taking care of it. Second, he must be given living conditions which render a healthy manner of life possible; for what use is there in a man knowing what kinds of food he should eat or the importance of fresh air, sunlight, cleanliness, rest, and recreation, if these things are unattainable? We take it for granted that it is an essential part of sound social management to see that every member of the group be provided with those things essential to his health and that he be given the instruction and training he requires in order to make proper use of them.

EDUCATION

We regard learning as a process causing certain changes to occur in the nervous system in consequence of which a given stimulus will call forth a different response after an experience from what it did before. Education, as the term is here used, includes not only the memories and the habits of thought and action acquired in school and college, but also those acquired in the home and in the world at large. Strictly speaking, a man's education is never complete until he is dead, but the most important part of it, the part we ordinarily have in mind when the subject of education is discussed, is that received during those plastic early years, school and pre-school, which are mainly a period of preparation for the years to follow.

The subject of education we shall here distuss from only one aspect, namely, its bearing upon mental adjust-

ment. The problem of mental adjustment has been defined as the problem of making desire and accomplishment match, a result which may be attained either by enlarging accomplishment to fit desire, or by curtailing desire to fit accomplishment. Education, if it is of the right kind, will help a man to make satisfactory adjustments by helping him to do both of these things. It will help him to gratify those desires or cravings which need to be gratified and to suppress those which need to be suppressed. Let us first consider the chief requirements in an education designed to do, and capable of doing, the first of these two things.

There are, we have seen, no less than five cravings of outstanding importance which need to be gratified. They are: (1) the craving for bodily well-being, (2) the sex craving, (3) the social craving. (4) the craving for self-expression or achievement, and (5) the craving for security. Let us begin with the craving for bodily well-being.

Stated in physiological terms, the craving for bodily well-being is a state of tension produced by the stimulus of some unsatisfactory bodily condition, such as results from lack of nourishment, exposure to extremes of temperature, injury or disease; and is to be gratified by supplying the food, protection from exposure, or medical aid and treatment required. But how does the individual supply these requirements? Under existing social and economic conditions, he does so by the expenditure of money. When he is hungry and wants food, when he is cold and wants clothing, fuel or shelter, when he is ill and wants medical treatment, he gratifies his craving by purchasing for himself the things he wants, and the chief problem of adjustment in the gratification of these demands is that of obtain-

ing the money wherewith the purchase is to be made.

But money is essential not only to the satisfaction of the craving for bodily well-being; in gradually extending its uses, it has come to acquire also a distinct value from the standpoint of the gratification of the sexual and social cravings. Courtship, marriage, the establishment of a home, the rearing of children, which used to be free or almost free a couple of centuries ago, all cost money now, and it costs money, too, to entertain one's friends and participate in their social activities. When we come to the satisfaction of the craving for security, we find that, unlike in the past, it depends not so much on good crops, good health, and the good habits of hard work and thrift as on money again. As I have already had occasion to remark, the evil most feared in the world today is the evil of poverty. The chief protection against future deprivation and harm is the possession of a comfortable balance in the bank which insures a continuing ability to purchase food, shelter and such protection as is to be had against the ills which threaten.

Under existing social conditions, then, one of the chief problems in mental adjustment is the problem of obtaining the money necessary to gratify those cravings which should be gratified. How is education to help us here?

The answer is obvious. In the world, as it is organized today, each one of us obtains, or should obtain, his supply of money by the doing of some kind of useful work. But, to do satisfactorily any kind of work which will yield an adequate financial return, one must be trained for it; he must have an education which affords the particular kind of knowledge and skill required to do this particular thing. So we see that,

from our point of view at least, the first requirement of any education is that it shall fit the individual for the doing of some particular form of useful work in which, while contributing his share to the service of mankind, he can also satisfy his own individual craving for self-expression or achievement, and find money for the gratification of a variety of personal cravings which are of fundamental importance and which it is impossible to gratify without money.

The kind of work for which each individual is trained should, of course, be determined by the form and extent of his ability. This is important, not only from the standpoint of the man's own personal satisfaction, but also from the standpoint of his value to the group. Today we see research positions occupied by research workers with no talent for research, teaching positions occupied by teachers with no capacity for teaching, administrative positions occupied by administrators with no capacity for administration. As a result, things which it is important for us to know remain undiscovered, our children are badly educated, our organized activities are badly conducted, and all of us suffer greatly in consequence. This display of incompetence is, obviously, not due entirely to dearth of men with the native ability to do efficiently the various kinds of work which need to be done. For every task there is probably someone who, given proper training and proper working conditions, could do it. The cause, or at any rate one of the most important causes, of the trouble is that we fail to sort out our various sizes and shapes of human pegs and to see that each peg gets into the hole it should occupy.

For building a complicated piece of machinery, a man might be provided with a great many different kinds

of material, each useful and necessary in its own particular place, cast iron for one part, steel for a second, copper for a third, glass for a fourth, rubber for a fifth, and so on. But if the builder used no judgment in regard to these materials, putting in glass where steel was required, and cast iron or rubber where he needed copper, it would be very foolish of him, when his machine broke down or refused to run, to lay the blame on his raw materials, which had proved unsatisfactory in the uses to which they had been put. Similarly, in the building of that complex mechanism we call society, where the raw materials with which we have to deal are living men and women, who display a wide variety of different abilities or aptitudes which render them suitable for use in different parts of the machine. Here we have an individual with one kind of ability who, properly trained, will make a good research worker; there another, who can be made into an efficient executive. It is an essential function of our educational system to sort out and classify these different kinds of human raw material and to prepare each kind for that particular use to which it should be put in the construction and maintenance of the social organism.

After a vocation and the remuneration it should bring, the next thing essential to the gratification of our fundamental cravings is what may be called social fitness. By this I mean that quality or combination of qualities a man must have to get along with his fellow men. Obviously, without this ability to harmonize with others, one cannot gratify his social craving, neither can he gratify the demands of sex because, to gratify his sexual demands, he must be able to get along with wife or sweetheart, he must be able to form one of a

group of two. Without social fitness, one cannot even carry on successfully in any form of work in which he has to cooperate with his fellow men, and there are today comparatively few vocations in which one can go far unless he is able to work as a member of a group.

But what is this quality of social fitness which a man must have to get along with his fellows, and how is it to be acquired? It is simply the ability or tendency to make his actions harmonize with theirs. This ability is largely a matter of habit formation. It is a matter of education or training as a result of which the individual develops the tendency to inhibit those forms of action which would bring him into conflict with others and to do those things which it is necessary for him to do in order that he may bear his part in the smooth and efficient action of the group as a whole.

From our point of view, the second great requirement of an education is that it shall give a man this quality of social fitness, that it shall develop those habits or tendencies which he must have in order to get along with his fellow men and forestall the development of those tendencies which would prevent him from doing so. As for what the various good and bad habits are on which social fitness or the lack of it depends, and how these habits are to be produced or prevented, that, of course, is a very complicated question which it would be impossible for us to discuss in detail at the present time.

So much for the requirements of an education from the standpoint of fitting the individual to make those adjustments which should be made by the method of gratification. Let us now consider the question of what can be done to fit him for making those adjustments which should be made by the alternative method of curtailing desire to bring it into harmony with what is possible of achievement.

When we consider the desires which should be dealt with in this way, we see that many of them are desires which should be suppressed because they are for things which are useless or harmful. The desires for alcohol and habit forming drugs which injure our health and lower our mental efficiency are of this kind; so are the desires to indulge in various forms of sexual perversion, which bring a man into conflict with society and cause him humiliation and shame.

Phobias and groundless dislikes or aversions may also be placed in this category, for fears and aversions, although it is not customary to think of them as such, are really desires of a negative sort. When we see something we like, the stimulus afforded by the sight of this thing causes nervous energy to be generated, which tends to find outlet in the form of an impulse to reach forward and take it. When we see something we dislike or fear, the stimulus afforded by this sight causes energy to be generated which finds outlet in the form of an impulse to draw away from and reject it. In one case we have a wish to approach or possess the particular thing which is the object of our concern; in the other we have a wish to get away from it.

Now these pernicious and useless desires, which are responsible for a large proportion of our most difficult problems in mental adjustment, are practically all of them due to conditioning or habit; in other words, they are the result of education. A man is not born with a craving for opium, a desire to withdraw from open spaces, or a desire for any particular form of sexual perversion; although certain people, by reason of their

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heredity, afford a soil in which such unwholesome desires or tendencies develop much more readily than they do in others. The people who have these desires or cravings have been badly educated. If men were properly educated, the problem of suppressing such desires would not arise because there would be no such desires to suppress.

But there are a great many desires that need to be suppressed which are not of this kind. A great deal of our unhappiness and discontent is due to wishes which are the expression of tendencies common to all of us, such as the tendency to seek wealth, prestige or affection, wishes which are to be looked upon as abnormal or unsatisfactory only because they are excessive or occur under conditions in which they cannot or should not be gratified. For example, take the woman whose desire for approval and affection is so excessive as to render her a burden to her husband. her children and her friends, or the man whose demand for prestige is so great that he cannot be happy except when he is in the center of the stage, or the man who is so greedy of gain that he is never satisfied with his share of the profit in any transaction but must be always trying to grab the whole thing for himself. We also see the unfortunate results of this tendency to demand more than is right or possible in the case of the man of mediocre ability who wants to be a great financier, a great statesman, or a great baseball player, and who is unhappy and discontented, looks upon himself as a failure because he has never been able to rise above the level of his fellows. Probably all of us suffer more or less from wishes of this sort. In everyone desire tends to run far in advance of capacity for attainment. How is education to help us here? How,

by means of it, can we help the individual to rid himself of these wrong desires which have their source, not in acquired tendencies, but in his inborn appetites or instincts?

When a man is dissatisfied with the position he has achieved in the world of art or of business, when he is unhappy because he has so little money in the bank, so little prestige, honor or affection bestowed upon him by his fellow men, it is because in his thinking he has set for himself a goal or objective which he has failed to reach. Wittingly or unwittingly, we are always setting up for ourselves standards of what is right or desirable by which our attainments are to be judged. If in any case we fall short of our standard, the situation is, in our opinion, not what it should be and the experience of this, to us, unsatisfactory state of affairs serves as a stimulus to maintain a state of nervous tension which manifests itself in the form of unhappiness or discontent. Thus if a man's idea of a satisfactory salary is fifty thousand a year, he will be discontented with ten. If a woman expects a man to send her candy, flowers, and other tokens of his love daily, she will not be satisfied if all she gets from him is a box of candy once a week. Success and satisfaction in business, love or anything else is purely a relative matter. It all depends on the standards we set up.

But what determines the nature of these standards? In large part, at least, they are the result of education. One learns, as a result of the influences to which he is subjected during the formative years of life, to think of certain things as right, necessary or desirable, and much of the dissatisfaction and unhappiness of later life occurs as a result of the setting up of unwholesome or impossible standards during this period.

If a man is to adjust himself in the world in which he must live, if he is to make desire and accomplishment match, he must have standards possible of attainment. It is an essential part of a man's education that he should be taught to seek and find his satisfaction in things which are within his reach, and in the doing or obtaining of which he will contribute most to his own personal well-being and to the welfare of society as a whole.

But, since different people have different kinds and degrees of ability, the objective which should be sought and attained by one person is not the same as that which should be sought and attained by another. So different individuals must be given different goals or standards. The only way in which this can be done, of course, is by so classifying the students in our schools and colleges that individuals with different potentialities will be brought together into different groups, and the members of each group developed along those lines that will give them the ambition and tastes, as well as the particular kinds of skill and knowledge, which they must have in order that they may be happy, healthy and efficient in the particular places in the social organization which they are best qualified to fill.

We have considered what would seem to be the three most important requirements of an education from the standpoint of mental adjustment, namely, (1) vocational training, (2) development of social fitness, (3) development of tastes and standards of achievement suited to the individual's limitations and requirements. Before leaving the subject of education there are, however, three needs in our schools and colleges which are deserving of brief mention.

The first is the need of instruction in the principles

of the management of the mind. Health, happiness and mental efficiency are only to be attained by breeding good stock, educating it properly, taking good care of its physical health, and giving it a mental environment suited to its limitations and requirements. But such a program as this cannot be carried out without the intelligent cooperation of parents, teachers, employers of labor, and the general public. To bring about such cooperation, people generally must be enlightened in regard to the principles which should govern their actions in seeking to bring about a better state of affairs and organized instruction in our schools and colleges is necessary as a means of bringing about this enlightenment.

The second is the need of maintaining in our schools and colleges conditions which are wholesome from the standpoint of the mental well-being of the student. Conditions are not particularly wholesome when, as today, a considerable proportion of the students fail to make satisfactory adjustments and when a large number of neuroses and psychoses and not a few suicides occur as a resut of their failure to do so.

The third and last need is one very closely related to the second. It is the need of detailed and accurate knowledge regarding the individual student and his requirements, so that our efforts to meet these requirements may be intelligently directed. Education is, or should be, a matter of subjecting the individual during the early, formative years of life to those stimuli which will so shape his tastes, tendencies and capabilities of thought and action as to fit him for the particular place in the social organism which he can occupy with the greatest degree of satisfaction to himself and others. But to do this we must have him constantly

under supervision: we must be able to see whether the influences to which we are subjecting him are serving to call forth the reactions we desire. Otherwise we are much in the position of the stone mason, trying to chisel a stone into a certain shape and hammering away with his eyes shut, so that he cannot tell what impression his blows are making upon it; or like a gunner blazing away at an invisible target, unable to tell whether he is making hits or misses.

It is, of course, in our institutions of higher learning that this defect in our educational system is most apparent. In the small college of earlier days, the instructors were personally acquainted with all their students and the students were intimately acquainted with each other. Everybody knew everybody else. The institution was a social unit. Today a man may spend four years at college and graduate without coming to know, even by sight, many of the men who are in the same class with him. As the group has grown in size, as the students have lost contact with each other, they have also lost contact with their teachers. This loss of contact between student and teacher is rendered more pronounced by the fact that with the growth of the college and increase in the number of men on the faculty, the teachers have tended to specialize more and more. Where in the old days a man taught several subjects to a small number of students, he now teaches only one subject, or one phase of a subject to a great many. Specialization has been described as a process whereby a man comes to know more and more about less and less until finally he comes to know everything about nothing. Whatever truth there may be in this definition, certainly the process of specialization has led to our teachers knowing less and less about their

students until in many cases it amounts to almost nothing.

What, it may be asked, can be done to remedy this unsatisfactory state of affairs? A plan which I suggested some time ago, in a paper dealing with the mental health problem in the college, was to break the student body up into a number of small units, each having its own social life, and to build an organization by means of which it would be possible to maintain the necessary personal contact with them. Where the students reside in the college, the thing to do would be to make the dormitory the unit.

Each dormitory would, under this plan, be in charge of a counselor, one of the younger members of the faculty. The counselor would live in the dormitory with his men where it would be easy for him to get acquainted and keep in intimate touch with them. These counselors would work under the direction of a chief, a man with the necessary professional training in normal and abnormal psychology to qualify him for such a position, a mental manager who would give all his time to this work.

HEREDITY

Education is a matter of modifying the structure of the organism by the chisel of experience so that it responds in a different way to a stimulus applied after the experience from what it did before. In the adult human being, practically every action is to be looked upon as, in a greater or lesser degree, the result of tendencies thus acquired. Practically every response above the level of a cord reflex is a learned reaction. But while this is so, it must be borne in mind that the effect produced upon the organism by the stimuli afforded

by the experiences to which it is subjected in the course of its education will depend, not only upon the nature of those stimuli, but also upon the nature of the organism on which they fall.

Take two birds, a parrot and a duck. Speak a word or phrase several times in the hearing of the parrot, and the bird will repeat this word or phrase on sub-sequent occasions when the right stimulus is applied to call forth this reaction. Not so, however, with the duck. There is a difference in learning capacity, pre-disposition, aptitude—call it what you will—between the two birds by reason of which the experience or teaching which produces a certain effect upon the behavior of one bird does not produce a like effect upon that of the other. As a further example, take two dogs, a collie which is used in the herding of cattle or sheep, and a pointer which is used in hunting. Each dog is educated or trained for the work it has to do. The reactions occurring in response to the stimuli to which it is subjected in the doing of its work are in large part learned. But although it is a comparatively easy matter to educate these two dogs to do each his own particular kind of work, it would be a very different matter if one were to try to teach the pointer to herd cows or the collie to point. Each dog has his own inclinations or aptitudes which predispose him, prior to experience, to react to the situations in which he finds himself in certain characteristic ways, thus rendering it easy for him to learn one thing, and difficult or impossible to learn another.

What is true of birds and dogs is true also of human beings. They too differ in their predispositions or aptitudes. Play a tune three or four times in the hearing of two children and one will thereafter reproduce it correctly while the other will not remember it at all. The first of these children has good learning capacity or aptitude for music, the second has not. I knew a woman once who had so little aptitude of this sort that, although she had received piano lessons for years and learned to beat out tunes after a fashion, the only way in which she could recognize these tunes, if someone else played them, was by watching the player's hands to see where he put his fingers on the keyboard. She could learn and remember a complicated series of bodily movements performed with the hands on the piano but she was incapable of learning or remembering a tune.

Similarly in the field of poetry, painting, dancing, arithmetic, baseball, and philosophizing. One person may show a great deal of aptitude for one of these things, another very little. Every person has a certain degree of aptitude of one sort or another, although there are some people who possess a wide variety of aptitudes of a high order while there are others who possess very little aptitude of any sort.

Defects in learning ability or mental aptitude may be classified as of two kinds:

First, quantitative defects. The child who, although yesterday he burned his fingers on the hot stove, today reaches out and touches it again and the man who, although yesterday he was shown how to do a simple piece of work, must today be shown all over again, suffer from defects of this kind. The trouble with these people is an inadequate capacity for undergoing modifications of structure or for being impressed by the experiences to which they are subjected. One may think of them as, like granite, too hard and unyielding to receive impressions or else, like jelly, too unstable

to retain them. When a man shows this kind of defect in only moderate degree, we say that he is stupid. When it is more pronounced, we say that he is a mental defective.

Second, we have also what may be called qualitative defects. Here the organism is sensitive enough to its environment. It is readily modified by the experiences to which it is subjected but it is modified in wrong ways. It learns easily, but it learns the wrong things. As examples of such wrong learning tendencies, take the person who as a result of some unpleasant or pain-ful experience, not very serious in itself, develops a phobia or aversion which remains as a life-long handicap; or the person who, from some sexual experience, which might have little effect on one differently constituted, develops into a sexual pervert. People with these qualitative defects prove very unsatisfactory material from the standpoint of the educator, not because they are made of a substance which is too hard to cut, but because this substance is brittle, fissured, cross-grained, and tends to break under the chisel into unsatisfactory shapes when we try to work it. Those who show these defects, who learn readily enough but tend to learn the wrong things, who break or become warped and twisted unless given the most skilful handling and care are the neuropathic and psychopathic stock. There are, of course, not a few people who display both quantitative and qualitative defects. They are stupid and, at the same time, tend to pick up bad habits quite readily. There are other neuropathic individuals possessed of capacities for learning and achievement far above the average; fragile material, easily spoiled, but material with which great things can be done if it is skilfully handled.

How are we to explain these differences in learning ability which we see displayed by different individuals, whether birds, dogs or men? Obviously they are to be looked upon as due to differences in anatomical structure and chemical composition. The nervous system of the parrot is different from that of the duck; the nervous system of the collie is different from that of the pointer; the nervous system of each individual man is different, in a greater or lesser degree, from that of every other man. So the situation or combination of stimuli which calls forth one reaction from one organism calls forth a different reaction from a different one, with the result that different impressions are stamped upon the brains of these different individuals, which predispose them to different forms of behavior on subsequent occasions. In other words, each individual having a different nervous system from that of his fellows is differently affected by the same experience and so learns to behave differently as a result of it.

Of course, in considering these differences of structure on which differences in learning ability depend, it is not only the nervous system that must be taken into consideration. In reacting to the stimuli to which a man or animal is subjected in any situation it is not only his nervous system which functions but also his sense organs, muscles and glands, in fact the whole of him. If any part of him were different, his reaction to these stimuli would be different; and, if the reaction were different, the changes produced in him as a result of these stimuli would be different also; the individual would learn something different as a result of his experience. It is a man's bodily structure, not only the structure of his nervous system but also that of his sense organs, muscles, glands and all parts connected

with these various organs—in short the structure of his body as a whole—which determines the nature of his mental aptitudes and is responsible for any defects in learning ability, whether qualitative or quantitative, which he displays.

As for the source of the differences in bodily structure which we see displayed by different individuals, they are, in large part at least, a matter of heredity. If we see a man with coal-black skin, kinky hair and thick lips, we may be reasonably certain that his parents were not both of them blonds, and if a man has blue eyes, flaxen hair and a ruddy complexion, the probability is that his ancestors did not come from the banks of the Congo. In spite of all that may be said to the contrary, children really do tend to resemble their progenitors. They tend to resemble them, not only in having the same type of bodily structure, but in having also the mental aptitudes or potentialities, both good and bad, to which this bodily structure gives rise.

What significance has all this from the standpoint of mental management? The answer to this question would seem to be fairly obvious.

Suppose a man were trying to build a really fine piece of mechanism, an aeroplane, let us say. It would, of course, be necessary for him to use the highest degree of skill and craftsmanship in shaping, finishing and assembling the different parts which he would use in its construction. But what would one think of the builder who, recognizing the necessity for good craftsmanship, stopped here and refused to admit the need of using good raw materials; who proceeded on the assumption that all kinds of material were equally good and in making the various parts of his machine used whatever kinds of stuff happened to be offered to him

or came first to his hand? Obviously an aeroplane built on this theory would not be worth much. To build a good aeroplane two things are necessary; first, the proper selection of raw materials to be used in the making of its various parts, and second, the proper handling of these materials after they are selected.

It is exactly the same in the making of that highly complex mechanism which we call society. Here we must use scientific skill and craftsmanship in shaping or educating the individual men and women who form the parts of it; but that in itself is not enough. If we are to turn out a satisfactory product from our educational mill, we must also have suitable raw material to work with. We must have people with aptitudes or potentialities which will enable us to develop in them, in a socially satisfactory degree, the mental characteristics which are required.

But how are we to exercise selection in dealing with human raw material? The worker in wood or metal may reject or throw onto the scrap heap anything which he finds to be unsuited to his requirements. We cannot very well dispose of our unsatisfactory human beings in this way. Our only way of freeing ourselves from the unfit would seem to be by preventing their propagation; in other words, by the proper exercise of birth-control. But man is loath to resort to this method of procedure. His craving to perpetuate himself in the form of offspring is of such potency that there is an almost instinctive impulse to cry, "No! No!" to any proposed curtailment of the right to gratify it. Before yielding to such an impulse, however, we should look the facts fairly in the face and see what alternatives lie open to us.

Man, in common with every other form of life, tends

to increase at such a rapid rate that, if this increase had been permitted to go on unchecked, there would long since have ceased to be even standing room upon this planet. That such state of affairs does not exist is due to the fact that, whenever crowding occurred so that there was not sufficient elbow room or food to go around—in fact, as a rule, even before this condition was reached—a struggle would arise for the means of sustenance. The weaker and less fortunate ones would be killed in this struggle, or left to die of famine and disease. So a high death rate was maintained which automatically served to prevent the overcrowding to which the high birth rate would otherwise have given rise. Now, looking at this situation, one thing is obvious, and that is, that if we do not care to go on with the wholesale killing, starvation and disease, by which overpopulation has been prevented in the past, we must find some other way to prevent it. And, obviously, the only possible alternative to killing off the excess population in each generation is to prevent this excess from being born. In the very nature of things, only two possible alternatives are open to us. We must keep right on having war, famine and pestilence as in times past, or we must practice birth control.

When we consider the alternatives which here confront us, when we look the facts fairly in the face, there can, it seems to me, be no doubt as to what our course of action must be. We must have some kind of birth control. But what kind of birth control are we to have?

When, in a business organization, there are a hundred positions to be filled and several times that number of applicants to fill them, the thing to do is to select from among these applicants the ones who will

most likely prove satisfactory. Similarly, when we have millions crowding at the gates of birth and not enough positions in this world for all who would enter it, the thing to do is to open these gates to those who may be expected to prove most satisfactory, and to keep back the less desirable, which, of course, means drawing our supply of human raw material from the best parent stock and preventing the reproduction of the defective and the unfit.

As a matter of fact, of course, we already have birth control of a sort, but a very different sort from that here recommended. Under existing conditions, those with more intelligence and capacity for self-restraint limit the number of their offspring to what they can properly care for, while the mentally defective, the stupid and the incompetent breed recklessly, leaving their offspring a burden upon the state which the more competent ones therefore have to support. And to make it more certain that the stupid and ignorant will not fail to reproduce abundantly of their kind, we have laws making it a crime to instruct these people in regard to contraceptive measures which are in general use among the more enlightened members of the community.

An objection always raised against any eugenic program is that our knowledge of the laws of heredity is still incomplete, and that, moreover, we cannot be sure how far a defect is hereditary and how far acquired. There is, therefore, it is said, great danger that, by our eugenic measures, we may prevent the birth of some who under favorable conditions would develop into useful citizens. People who talk thus fail to grasp the essential nature of the problem that confronts us. The problem is not whether we shall or shall not restrict the birth rate. Birth control of some sort

is inevitable. The question is—Upon whom shall our restrictions fall? How are we likely to get the better stock? By breeding from mental defectives, criminals and others who fail to fit into the social organism, who are a drug and a burden for society to support, or by breeding from those who show a high order of intelligence and energy, who are healthy and efficient members of the group?

The development of the human race has been largely, if not altogether, the result of selective breeding. It has been the outcome of Nature's own system of eugenics which, although rough and cruel, has been effective. In the struggle for existence, the fittest have survived. Those best able to adapt themselves to the conditions of life have crowded out the less capable. The race has in every generation been bred from its strongest stock. If man today has the intelligence, initiative, energy and moral force, not only to maintain himself at his present relatively high level, but also to aspire to higher things, it is due to this process of natural selection.

Today, however, we are no longer content that those less fitted to survive should continue to be killed off or die of hunger and disease in the cruel struggle for existence. We wish to be more kind in the future than Nature has been in the past. But, if we are to interfere with Nature's method of selective breeding, we must put something else in its place. We have the right. nay, more, we are under obligation to do this, not only for the sake of the race, but for the sake of the unfit themselves who could otherwise be born. We have no right to permit children to be born into a world to which they are not suited and in which they are unlikely to find either health or happiness.

CHAPTER V

HANDLING THE BREAKDOWNS

No matter what is done to enable people to be happy, satisfied and, hence, well adjusted, some of them will remain non-adjusted or even mal-adjusted, at least in some respects. And as little indeed is being done to promote mental hygiene, individual and social, it is not surprising at all that a great number of men and women, a number that seems to be growing to an appalling degree with every decade, find themselves unable to overcome various tensions, to preserve peace of mind, and to find a way out of the state of non-adjustment. It is not surprising at all that we have so many cases of breakdown.

The understandnig of mental tensions, their causes, and their elimination is clearly required for the prevention of breakdowns. The ideal treatment of any case is, of course, by preventive methods. We should go out to meet the gathering trouble and overthrow it before it has a chance to fall upon us. But it seems to be part of human nature to disregard potential, even probable, evils before they have arrived in all their unpleasant reality. It is a sad truth that mental hygiene is unlikely ever to attract popular attention to the same extent as mental ills themselves, even though the appalling growth of neuroses and, to a certain degree, of psychoses should have warned people of the urgency of preventive psychiatric work.

Be it as it may, we have to face the reality of breakdowns, in various forms and degrees of seriousness. We can grant that they constitute cases of abnormal behavior, which we have failed to prevent. But once they arise, all we can do is to deal with them as best we can, the more so that the victims themselves feel the painful impact of the mental ill affecting them and clamor for relief.

In dealing with any case of abnormal behavior, the first thing to do is to investigate the nature of the trouble, make a diagnosis. But what must we do to make a diagnosis? What are the objectives to be attained?

DIAGNOSTIC OBJECTIVES

When we have to deal with the case of a person who is not reacting in a normal or satisfactory way to the environment in which he is placed, the first thing to do is to determine the nature of his unsatisfactory behavior. We must get a clear and accurate picture of what he has done, thought, or felt that may be regarded as abnormal. I have not infrequently seen men go wrong in their explanations of abnormal behavior, owing to the fact that the behavior they were trying to explain was behavior of which the patient had never been guilty.

And while we are making sure of the exact nature of a man's abnormal behavior, we should also make sure that this behavior really is abnormal. This is not such a simple matter as one might suppose. To many of his contemporaries, Christopher Columbus seemed to be acting in a very unsatisfactory or abnormal way when he set out to sail around the earth. We now know that Columbus was right in his undertaking and that those who opposed him were wrong. A man says

someone is after him to kill him and we look upon this as delusional behavior. But later events may prove that the man's fear was justified. I had a patient once who, according to the history given by the doctor who had been in charge of his case, had refused to eat the food his wife prepared, because he believed that it was poisoned. This alleged belief that his wife was trying to poison him had been looked upon as indicative of a very grave form of mental disease. Careful study of the case, however, revealed the fact that the man's refusal to eat his wife's food was not due to fear of poison at all, but to fear that she was putting filth in it, and this fear was based upon the fact that the wife, being an extremely silly ignorant woman, had actually put some of her menstrual discharge in his food, in the superstitious belief that it would serve as a "love potion." Moreover, she had been indiscreet enough to let her husband know the means she was using to stimulate his sexual desire for her.

Having clearly in mind the nature of the abnormal behavior with which we have to deal, we must next try to determine the causes to which it is due. All abnormal behavior, as we have seen, is to be attributed to one or both of two things: (1) the nature of the stimulus which called it forth, and (2) a defect in the organism by reason of which it reacted to this stimulus in an unsatisfactory way. Search for the possible causes of any abnormal thought, feeling or act must therefore comprise (1) an inquiry into the nature of the stimulus which called it forth, and (2) an inquiry into the nature of the organism which reacted to this stimulus in this unsatisfactory way; in other words, an inquiry into the personality.

FINDING THE STIMULUS

As for the first of these two inquiries. The stimuli which give rise to our thoughts, feelings and actions can be classified, for practical purposes, under three different headings: (1) external or environmental stimuli; that is to say, those which come from outside of the body, as sights, sounds, smells, tastes and changes of temperature; (2) somatic stimuli, that is to say those coming from within the body, as the stimulus of an empty stomach or of a full bladder; (3) ideational stimuli, thoughts and memories which we may think of as having their origin within the brain. Search for the stimuli giving rise to unsatisfactory behavior means therefore an investigation of three different fields. We must study a man's surroundings for environmental stimuli, his bodily condition for somatic stimuli, and the thoughts which occupy him for ideational stimuli to which his abnormal reactions may be due.

But, it may be asked, how are we to recognize the stimulus responsible for any particular abnormal thought, feeling or action when we find it? There are two things we have to go upon.

The first is the apparent adequacy of the stimulus. Whenever in our search we discover a stimulus which might reasonably be expected to cause the behavior we are seeking to explain, we may—in absence of any evidence to the contrary—assume that it has caused it. For example, suppose a child is nervous and irritable, and we find, as we sometimes do, that he lives with a mother who is forever nagging at him, we may assume that the environmental stimulus afforded by this mother is, in part at least, the cause of the child's nervous behavior; because, from our observation of

other cases, and from what we know of the nature of the human organism, we should expect such a stimulus to call forth such behavior. Similarly, if a man is restless and irritable and we find that he has a toothache, we may assume that the somatic stimulus afforded by his diseased tooth is the cause of his restlessness and irritability. Or, if a boy is anxious and depressed, and we find that he thinks he has ruined himself by his habit of masturbation, we may assume that the stimulus afforded by this thought has played some part in producing his reaction of depression.

The second thing we have to go upon is the temporal relationship between the stimulus and the behavior to be explained. After this, therefore because of this. If we find that every time a man is exposed to a certain stimulus he behaves in a certain way, we may assume that this stimulus has something to do with causing the behavior, even although the stimulus is one which we should not expect to call forth this response.

FINDING THE PERSONALITY DEFECT

Proceeding next to our inquiry into the personality of the individual who has been reacting in an unsatisfactory way, the first thing to do is to determine whether or not he suffers from any defect to which his abnormal behavior may be attributed.

It might not be amiss at this point to remind the reader that by a defect of personality we here mean simply the tendency to react to some sort of stimulus in an unsatisfactory way. Thus cowardice, which is the tendency to run away from dangers one should face, is a defect of personality. So is irritability, dishonesty, stupidity, defective judgment, laziness, or any

other "mental quality" by reason of which a man tends to react unsatisfactorily to any kind of situation. When a man suffers from one kind of personality defect, we say that he is wicked; when he suffers from a second kind, we say that he is a mental defective; when he suffers from a third kind, we say that he is insane. Now how are we to determine the existence of these or any other kinds of personality defect?

When a man wants to discover the defects of an automobile engine, he does so by means of a performance test. He drives the car up hill and down, fast and slow, backward and forward, and observes how it responds to the various demands made upon it. We must use the same method to determine the defects and limitations of the human organism. We must observe its behavior under a variety of different conditions, study its responses to a wide range of different stimuli. How is this to be done?

The sequence of events which make up a man's life are in themselves a never ending succession of mental tests and his life history, which is the record of his responses to these tests, really constitutes a psychological record, from which, if we know how to read it aright, we can form a pretty accurate estimate of his capacities and limitations. For example, in every man's life, dangers of various sorts arise and, from his reactions to these dangers, it is possible to determine whether or not his courage is defective. Similarly, every man is placed in situations which call for the exercise of thought and judgment and, from his reactions to these situations, we may judge as to whether his intelligence or judgment is defective. Or again, everyone encounters difficulties and obstacles in his undertakings, and from his reactions to these difficulties

and obstacles we may determine whether he is lacking in tenacity of purpose.

In seeking to discover a man's personality defects, we must then investigate his life history, we must endeavor to obtain a detailed and accurate record of the various stresses and strains to which he has been subjected and of how he has responded to them. But how is such record to be obtained?

As a rule, the person who can give us the most information is the man himself. In those cases, therefore, in which the nature of the troubles is in doubt and calls for careful investigation, we should get our patient to give in full detail the story of his life, and we should go back and forth over this story, questioning him about its various details, until the whole thing is clear and straight and we feel sure that we have gotten from him all the important information he has to give. But if the case is at all obscure, we should not be content with this information alone. We should also find out what the man's relatives, friends and acquaintances have to say about him. This is necessary, not only because he may be trying to deceive us, but also because, even with the most honest intentions in the world, he can tell the story of his life, only as he himself sees it. To arrive at a correct understanding of any event, it is desirable to get as many separate and independent stories of it as possible and then check and weigh these different accounts with their inevitable discrepancies, one against the other.

Of course, in a great many cases, it is impossible to get these various points of view. When a patient is brought for treatment by his family, for example, it not infrequently happens that he will not or cannot co-operate and one must depend entirely upon the state-

ments of other people for information concerning him. On the other hand, when a man comes of his own accord in search of help, he may not be willing to have other people called in to give information about him and, in that case, one is obliged to depend entirely upon such information as he himself is able to give.

In seeking to discover a man's personality defects, we are not, of course, entirely dependent upon what we are able to learn about his behavior at second hand. We have also our own observations to go upon. Failure on the part of a patient to respond in a satisfactory way to the stimuli to which he is subjected during an examination or while under treatment may be taken as evidence of defects or limitations, just as much as similar unsatisfactory behavior occurring at any other time. For example, if in response to our questions he is unable to recall events of his past life which he might reasonably be expected to remember, we may take this as evidence to show that he suffers from a memory defect. If, when we give him simple test problems, he is unable to do them, we may infer that he suffers from a defect of intelligence; and if he flies into a rage, weeps, or becomes terrified without adequate cause, we may take this as going to show the existence of what may be called an emotional defect. It is an essential part of our diagnostic procedure to ask such questions and apply such other stimuli as will bring out all the information in regard to a patient's limitations and defects which can be obtained in this way. As to what questions or tests one should apply in any given case and what one may expect to learn from them, that is not a matter which need here be discussed.

It is, of course, necessary to make sure, when a man

behaves unsatisfactorily in a situation where unsatisfactory behavior might be expected, that his faulty behavior is not due to the action of some disturbing stimulus with which we have failed to reckon. Thus, if a man fails in some simple test that a child of ten might be expected to pass, we must not conclude that he is mentally deficient unless we can be reasonably certain that his failure was not due to the thought of some disturbing incident which served as a distracting stimulus to prevent him from giving the test the attention it required. Similarly, when a man is restless, mutters to himself, is frightened, angry or unhappy without apparent reason, it is necessary, before concluding that he suffers from an emotional defect, to make sure he is not reacting to the stimulus afforded by some danger or injury which is sufficiently serious to justify the emotion displayed.

FINDING THE CAUSES OF PERSONALITY DEFECT

So much for the method of procedure by means of which we may discover a man's defects of personality. Whenever we have to deal with the case of a person who, in a certain situation, has become angry, panic stricken or depressed, launched out on some impractical undertaking or reacted with any other form of unsatisfactory or abnormal behavior, we have taken the first step toward explaining this behavior when we have discovered in him a defect by reason of which he might be expected to react to this situation in this way. But having found a defect which is responsible in part at least for the unsatisfactory behavior with which we have to deal, it still remains for us to discover the causes to which this defect is due. Now

every personality defect, as we know, has its root in one or more of three different things, heredity, education and bodily disease. Finding the cause of a defect is, therefore, a matter of investigating these three different things. Let us see how this is to be done.

- (1) Heredity: There is, of course, no way of actually showing that any given defect which a man may display has been inherited. No one ever saw a father pass a defect on to his son. All we can do in investigating the part played by heredity in any case is to obtain as much information as possible about the lives of the various members of the family from which our patient has sprung and then draw such inferences from these facts as they warrant. For example, suppose we have a nervous or mental breakdown occurring in a man without apparent adequate cause and we find that a large proportion of his family have suffered from nervous or mental disease, we may conclude that there is probably something in the stock, some constitutional weakness, which has played a part in causing his breakdown. Or, suppose we are dealing with a case of mental defect, and we find that various other members of the family are mental defectives, we are warranted in assuming that our patient's mental defect is in all probability an inherited one.
- (2) Education: To determine the role which education has played in giving rise to any defect in a man, the first thing necessary, of course, is a knowledge of what this man's education has been. And since a man's education is the sum of the experiences through which he has passed, this means a knowledge of his previous experiences, or, in other words, the story of his life. We have seen that a man's biography, since it tells of his reactions to the stresses and strains to which he

has been subjected, is a sort of laboratory record from which his defects of personality may be determined; but, since it tells of all the various experiences through which he has passed, the influences which have acted upon him, it is also a record of his education. From it we may discover, not only the nature of his defects, but also the experiences which have played a part in their production.

But, it may be asked, how, in going over the story of a man's life, are we to know which of his experiences have played a part in producing the defects of personality we are seeking to explain? Suppose a man falls off the roof of a house, and the surgeon, on examining him, finds that some of his ribs are broken. Knowing that such an accident might be expected to produce such an injury, the surgeon will, in absence of evidence to the contrary, assume that this accident did produce it. We follow the same procedure in determining what part a given experience has played in producing a given personality defect. For example, suppose a man has a fear of enclosed spaces which apparently developed following an experience in which he was confined in a small room and badly frightened. From our knowledge of the conditioning process, we know that such an experience is likely to cause such a defect; so, unless we can find some good and sufficient reason to think otherwise, we assume that the experience has caused the defect. Or, suppose a child has a violent temper to which he gives free rein whenever he is thwarted, and we find that he was brought up by foolish parents from whom he was always able to get whatever he wanted by flying into a rage and yelling for it. Knowing what we do of the processes of adjustment and of habit formation, we should expect

such education to produce a personality defect such as we find here, and, in absence of evidence to show that it is due to some other cause, we assume that it is due to the faulty education.

(3) Bodily Disease: Here our method of procedure is, of course, exactly the same as in dealing with heredity and education. First we find out from a detailed history and medical examination all we can about the diseases and injuries, past or present, from which the patient has suffered or is suffering. Then we draw such conclusions as the facts may warrant in regard to the part played by these diseases and injuries in giving rise to the defects of personality which we are seeking to explain. For example, suppose a patient is overactive and excitable and we find him to be suffering from exophthalmic goitre; we shall, in absence of evidence to the contrary, assume the goitre to be the cause of the excitability, for we know from experience with other cases that goitre will produce this effect. Or, suppose a man shows lack of judgment, grandiose ideas, and we find evidence of syphilis of the brain. Knowing that this disease produces personality defects of the kind which our patient displays, we shall assume that his personality defects are due to this cause.

DIAGNOSTIC PROCEDURE IN CASE WORK

Having considered the sources and nature of the data that must be used in making a diagnosis and the principles which must guide us in its interpretation, it might also be worth while to say something about the method of procedure to be followed in working up a case. When a case is at all complicated, I have found that the best thing to do is, to gather together all the

facts which seem to bear upon it, and then, after these facts have been collected, to go carefully over them, weed out the unessential and set down the remainder in the form of an orderly and connected statement or narrative.

When I come to do this, I frequently find, of course, that there are points in regard to which I have contradictory reports and others concerning which my information is inadequate or doubtful. I make a note of these doubtful points, go back to the patient, to his friends, or to any other possible source of information, and try to obtain additional data which will serve to clear them up. With this extra data, I come back and again try to piece the parts of my picture puzzle together. As I work on it, however, I am likely to encounter new doubts, new possibilities, that again send me back for further information. So I go on, working over my material, clearing up doubtful points, seeking to explain first this fact and then that, until the case is worked dry and there is nothing to be gained by studying it further, which may be only after months of patient labor.

The nature of this method of procedure and the kind of results to which it leads will probably be much better understood if, instead of trying to explain it in detail, I give the reconstruction of a simple case worked out by means of it.

The case is that of a young man who, rather suddenly, became moody and depressed and gave up work to spend his time in bed or lounging about the house. He indulged in violent outbursts during which he talked incoherently and acted strangely, his conduct finally becoming so abnormal as to lead to his commitment to a hospital for the insane. To his family, the trouble seemed to have come out of a clear sky. They could explain it in no way, except on the assumption that he had been stricken down with some kind of "mental disease." Diagnostic study of the case, however, made the cause of the trouble quite clear by bringing to light the situation to which the young man had reacted in this unsatisfactory way, and the defects in his personality which had caused him to do so.

The patient was found to be above the average in intelligence. In public school he had always stood at the head of his class. He had been quiet and studious in his tastes and rather shy and retiring. At the same time he had a high opinion of his literary abilities and was very ambitious. He wanted a college education and dreamed of taking up literature as a profession.

Unfortunately, he was also weak and self-indulgent. He desired to accomplish great things, but was not willing to exert himself or sacrifice his comfort in order that his ambition might be realized. Whenever he had encountered any difficulty or unpleasantness, he had always reacted, not by putting forth extra efforts to remove it from his path, but by becoming discouraged and seeking to withdraw from it. For example, after two years in high school, he became discouraged because he was not permitted to map out his own course, but was obliged to give a good deal of time to subjects which he found uninteresting. This caused him to leave school and take a position as an office boy. Later he secured a position in a library where the work was well suited to his tastes and abilities, but he gave it up when he was obliged to work after closing time in order to have things in shape for the next day. On another occasion, when he was advanced from a simple routine clerical position, where the work was easy, to another which gave better pay and opportunities for advancement, he asked to be moved back to his old job because in the new one the work was heavy, and he frequently had to remain after hours to finish it.

Although this tendency to self-indulgence may have been in part the result of an hereditary predisposition, there were undoubtedly certain things in his education which had contributed to its development. He was the youngest of several children and had always been petted and indulged by the older members of the family. If he had been obliged to fight his way through his difficulties, to stand on his own feet, he might have developed more sturdiness of character. As it was, being indulged in his tendency to avoid what was hard or unpleasant, this tendency grew stronger as the years went by.

A thing which increased his tendency to react in this way was his attitude toward his work. His ambition was to become a writer. He was interested in philosophy, science, literature. He cared nothing for business and regarded his various positions as mere makeshifts. He did not believe that in these positions he was occupying his proper niche. He dreamed of some day getting into the work for which he was fitted and there achieving a great success. For this reason, he did not take his work seriously. He did not regard it as important, and his efforts to succeed in it were only half-hearted. So, whenever he found it hard, instead of looking at the difficulty as an obstacle to be overcome, he regarded it as evidence that he was in the wrong kind of a job, and his tendency was to give it up and seek another position in which he would be better suited.

In such a case as this, we see how high ambitions, which are supposed to be a spur to increased effort, may prove only a handicap. If this young man had possessed more force of character, his ambition might, of course, have led him to study in his spare time. In fact, if he had shown a strong inclination to study, his brothers would have given him the financial support necessary to enable him to return to school. Thus he might have fitted himself for the professional career of which he dreamed. But there was a defect in his personality which prevented him from doing this. He himself recognized it, for he said, "My aim was high, but I lacked the ammunition to drive me. My lack was not ability but simply driving force." So he drifted along in a desultory way and his ambition, instead of inspiring him to higher efforts, merely prevented him from taking a wholesome attitude toward the tasks which were close at hand.

Having considered the personality defect in the individual with whom we have to deal, let us next consider the situation which called forth the abnormal behavior that led to his commitment.

Previous to the onset of his trouble, he had been filling an easy but poorly paid routine, clerical position and had repeatedly asked for promotion to something better. He was finally given the wished for promotion and was at first much pleased with it. But he soon began to encounter difficulties in his new work. His most serious difficulty grew out of the fact that he was obliged to make out elaborate reports and statements. The data for these he had to obtain from the books of the various departments of the company by which he was employed. He did not have sufficient familiarity with the bookkeeping methods in these de-

partments to find the information for himself, and so he had to apply constantly to his fellow clerks for assistance and advice. He was shy and sensitive. He hated bothering people. Moreover, he felt that if he asked so frequently for assistance, he would give the impression that he was not competent and was getting others to do his work. Therefore, when he had a report to get out, which necessitated asking for information from people he had already been bothering a good deal, he would not have the courage to go to them. He would simply postpone getting out the report.

Thus it came about that, as the days went by, one neglected task after another piled up on him. He got farther and farther behind with his work and, as the pile of neglected work grew larger, he became more and more discouraged. He saw that he was not making a success of his new position. He knew that he could not hope to retain it unless he did better work. He went about daily with the dread hanging over him that his employers would discover how badly he was doing and that he would be severely reprimanded, perhaps discharged.

A man with more force of character, realizing into what a hopeless muddle his weakness and negligence had led him, would, at this point, have pulled himself together, attacked the neglected reports, and again gotten his affairs into good shape. But our patient was not such a man. As he himself said, he had lost heart, and it had always been impossible for him to work at anything when his heart was not in it. It was quite characteristic of him that he should attribute his failure in this position, not so much to his own weakness, as to the complicated system of bookkeeping which made it difficult to obtain the information he needed, and

to the fact that the position was not one to which he was suited.

So he simply marked time in his work, becoming every day more anxious and depressed. He would have given it up altogether, in spite of its opportunities for advancement, and gone back to his old routine job, but another man was now filling the old job, thus cutting off that line of retreat. After a couple of weeks in his new position, he had his annual vacation, and this afforded him a brief respite, a short two weeks, during which he was able almost to forget his troubles. But, when his vacation was over and the morning came for him to return to work, he could hardly get himself out of bed and drag himself back to the office. Arrived there, he had no heart to attack the accumulation of tasks awaiting him, so he simply "loafed on the job" and "made a bluff at working." Then after a few days, as the situation became intolerable, and as he felt that sooner or later he would be discharged in any case, he resigned his position, telling his employers that he was leaving the city.

By the time he gave up his position, he had become, as might be expected, somewhat depressed, and this, of course, affected his thinking. He worried, not only over the difficulties in his work and the fact that he was not making a success of it, but also over the possibility of having to give up his position, and whether he would be able to secure another. From this he began to brood over a variety of things that previously had given him little concern. As he himself expressed it, "One depression started another. Thinking about one thing started me thinking about something else. You can easily find things to worry about when you look for them." So it was that he began to brood

over the fact that with all his fine ambitions he had accomplished nothing, that his life in the past had been colorless with few real pleasures and practically no friends.

Being in this depressed state of mind, he had very little heart to go out and look for another position. So, yielding, as always, to his inclinations, he spent most of his time at home, either lying in bed or lounging about the house, not even taking the trouble to put on his clothes. He remained at home five weeks, during which period he slept poorly, cried a good deal, and at times worked himself up into emotional condition in which he threatened to commit suicide. He talked incoherently and "acted crazy." His crazy actions apparently consisted of gesticulating and throwing himself about in an emotional state that bordered on frenzy.

Telling about it afterward, he said that, in acting and talking as he did, he was only feigning insanity. He wanted to make the family realize how badly he felt. Evidently his statement is, in part at least, true for, although his behavior was undoubtedly an expression of genuine emotion, he made little effort at self-control. On the contrary, he attempted to express his feelings as violently and extravagantly as possible. Two motives lay back of this. One was the desire for sympathy which he hoped to arouse by his violent manifestations of distress. Another was a desire to justify himself in the eyes of his family for remaining idle at home, a burden for them to support. He himself felt that he was unfit to go to work and he wished to bring his family to the same opinion by demonstrating to them what a bad condition he was in.

Evidently he was at this time the victim of conflict-

ing impulses and desires. On the one hand there was the demand for emotional outlet and the desire for sympathy and self-justification which impelled him to give way to these frenzied outbursts in which he talked and behaved in such an extravagant manner. On the other hand there was a desire to inhibit these outbursts, both from pride and from consideration for his family. It was humiliating to be regarded as insane; moreover, he realized that by his abnormal behavior he was bringing on his family a great deal of anxiety and distress. The result was that his conflicting impulses swayed him now this way, now that. At one time, actuated by one set of impulses, he would indulge in an emotional outburst, but later, when he heard members of his family discussing his condition, he would be ashamed and sorry and feel worse than before.

Finally a physician was called in who said that his mind was affected and advised sending him to an institution. The young man was now so ashamed and distressed at the fact that his family regarded him as crazy and at the trouble he had brought upon them, that the home situation had become intolerable. He therefore welcomed the doctor's suggestion as offering a way of escaping from it. His own words make his attitude in this matter fairly clear. He said, "My sister's children came around and saw me doing all sorts of queer actions. I knew what I was doing, but the poor children! I liked them and I always played with them, and they thought their uncle was crazy, and I felt ashamed of myself and I wanted to go to Bellevue for about a week."

At his own request, his brother therefore took him to the psychopathic ward of Bellevue Hospital. When

he expressed a desire to go to a hospital, he did not, however, regard himself as "really insane," and did not think that he would be committed. He said, "I thought I would be given good advice and allowed to return home after a few days. Instead of that, they treated me as an ordinary routine case of insanity."

DESCRIPTIVE VERSUS APPELLATIVE DIAGNOSIS

It will be seen that what we here call diagnosis is a different thing from diagnosis in the old orthodox, formal psychiatry, which is mainly a matter of labelling the patient as a case of paresis, dementia praecox (or schizophrenia, if one prefers the newer and more pretentious term), manic-depressive psychosis, or what not. How is this difference to be explained?

When a patient enters a general hospital and the doctor who examines him says that he is a case of typhoid, we say that he has made a diagnosis. But what do we mean by this? Do we mean simply that he has given the illness a name? No, indeed. The word, typhoid, has a meaning. That is to say, it serves to call up, in the minds of those who use it, certain pictures or ideas. First, it calls up a picture of the patient's condition. An inflamed and ulcerated intestinal tract, swarming with bacteria; diarrhea; blood in the stools; toxins circulating in the blood stream and poisoning the tissues; elevation of temperature; a weakened heart; mental dullness; a low muttering delirium. Along with this picture of the condition of the patient, there is also a picture of the causes leading up to it. A previous sufferer from the disease excreting typhoid bacilli in his stools; these bacilli being carried by flies or getting into the man's

drinking water, so that they are taken into his mouth and passed down into his intestine, where they breed in vast numbers, and after a sufficient interval of time for them to get in their dirty work, produce the condition just described. It is these pictures called up in association with the word, typhoid, and not the word itself which is the diagnosis.

A diagnosis is, then, a picture of the abnormal condition with which one has to deal and an explanation of how it came about. The physician might have given this description in full detail, telling what the patient's condition was like and tracing the steps in the process of infection which led up to it. But, for those who already have these pictures stamped upon their brains and associated with the word, typhoid, the mere mention of the word serves the same purpose. So a diagnosis may be made, or, more properly speaking, communicated, in either one or the other of two ways: (1) By drawing an actual word picture of the pathological condition and how it was produced; (2) by giving a single word or phrase and leaving it to the hearer to call up the picture for himself from the archives of his own memory. The first of these we may, if we like, call a descriptive diagnosis, and the second an appellative diagnosis.

It will be apparent that in dealing with the problems of medicine the appellative and the descriptive forms of diagnosis both have their uses. The advantage of the appellative diagnosis is its brevity. It is a laborsaving device which is perfectly satisfactory when we are dealing with groups of cases so much alike in their etiology and essential characteristics that a description which fits one case will, for practical purposes, fit all other cases in the same group. It is inadequate, how-

ever, where we have to deal with cases which do not fall into groups of this sort. Now it is obvious that what the formal psychiatrist is doing, or trying to do, when he disposes of his patients by labelling them as cases of paresis, paranoia, manic-depressive psychosis, and so forth, is to diagnose them all by the appellative method; and the question which confronts us in weighing the merits of this kind of psychiatry is the question of the value of such procedure in dealing with the problems of abnormal behavior.

That the appellative form of diagnosis is useful with certain types of psychiatric cases is, I think, not open to question. Take paresis, for example. When a psychiatrist tells us that a man has paresis, we are able to call up from this word a fairly adequate picture both of the nature of the malady and of its cause. As for the nature of the malady, we know that there is a certain definite kind of destructive process going on in the brain tissue, which will eventually end in death, unless proper treatment is administered. We know that with this process there is also going on a certain form of bodily and mental deterioration, which, at least in so far as its essential characteristics are concerned, is practically the same in almost every case. And, as for the etiology, we know that the cause of the trouble is a syphilitic infection, the syphilitic organism having found its way to the central nervous system through the blood stream and there set up the destructive process to which the whole trouble is due.

But how about the young man whose case I have just described? Here is obviously a case which will not fit into any group. We have no name or label we can apply to it which will serve to call up in men's minds either the picture of this lad's abnormal behavior

or of the causes which led to it. The only way to convey this information is by means of a descriptive diagnosis such as I have here given. And what is true of this case is true of a great many others which enter our psychiatric hospitals and which cannot, like the ordinary case of paresis, be attributed to one specific cause to the practical exclusion of all others. These are not cases of "mental disease", in the sense in which that term is generally understood, but simply human beings, highly complex organisms, which have failed to respond with satisfactory behavior to the demands made upon them, in the situations in which they have been placed. In these cases, we have combinations of factors, defects of bodily health, education and heredity on the one hand, difficult situations on the other, which vary with the individual case, these combinations of factors working to produce a wide variety of abnormal reactions, each one of which has to be studied as a separate and individual problem in order to be understood.

How, it may be asked, are these cases diagnosed by the formal psychiatrist at the present time? When a man reacts to a situation by getting excited or depressed, he is, as a rule, diagnosed as a manic-depressive psychotic. When he reacts by developing false beliefs or by form of behavior which impress the psychiatrist as strange or ominous, he is diagnosed as a case of dementia praecox. When, as often happens, a man develops delusional ideas, and at the same time becomes excited or depressed, he may be placed in either one group or the other.

Much research work has been done and many words have been written on the subject of dementia praecox, but after all this working and writing, we

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seem to be just about as far from finding the "cause" of dementia praecox as we were at the beginning. My own conclusion—reached after several years devoted to the study of this problem—is that we never shall find the "cause" of dementia praecox, for the very simple reason that there is no "cause" to find. Dementia praecox is not a disease but a catch-all, a mere name, under which are thrown together a wide variety of different causes. We shall begin to make real progress when we stop concerning ourselves about the problem of dementia praecox and begin instead to study the problems of the cases which are grouped together under this label.

CHAPTER VI

PRINCIPLES OF TREATMENT

Having considered the procedure to be followed in diagnosing our cases, we next come to the problem of dealing with them. The first thing to do, in clarifying this problem, is to take stock of our resources. Let us see what courses of action there are for us to pursue.

We have made it already abundantly clear that nervous and mental ailments are largely due to failures of adjustment. It is safe to say that at least all neurotic cases develop under conditions of dissatisfaction or non-adjustment. It is possible, of course, for a neurotic condition to grow out of a state of contentement and happiness, but only when such a state is harmful and socially undesirable, as when a child is pampered and overprotected and thus is ill-prepared for unavoidable hardships of later life; however, even in this case the neurotic condition arises as a result of the subsequent inability to meet hardships rather than as a result of the preceding state of contentment.

The course of treatment follows here, in a sense, the opposite direction to that of ailment: it consists in regaining adjustment where it was previously lost. Even when the ailment originates in physical rather than psychological causes, one of the purposes of treatment is still adjustment, possibly under modified conditions of existence.

Mental treatment is always unique and specific, in so far as the form of each mental ailment is invariably

determined by a unique personality with a unique case history. Consequently, all the facts of the case must be carefully considered before one decides on the kind of approach and the course of action, of which several are available.

We have already pointed out that, when in a certain situation a man reacts in a certain way, it is because of the stimuli which the situation affords. If the stimuli had been different, the behavior would have been different also. So one way of dealing with unsatisfactory behavior is by changing the stimuli to which the man is subjected.

But when, in any given situation, a man behaves in an unsatisfactory way, it is also because of some limitation or defect in his personality. If he did not have this defect, if he were a different kind of a man, he certainly would behave differently. A second way of dealing with unsatisfactory behavior is, therefore, by changing the man's personality, that is, by freeing him from the defects to which his unsatisfactory behavior is due. This, of course, is precisely what we are trying to do when we undertake to cure a man of a psychosis, for in one sense at least all psychoses are personality defects.

This, however, is not all. We have seen that no form of behavior is abnormal in itself. What we call abnormal or unsatisfactory behavior is simply behavior which is not suited to the requirements of the situation in which it occurs; it is behavior which leads to unsatisfactory results. This being so, abnormal behavior may be dealt with, not only by modifying the behavior to meet the requirements of the situation, but also by modifying the requirements to fit the behavior; that is to say, by putting the person in an environment

where his behavior will not lead to unsatisfactory results.

Broadly speaking, then, there are three ways of dealing with abnormal behavior:

- 1. By modifying the stimuli.
- 2. By modifying the personality.
- 3. By modifying the requirements.

Let us consider these ways separately, in the order in which they are here named.

Modification of Stimuli

Faults of behavior are of two kinds. There are faults of omission and faults of commission. We may leave undone the things we ought to do and we may do the things we ought not to do. Now when a person is guilty of a fault of omission, when he leaves undone something which ought to be done, we may correct this unsatisfactory behavior by modifying the stimuli to which he is subjected in one or the other of two ways, namely, by adding a new stimulus or combination of stimuli which will impel him to do the thing required of him, or by cutting off some stimulus which is preventing him from so doing.

For example, suppose a school boy is neglecting to do his lessons. Here is a fault of omission. This we may deal with in certain cases by putting the boy with others who are industrious so that he may be affected by their example, or by offering him some reward if he will apply himself, or by threatening him with punishment if he fails to do so. Whichever of these various courses of action we pursue, we are corcorrecting the lad's faulty behavior by introducing into the situation a new stimulus which causes him to react

with the behavior required. But suppose the boy is neglecting his work because of some distracting stimulus, such as the sight or sound of companions at play: in such a case we may be able to make him apply himself to his work by removing him to a place where he will no longer be disturbed by these distracting stimuli. In this case we are correcting his fault of omission by subtracting from the stimuli which are acting upon him, instead of by adding to them.

Where, instead of a fault of omission, we have to deal with a fault of commission, we may deal with it by either one or the other of these same two methods, namely, by the addition or subtraction of stimuli. Suppose, for example, we have to treat a man who is in the habit of getting drunk. We may sometimes prevent such wrong conduct by imposing a punishment for this form of misbehavior, or by offering a reward for sobriety, in which case we are correcting his behavior by the addition of stimuli, or we may remove temptation from his path by placing him in an environment where he will not be asked to drink nor see others drinking, in which case we shall be correcting his behavior by the subtraction of stimuli.

Of course, the stimuli, which call forth action, do so for the most part through the agency of the thoughts to which they give rise. For practical purposes, therefore, the thought may be looked upon as the stimulus to which the action is due. This being so, modifying the stimulus which acts upon a man with a view to correcting his abnormal behavior is largely a matter of modifying his thoughts, of introducing into his mind the ideas which will serve to produce satisfactory behavior and withdrawing those which are producing behavior that is unsatisfactory or abnormal. And since

by talking to a man we can modify his thoughts, this is one way of correcting abnormal behavior. All exhortation, argument and persuasion, all psychotherapy in which the physician treats his patient by talking to him is treatment by the method of modification of stimuli. It is, in so far as it is successful, a matter of taking away those thoughts which are serving as stimuli to call forth wrong forms of behavior and introducing thoughts which will cause the kind of behavior required.

MODIFICATION OF PERSONALITY

We have seen that the nature of a man's personality is determined by three factors, (1) heredity, (2) state of health, and (3) education. His heredity obviously cannot be changed. Eugenics plays—or should play—an important part in the prevention of abnormal behavior, but has no part whatever in its cure. Bodily health is a factor to be reckoned with in every case, but the care of bodily health and the diagnosis and treatment of disease are outside of our special province. So the only factor we have to deal with in correcting defects of personality is the factor of education.

Education, broadly conceived, is a great molding power of human personality. If it is of the right kind, it tends to spread understanding and promote adjustment; if it is of the wrong kind, it tends to consolidate ignorance and uphold non-adjustment. This power could be most advantageously applied, for instance, to instill in us a little more understanding of mental hygiene; the sad truth is, however, that the great majority of men and women are so ignorant of it that they are unable to recognize a neurotic condition in

themselves or members of their family; nor do they seem to appreciate the value of psychiatric or psychological help. Even when they are able to recognize this condition, they are often unwilling to avail themselves of the help, for reason of prejudice or unwarranted fear, until the condition is so advanced that little can be done about it apart from a very extensive, and hence expensive treatment; and the high expense connected with it may, and usually does, increase the patient's reluctance to call on a qualified man for help.

However relevant this particular question may be to the general problem of mental treatment, it constitutes merely an infinitesimal part of the total problem of education as a great molding power of human personality. The fact is that, almost in every case coming to our attention, we discover some serious fault of education, responsible for annoying tensions and nonadjustment. For every personality defect is merely a tendency to some wrong form of behavior, and tendencies to wrong forms of behavior have their root largely in wrong beliefs, wrong likings and aversions, wrong thought and action patterns of a wide variety of different forms which the individual has had stamped into the tissue of his brain in the course of his education. For the correction of these personality defects the only cure is re-education. We must develop in our patient new beliefs, new habits, new reaction tendencies which will cause him to respond to the stimuli afforded by the situations in which he has been misbehaving with the forms of behavior which these situations require.

One of the most important phases of any re-education program consists in securing the patient's cooperation. This means, first, that he must show suf-

ficient desire to be cured. As any competent psychiatrist or clinical psychologist knows, quite a few of the cases coming to him want to be treated without being cured. To be treated means to them to receive attention, to be cared for-and that is precisely what they want; to be cured, on the other hand, would mean to them to lose that much needed attention and care. The majority of patients, to be sure, sincerely desire to get well. But they, too, may be handicapped by fears, worries, and the lack of faith in themselves and in the method of treatment. The principal task of re-education, in their case, becomes the correction of these attitudes and their replacement by confidence and faith. It may be said, in general, that mental treatment has little chance to be successful in the absence of the patient's co-operation. It has to be secured in all cases, but it may imply special re-education in cases where the attitudes of hesitation, suspicion, skepticism, or lack of confidence stand in the way of sound treatment and eventual cure.

In some cases, however, it may not be quite enough to secure merely the passive co-operation of the patient. He may have to be asked to do something more difficult than can ordinarily be expected of him. His ability to demonstrate a sustained effort may have to be strengthened. If it is necessary for the patient to overcome, for instance, a long ingrained yet undesirable habit, he must obviously be armed with a sufficiently strong desire to carry on the fight against himself and to protect himself against temptations and moments of weakness. And if there is no such desire in the patient, only re-education can build it up and provide him with new and vigorous motivation.

MODIFICATION OF REQUIREMENTS

There are cases where it may be too difficult, perhaps impossible, to change the patient's personality and where, in addition, stimuli are inseparable from the environment in which he lives. Under these conditions it may nevertheless be possible to alter that very environment and hence the requirements of the situation and thus relieve the tension responsible in the first place for the patient's abnormal behavior.

To show how a person's requirements can be modified to make them fit his behavior, we shall give a few simple examples. Suppose one has to do with a chauffeur who has the habit of swinging to the left on meeting traffic instead of to the right, a form of be-havior which in America would almost inevitably lead to an accident. If one could not break the man of this habit, one might send him to England where everyone passes on the left side of the road and where this is not misbehavior at all but quite the right thing to do. Or suppose one had to do with a baby who, babylike, would grab at anything within reach and throw it on the floor, a very unsatisfactory form of behavior indeed in a room filled with expensive bric-a-brac. The thing to do would be to take him out of this room and put him in a nursery where no harm could result from grabbing things and throwing them about. Or suppose one had to do with a man who was inclined to get drunk or lose his temper every once in a while. If, despite all attempts, one could not cure him of so doing, one might at least place him in an environment where his drunkenness or ill-temper would produce the minimum of harm to himself or others.

In dealing with the problem of abnormal behavior,

it is an important fact to bear in mind that no two walks of life call for exactly the same forms of thought or action and that what is a serious personality defect in one environment may be a positive virtue in another. There was once a miller whose son, instead of helping his father with the work of the mill, spent his time sitting about drawing pictures, a form of behavior not at all suited to the requirements of the walk in life in which he found himself. What the father might have done—what most fathers would have done under like circumstances—would have been to try to rectify this unsatisfactory state of affairs by altering the son's behavior. Instead of this, he sent him to a nearby town to study art. That is to say, he modified the situation to make it agree with the boy's behavior instead of trying to modify his behavior to make it agree with the requirements of the situation, and by so doing he gave to the world the great Rembrandt.

CHAPTER VII

THE TREATMENT OF EXTRA-MURAL CASES

The cases of abnormal behavior with which we must deal may, for practical purposes, be classified as of two kinds: (1) the extra-mural patients, those who live out in the world somewhere and whom we see only when they visit us in our offices or clinics or when we call upon them in their homes; and (2) the intra-mural patients, those who live under our care within the walls of our institutions.

In this chapter we shall consider the question of what can be done for the extra-mural cases. They include the adults coming for treatment of their own volition and also children brought by parents who find their offspring behaving in what they believe to be an abnormal way and do not know what to do about it. In the latter cases, treatment is, in the main, a matter of explaining the nature of the trouble and giving advice and assistance, not to the patient himself, but to the one who has brought him. Thus, if we find a child's abnormal behavior to be the result of certain stimuli to which he is being subjected in the home. the school, or elsewhere we explain this to the parent and advise him as to what should be done about it. If we find the trouble to be due to bad mental habits. we advise as to the correction of these habits. If we find it due to bodily ill-health, we advise as to medical treatment.

The problems of those standing between the two groups, that is, of the adolescents, are particularly

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significant; for it is in adolescence that the ability of the individual to adjust himself is, as a rule, most severely tried, because, owing to the new appetites and desires that now awaken, he has to make one of the most radical readjustments required of him at any period of his life, and in his efforts to make this adjustment, he is severely handicapped by his ignorance and inexperience. He has to deal with new emotional forces of great strength, but of the nature and significance of these forces he knows very little. He does not know whether they are good or bad, whether he should yield to them or hold them in check; so he is carried along by a blind impulse seeking some means of emotional outlet, some source of satisfaction. This outlet, this satisfaction, he must find in his dealings with his fellows, in work and play, in the adjustment that he makes with the world about him. But of this world, also, he as yet knows very little. He does not know how or where he may obtain from it the means of satisfaction which his nature demands. So he gropes his way, seeking more or less blindly some adjustment that will satisfy his needs, and in this blind groping there is great danger that he may fall into unwholesome or undesirable habits of thought and conduct.

But even where his impulses lead him toward a satisfactory adjustment, there is danger that he may be prevented from reaching it by misguided parents who have different views. His parents may exert their authority to prevent him from ordering his life as the needs of his nature dictate, forcing upon him instead a manner of life that is in conformity with their own views and desires, but that for him makes a satisfactory adjustment impossible. So we find that the weaker or less fortunate ones at this time are unable to adjust

themselves. In some this failure to adjust shows itself merely in an emotional disturbance which may not swing beyond the limits of what we are accustomed to regard as normal. In others, however, it results in unwholesome habits of thought and conduct, in bad sexual practices or antisocial acts, and in certain cases it manifests itself in types of mental reaction which we are accustomed to regard as manifestations of mental disease.

The treatment of extra-mural cases is complicated by the very environment in which they live and which may be the source of trouble in the first place. Recurrent temptations of every sort, persistent frustrations of economic life, difficult family or marital situations, unwise guidance by parents, and other unwholesome influences may make cure difficult or impossible, even when the trouble is correctly diagnosed and suitable treatment available. It is these irremediable forces of environment that make many extra-mural cases, by themselves relatively mild, the despair of psychiatrists and clinical psychologists.

THERAPEUTIC PROBLEMS

Probably the most puzzling therapeutic problem with which the medical practitioner has to deal, is the problem of the "mental" treatment of his patients. Moreover, it is a problem which faces him at every turn. The cases commonly occurring in medical practice, which call for psychotherapy of one kind or another, may be divided into three groups.

I. The neuroses. The term neurosis (or psychoneurosis) is a very loose one. Everybody uses it, but no one seems to know exactly what it means. For

practical purposes, however, we may apply it to those conditions in which there is no demonstrable pathology and in which the complaints of the patient are looked upon as due in part at least to "psychic" causes.

The treatment of this group of cases is today a major therapeutic problem. Psychoneurosis seems to be the most frequently made diagnosis in medical practice. Of two thousand consecutive ambulatory cases in the Boston dispensaries, for instance, forty-five percent were psychoneurotic. It is claimed that at least half of those who come to the doctor complaining of heart disease are really neurotic cases. The tremendous economic loss resulting from these conditions is pointed out by a British authority, Dr. J. R. Reese, who says that a third of the loss to industry through illness is due to neuroses. We are informed also that sixty percent of the time lost through sickness in certain industries is lost through neurotic illness of one kind or another.

II. Conditions with a demonstrable pathology which are due in part at least to psychic causes. Although the neuroses are the most obvious group of cases calling for mental therapy, they are not the only group, nor can it be said with certainty that they are the most important. There is also an important group in which the patient shows unmistakable evidence of somatic disease, but in which the physical condition is, to some extent at least, the result of nervous tension or emotional stress and strain. As examples of this group, one might mention certain gastrointestinal disorders such as duodenal ulcer, colitis and nervous indigestion; and possibly also certain abnormal conditions of the circulatory apparatus such as coronary thrombosis and arterial hypertension.

III. Problems in mental adjustment occurring as results of physical deformity or disease. A good many orthopaedic cases fall into this group. The patient's physical handicap or deformity produces in him an unwholesome attitude of mind which sometimes tends to grow into a mental deformity that may be a more serious disability than the bodily condition from which it springs. Obviously the surgeon, who allows such a deformity to develop without doing everything in his power to correct it, has not done his duty toward his patient. If he is not himself able to give his patient the mental therapy required, he should enlist the services of some outside agency which can. As with these orthopaedic conditions, so also with cases of deafness, loss of sight, chronic heart disease, and all other long-standing or slowly progressing ailments, which prevent a man from satisfying his normal aspirations and which are productive of unhappiness, frustration or fear.

The mental disturbances which occur in association with bodily disease, are not only serious evils in themselves; they also react unfavorably upon the patient's physical conditions, so that a vicious circle is frequently established. The bodily disease maintains an unhealthy mental condition and the mental condition serves in its turn to aggravate and perpetuate the disease. The treatment of such cases may begin at either side of the circle, depending on which is easier to handle.

INDIVIDUAL TREATMENT

Where it is possible to do so, the best way to help anyone is by helping him to help himself, by fitting him to cope with his own difficulties; and, to fit a man

to cope with any difficulty, one of the first things necessary is to give him a clear understanding of it. So the first thing to do for a patient after diagnosing his case is to go over it with him, explaining the nature of his trouble and the significance of the facts brought to light in the course of the examination. One should not, however, offer any explanations or suggestions until the patient has told all he has to tell and all the information available from every other source has been collected. This is important for two reasons. In the first place, no explanation the physician or clinical psy-chologist may offer can ever be anything more than an expression of his own personal opinion, and no one has any right to express an opinion until he has studied his facts. One should not pass judgment on a case until the evidence is all in. In the second place, one should not offer suggestions during the examination of the patient because by so doing he will distort the evidence and prejudice the patient. If the patient knows that the physician or clinical psychologist holds a certain theory in regard to this case, he will tend to tell his story with this theory in mind. He will try either to support or discredit it, and in either case the picture we get from him will be false and misleading.

For a patient to understand a scientific explanation of his case, it is of course necessary for him to have a considerable degree of intelligence and education. Where he lacks these necessary qualifications, we must simply do the best we can, explaining to him only as much as he can grasp and in language of a kind which he is able to understand. Sometimes also we have difficulty in getting a patient to accept an explanation because he finds it distasteful. Personally, I have never found this to be the serious difficulty which the psycho-

analysts seem to find it. On the contrary, my experience has been that, where a patient comes of his own accord seeking for help in his mental difficulties, he is apt to be, if anything, too credulous, too ready to believe whatever he may be told. The tremendous resistance which the psychoanalyst encounters is in my opinion not due so much to the obstinacy of the patient as to the absurdity of the explanation which is being forced down his throat. It is the patient with sufficient commonsense and sturdiness of character to reject such explanations who is the most promising material to deal with, if the physician really understands his case and has a reasonable explanation of it to offer.

Having explained to a patient the nature of his trouble, the next thing is to advise him as to how to deal with it. If the patient's trouble is due to lack of care of his bodily health, we advise him as to what he should do in caring for it, or else refer him to someone from whom he may receive the medical advice or treatment he requires. If we find the trouble to be due to the fact that the patient has been holding back from the gratification of some craving which could and should be gratified, we advise him to go ahead and gratify it. If we find the cause of the trouble to be an unwholesome environment, we advise him to get out of it, and so on. Also, where it seems necessary, we do what we can to make the task of adjustment easier: we step in and pick the obstacles out of our patient's path. Thus, if a man's problem of adjust-ment is being rendered unduly difficult by the unreason-able demands made upon him by certain members of his family, we may talk to these people and try to persuade them to proceed more wisely in their dealings with him.

Frequently, of course, a patient's nervous tension or distress of mind has its root in his own false beliefs; as when he suffers from fear of death owing to the fact that he believes himself to be the victim of some serious heart disease; or when he believes he has destroyed himself by the practice of masturbation. In such cases, it might be supposed that a cure could very easily be effected by disabusing the patient of his false belief. This task, however, is not quite so simple as at first glance it might appear to be.

Consider, for example, the case of the man who has gotten the idea into his head that he suffers from some form of heart disease which is liable to carry him off at any moment. Every time this man becomes excited or indulges in any form of physical exertion, he feels his heart begin to pound. This pounding of his heart serves to throw him into a panic which makes it pound more violently than ever. As a result of repeated experiences of this kind, he finally gets himself into a condition in which he sits about not daring to walk or run or expose himself to any form of excitement lest he bring on one of these heart attacks and perhaps fall dead in his tracks.

Now, if one explains to such a man the real nature of his difficulty, he will, if he is intelligent, be very likely to accept the explanation offered. He will admit that it is possible that there is really nothing seriously wrong with him and that his fear may be groundless. But, in spite of this admission, the next time something occurs to increase his heart action so that he feels its rapid beating, this sensory stimulus will serve to reawaken the same old familiar thoughts of disease and death and the panic fear that goes with them. The patient will not have been cured of his mental trouble.

The reason for the persistence of this morbid reaction after its absurdity has been explained is quite obvious. It is not due to any kind of unconscious craving, but to the force of habit. From frequent repetition of this form of response, certain paths have been worn in the brain, certain habits have been established, as a result of which the stimulus afforded by the rapid beating of the man's heart serves to call up these thoughts of disease and death and the associated affect. The man's unreasoning fear is due to the fact that he has been conditioned to react in this way, just as in those cases in which he displays the fear of open spaces called agoraphobia which is even more obviously absurd. In order to relieve our patient of his persistent fear, we have, therefore, not only to correct his false belief on which it rests, but also show him how this false belief has led to wrong conditioning and how, as a result of persistent effort, this pernicious habit may be corrected.

A very important part of the treatment of "nervous disease" is the elimination of fear, and one of the ways in which the psychiatric physician may allay his patient's fear is by the sense of protection which he affords. Danger, whether real or imaginary, always frightens us less when we have someone to stand by us than when we have to stand alone. The child is not afraid in the dark if his mother is with him, and the nervous patient is very much, in a sense, like the child in the dark. Somewhere in the dark corners of his life there lurks disease or danger, the nature of which he does not understand, with which he feels unable to cope, and which seems to be threatening his bodily health, his sanity, or even his life. He feels somewhat reassured, however, when the nature of his

trouble is explained to him, because the reality is not as terrifying as the picture his imagination had conjured up, but he feels still more reassured by the fact that, in the physician, he has found someone who under stands his trouble and whom he can depend upon for protection.

Another way that might be mentioned in passing, in which the psychiatrist helps his patient is by being a good listener, by giving him a chance to get things "off his chest" and find the solace that confession usually brings.

It will be seen that, as our method of diagnosis is very different from that of the psychoanalyst, so also is our treatment. This difference is the inevitable outcome of the difference in our theories. The psychoanalyst believes that the ills he has to treat are due to memories and desires which have been locked up in the unconscious. Treatment is for him, therefore, a matter of releasing these prisoners from their confinement, of making the patient recognize their existence. We, on the other hand, believe that these ills are due to defects of personality resulting from bad heredity, physical disease and bad education, and to difficult situations, with which, owing to his personality defects, the patient is unable to cope. Treatment for us, therefore, is a matter of helping the patient to correct his personality defects by improving his bodily health and by re-education, and of helping him to deal with the difficult situations of life, with which he is confronted. Treatment, from the psychoanalytic point of view, is a matter of uncovering the cause of the trouble-or at least what the psychoanalyst believes to be the cause. With us, however, finding the cause of the trouble is not treatment but diagnosis. It is a mere preliminary to treatment.

GROUP THERAPY

If, as some of us believe, the treatment of neuroticism is a matter, not of evacuation but of education; and if cure is to be accomplished, as experience shows it can be accomplished, by teaching the patient how to live; then the question arises as to whether the treatment of these cases must continue to be an individual matter. In other words, if psychotherapy is essentially a matter of teaching the patients how to live, why should we not teach them collectively in groups or classes as we teach dancing or chemistry or any other art or science, and by so doing reduce the cost of this much needed therapy to a point where people generally can take advantage of it? I am convinced, as a result of my experience in dealing with such cases, that this is a method which can and should be followed. Moreover, I am convinced that it is not only the cheapest but also the most effective method to pursue.

As a matter of fact, the idea of group therapy in the treatment of nervous ills is far from new. Coué, who depended upon suggestion for his results, was using it some twenty years ago with good effect. For the past ten years, Dr. Joseph H. Pratt, who is a follower of Dejerine, has been carrying on classes in group therapy in the Boston Dispensary, and the results obtained have been very satisfactory. Also we have the work of Dr. James S. Green of the National Hospital for Speech Disorders, who looks upon stuttering as a form of neurotic behavior and who has been treating stutterers successfully by the group method for an even longer period of time.

What I have to propose, therefore, is the establishment of a new kind of school, a school of mental health.* This school, which might be conducted either privately or under the auspices of some agency of recognized professional and scientific standing, would have two functions to perform: first, to provide a more adequate and less costly form of mental therapy than the practising physician is able to obtain for his patients at the present time; and second, to prevent the development of mental ills by teaching people how to live successfully under the stresses and strains to which they are subjected in this troubled world.

The aim of our therapeutic program will be to assist the medical practitioner by providing him with facilities which will enable him to give his patients the mental treatment they require. Generally speaking, what these patients need is the education or training that will serve to correct their wrong mental habits and fit them to meet successfully the difficult situations of life. But it is manifestly impossible for the busy medical practitioner to carry on this educational work himself. What the doctor needs, therefore, in addition to his other therapeutic facilities, is a school of mental health to which he can send his patients for the training and instruction they require. It is our aim to provide him with an institution that will satisfy this need.

In carrying on this work, we shall assume no responsibility for the medical care and supervision of our students, for it will be as students that they will come to us, and not as patients. Every patient referred to us will continue under the medical care and direction

^{*} Dr. Harrington was engaged in attempting to establish such a school of mental health at the time of his death.

of his own physician. Our function will be merely to assist the physician by advising him in regard to his patients' mental needs and by giving these patients the psychological treatment they require.

The method of procedure, here tentatively outlined as a means of carrying out this treatment, will be to begin in every case with a six-week intensive course consisting of four things:

I. Entrance examination. Group therapy, to be effective, must be suited to the requirements of the individual members of the group. So the first thing neccessary will be an examination of each patient, to determine the nature of his problems, his potentialities, his limitations and his needs. This examination, which will be given in the form of a personal interview or series of interviews, will enable us to determine whether the patient is a suitable applicant for admission to the school as well as serving as a guide to treatment in case he is accepted.

The qualifications for admission to the school will be quite simple, the main requirement being teachability. The student must have the intelligence necessary to pursue a simple course of study dealing with the principles of mental health. Also he must be willing to apply himself and to cooperate to the extent of his ability in the program that will be laid out for him.

II. Course of lectures on the psychology of adjustment. Psychotherapy is not a matter of curing the patient of his mental ills. It is a matter of helping him to cure himself. But, if the patient is to proceed intelligently in his efforts so to do, he must have some knowledge of the therapeutic principles and methods of procedure by which this cure is to be effected; and

it is our business to provide him with such knowledge. Now, according to our theory and point of view, the root of the patients' difficulties lies in every case in his failure to adjust himself satisfactorily to the situations of life. It lies in his failure to find satisfaction or relief from tension, or in his not finding it in the right way. The problem of winning back to mental health is, therefore, essentially the problem of learning to adjust, and no matter what conditions may have been responsible for a patient's failure to adjust or what the ill effects to which this failure may have given rise, the basic principles of adjustment and self-management which must be followed in order to effect a cure will be in every case the same. The purpose of our course of lectures will be to give the student a thorough knowledge and undestanding of these basic principles on which the attainment and maintenance of mental health depends.

III. Classes for informal discussion of practical problems in self-management. In these discussions, which will run concurrently with the lecture course, the principles there presented will find practical application in the elucidation of the concrete problems of the individual. Besides being informative, these classes will serve a therapeutic purpose in modifying the attitudes and mental habits of the patient. Generally speaking, the nervous patient tends to grow self-centered. His own ills and difficulties come to be of superlative importance. He suffers from a feeling of insecurity and from an exaggerated demand for sympathy and support. In these group discussions, which are bound to take on, in some degree, the character of "experience meetings," he will, however, be obliged to think of other people's troubles; and in so doing he will have

it brought home to him that his own ills are in no way remarkable or unique. Thus, his personal ills will tend to shrink in importance and to grow less disturbing as time goes on. Also, he will become less apprehensive, for there is a sense of security in numbers. Along with this, he will learn to give out sympathy and encouragement instead of merely demanding it; and in so doing, he will be learning to practise what is one of the first laws of mental hygiene, the law that it is more blessed to give than to receive.

IV. Individual conferences. Each student will be under the supervision of an instructor who will act as personal adviser, and he will confer with this adviser from time to time as occasion may arise. The purpose of such conferences will be, on the one hand, to enable the student to get the individual advice and guidance which he needs in regard to those personal problems that cannot be satisfactorily discussed in class; and, on the other hand, to enable the adviser to keep track of the students committed to his care, so that he may know that each of them is receiving the kind of training and instruction he requires; also that, as a result of this training and instruction, he is learning how to master his difficulties, developing sound mental habits, and making satisfactory progress in every way.

According to the plan here outlined, there will be eighteen lectures and eighteen discussion periods of forty-five minutes each. The time spent in personal interviews and conferences will vary according to the needs of the individual case, but will, in all probability, amount on the average to about six hours. This gives twenty-seven hours of group therapy and six hours of individual therapy, making a total of thirty three hours

of school attendance, or an average of five and one half hours weekly, for the entire course.

The purpose of this course will be to give the student an understanding of his mental difficulties and of how he is to overcome them; also to lay the foundation for the development of a set of sound mental habits that will enable him to function successfully in the world in which he has to live. In other words, it is not expected that in this course we shall effect a complete cure. Its purpose will be merely to set the feet of the student upon the road to mental health and to provide him with a map of this road so that he may be able to stay in it. For many students, this is all that will be needed. From there onward, they may be left to work out their own salvation. But there will be others who will require further guidance and support; and for these, further courses will be provided. Or perhaps, they will need special psychiatric attention.

There are three advantages in the educational group therapy here proposed to which I should like to call attention:

- I. It has the advantage, already pointed out, of being relatively inexpensive. Psychotherapy, whether we regard it as a matter of evacuation or education, is of necessity a lengthy process; and when we consider the vast number of cases needing treatment, we can readily see the impossibility of treating each one separately and giving to each the amount of treatment he requires. Obviously, therefore, it must be group therapy or nothing, for there is no other form of treatment worthy of the name that could be generally employed.
 - 2. It is also the most effective method of training

and instruction. I believe this to be so for several reasons:

First, because with the class method of instruction, material can be better organized and more systematically presented.

Second, because students working together as members of a group are mutually stimulating, so that it is much easier to maintain the interest and enthusiasm essential to good work where this method is employed than where each student pursues a solitary course.

Third, because, with this form of instruction, unwelcome truths will encounter less hostility and resistance; for experience shows that a man is less likely to resent criticism or admonition when it is addressed to him impersonally as a member of a group, than when it is addressed to him personally as an individual.

Fourth, because, under this method, the patient is given comparatively little opportunity to talk about his ills and grievances. Instead, he is impelled to turn his attention to the much more wholesome subject of what he is going to do about them. The patient must, of course, be allowed a reasonable amount of time in which to unburden himself. Otherwise it would be impossible to arrive at an understanding of his case or to win his confidence. That type of cathartic treatment, however, in which the therapist assumes the rôle of sympathetic listener, while the patient talks on endlessly about his feelings and his fears, is not, to my way of thinking, treatment at all. It is, instead, a matter of providing the patient with the facilities which he requires for the practice and development of a bad mental habit. The patient may enjoy this sort of thing and he may be willing to pay for it, but it doesn't do him any good.

3. It gets away from that unwholesome infatuation and dependence of the patient upon the therapist, which the psychoanalyst calls "transference," and which is deliberately cultivated under the psychoanalytic method. Generally speaking, the neurotic patient is a lonely frightened soul who craves companionship and sympathy and who is always looking for somebody or something that he can lean upon. Such a one undoubtedly needs guidance and support, but this should not be given in a way that will make him more dependent. In our system of group therapy, the patient gets moral support mainly from being banded together in a group with other individuals whose plight is similar to his own. But while he gains support from this association with his fellow sufferers, they also get support from him. The relationship, therefore, is not one of dependence but of mutual aid, of working together for a common cause; and, for this reason, it will tend to develop courage and self-confidence.

CHAPTER VIII

THE TREATMENT OF INTRA-MURAL CASES

Intra-mural cases are, on the whole, different from extra-mural cases in so far as the latter group consists largely of neurotics who are comparatively rare in the former.

Our intra-mural cases may be conveniently classified as of four different kinds. (1) The patients who of their own volition enter an institution for treatment. These are usually looked upon as "nervous," not "mental," and most of them go to private institutions. (2) Those whose unsatisfactory behavior is such as to cause them to be looked upon as "insane" and who are confined in hospitals for "mental diseases." (3) Those whose abnormal behavior is mainly due to low intelligence and who are confined in institutions for mental defectives. (4) The criminals, or more specifically those whose abnormal behavior is attributed, not to "disease" but to "depravity" and who are confined in penal institutions.

Let us consider the treatment of these four different groups of cases in the order in which they are here named.

TREATMENT OF NERVOUS CASES

The cases to be discussed in this section are basically the same we dealt with in the preceding chapter, though they are often more serious or complicated by unusual causes, circumstances, environmental conditions, and personality traits. The nature of the problem which these cases present can best be shown by means of an example.

A young woman enters a private institution, complaining that she feels nervous, anxious and depressed. Diagnostic study of her case brings out two facts of fundamental importance.

One of these facts is the existence of a long standing condition of bodily ill-health. Two years before she passed through a trying emotional experience, and at the same time a severe illness from which she has never made a complete recovery. She is still in a condition of semi-invalidism, tires easily, and at times suffers from a certain amount of pain. Evidently this state of bodily ill-health plays an important part in the production of her anxiety and depression. In the first place, the thought that after two years she is still a semi-invalid and that as time goes on she may grow worse instead of better is in itself a stimulus which may be expected to produce a reaction of anxiety and depression. In the second place, she was, before her illness, a very beautiful woman. During her long period of invalidism she has seen that beauty, on which she set such great store, disappearing before her eyes. In a short time perhaps, it will have disappeared altogether and she will then be ashamed to show her face to her husband or to any other man. This is another thought likely to call forth, quite naturally, anxiety and depression. In the third place, her illness has cut her off from doing many things she enjoyed or would like to do. Her condition results in a constant thwarting of her desires. And in the fourth place, the illness with all its consequences has produced in her, as it probably would in any one of us, a gloomy attitude of mind, a tendency to look on the dark side and to make the most of every little trouble or possible source of injury that shows upon the horizon.

The other important fact is the unwholesome manner of life she has come to lead. She lives in a hotel with no work nor occupation of any kind and very little in the way of salutary recreation. Partly as a result of her semi-invalidism, partly as a result of the circumstances in which she has been placed as well as her own mental limitations, she has developed the habit of remaining in her room during the greater part of the day, not even taking the trouble to put on her clothes. Most of this time she spends lying on her bed, smoking innumerable cigarettes, brooding over her troubles, or trying to find distraction in reading. She happens to be fully and painfully aware of the changed mode of living, and she has a keen appreciation of the futility and unwholesomeness of her voluntary retirement. She is not without a sense of shame, but she does not seem to be able to do anything to remedy the situation. She sees herself drifting further and further in the grip of forces which she is powerless to overcome. The realization of her weakness and worthlessness and the futility of her existence adds still further to her unhappiness and depression. She sees that unless she can find some means of escaping from her present manner of life there is nothing ahead of her but shipwreck and ruin.

What can we do for this woman? Someone may say that the first thing necessary is to treat her bodily ailment. But how? The various specialists who have been consulted have no specific medical or surgical procedure to offer which will effect a cure. This is one of those cases which can only be cured by wisely

regulating the patient's life and leaving Nature to do the rest. As long as our patient continues to spend her days thinking about her troubles and poisoning herself with cigarette smoke, she will not get well. Our treatment must consist of modifying her behavior, breaking down her present unwholesome habits, and developing healthy habits in their place. She must have work to do and wholesome recreation, give up her incessant smoking of cigarettes, stop drifting and lead an orderly, well-disciplined life.

But how are we to bring about these changes in her habits? Suppose we tell her to stop smoking. She will wish to follow our instructions. But will she succeed? When a person tries to give up a habit such as smoking, there is a conflict between two forces or impulses, the impulse to continue the habit and the impulse or desire to give it up. The outcome of this conflict will depend on which force is the stronger and there is little doubt as to which force would prove stronger in the present instance. As long as this woman continues to lie about in her hotel bedroom with nothing to occupy her but the thoughts of her own miseries and unsatisfied desires, the impulse to smoke will be too potent for her to overcome.

When it comes to inducing her to go to work, we have not only her habits of indolence to overcome but also the difficulty of finding work for her. What kind of work could this woman do and who would employ her? She is without vocational training of any kind. And were she ever so willing, she is physically incapable at present of working in an office or shop at any "full time job." Moreover, it would be inadvisable to allow her to make the attempt. As for recreation, the problem of finding anything which would meet her

needs would be just about as difficult as the problem of getting her work.

Under existing conditions it is impossible to get this patient to do those things necessary to correct her bad habits and restore her to a condition of health. What then are we to do? The answer is obvious. We must change her environment. We must induce her to leave her hotel bedroom in the big city, where every circumstance combines to make her do the things she ought not to do and to prevent her from doing the things she ought to do. We must persuade her to place herself in a different kind of environment, where the right course of action will be made easy and the wrong course of action will be made hard. But where is such an environment to be found? It is not to be found anywhere except in those hospitals or sanitaria where it has been specially created to meet the needs of cases such as this. The only satisfactory way to deal with this patient is to persuade her to enter an institution where it will be difficult for her to lead anything but a well-ordered existence, where the requisite facilities are provided to give her work and play suited to her limitations and requirements, and where she will be under the care of competent physicians who will regulate her life for her until she has been freed from the thralldom of her bad mental habits and her physical health restored, so that she is again fit to step out into the world and take up the sruggle herself.

What is true of this case is true of many of the patients who come to us in our offices asking for assistance. Treatment of these patients, we have seen, is in the main a matter of showing them what they must do to help themselves. But many of these patients are not in a condition to profit by such instruction. To

offer it to them is like telling a prize-fighter what he must do to overcome his opponent when he is himself lying in the ring helpless and unable to rise. What we must do with these patients is to induce them to withdraw from the struggle for a period of recuperation and training, and the chief function of the sanitarium or hospital for our voluntary "nervous" cases should be to serve as a training camp to which they may withdraw, a training camp in which they will be put in condition to renew the battle of life.

Amongst the large number of private institutions scattered through the country, there are a certain number which are performing this function admirably. There are not, however, nearly as many institutions of this kind as we need. It is, moreover, an unfortunate thing that, being private enterprises they are expensive and therefore, as a rule, out of the reach of people of limited means. For the poor people who need treatment, the only institutions available are the state hospitals, and our state hospitals are not suitable for the treatment of cases of the kind we are discussing. There is at the present time a great need of scientifically run institutions for the treatment of these "nervous" cases, available for others than those possessed of fat bank accounts. No doubt this need will be met as time goes on and we become more intelligent in the handling of our behavior problems.

TREATMENT OF THE INSANE

When a patient is committed to a hospital for the "insane," it is, as a rule, because he behaves in a way which is likely to prove harmful to himself or others, and the first thing necessary in dealing with him is to

give him an environment in which the evil consequences of this behavior will be reduced to a minimum. In other words, the first thing to do is to make the requirements to which the patient is subjected conform to his behavior. For example, if he is destructive and inclined to smash the furniture, we must put him in some place where there is no fragile and expensive furniture to smash, so that no loss or damage will result from his giving way to this propensity. If he is noisy, unclean, assaultive, we must put him in some place where it will not be possible for him to annoy or hurt others. If he refuses to eat, he must be given his meals through a stomach tube to prevent him from starving as a result of this unsatisfactory course of action.

Having given the man an environment in which the ill effects of his abnormal behavior will be reduced to a minimum, the next thing is to help him to adjust himself in it. This is important for two reasons. In the first place, a condition of non-adjustment or nervous tension is, as we know, a condition of discomfort and pain, and one of the chief aims of medical treatment is to relieve pain. We do not want our patient to be unhappy: we must want to make him as comfortable and contented as possible. In the second place, we have seen that unrelieved nervous tension is destructive to mental health and efficiency. When we have a patient who is in a state of tension, the relief of that tension is an essential part of his cure. But what must we do to relieve his tension? When a man is in a state of non-adjustment, it means that he is being acted upon by some stimulus or combination of stimuli, and the problem of helping him to get relief from it is the problem of finding out the nature of these stimuli

which are acting upon him to keep him in a state of nervous tension and how they may be removed.

A large proportion of the patients admitted to our mental hospitals are people who have been in a state of nervous tension previous to their entrance; they are cases of non-adjustment. These patients do not, as a rule, leave behind them the stimuli responsible for their previously existing nervous tension when they enter the wards of a hospital. If they have been suffering from unsatisfied sexual hunger, this hunger will probably still continue to trouble them. If they have suffered financial reverses or the death of loved ones, the thought of their losses will stay with them in the hospital and continue to cause them distress of mind.

But, in addition to these stimuli which are already acting upon the patient at the time of his commitment. there will also be others to which this new experience will give rise. Of all the evil fates which may befall a man there are few which seem to him more terrible than that of "losing his mind." So, when he finds him-self in a mental hospital committed as "insane," the realization of this plight fills him with horror. He looks at the patients round about him, some of them noisy, dirty, and dilapidated. Is he now to be classed with such as these? Is he doomed to become like them? He has a wild impulse to run away from this place and these people, to get out in the clean cool open air or seek the shelter of his own home. But the doors of the ward are locked, the windows barred. There is no escape for him. To the horror of insanity is added the horror of confinement. Obviously here we have a combination of stimuli which would produce a state of high nervous tension in any of us. The only person who can escape it is the patient so stupid or confused at the time of his entry into the hospital that he does not realize what has happened to him.

What can we do to save our patients from these harmful stimuli? The first thing necessary is to so arrange our hospitals that those who are noisy, demented or unclean in their habits will be kept entirely separate from other patients to whom they might give offense and whose mental health would be unfavorably affected by them. The second thing is to make the ward to which the patient is admitted as comfortable, homelike and reassuring as possible. We want nothing in it to suggest to him that he is in a hospital or place of detention.

It has always seemed to me that the most satisfactory arrangement for a reception ward would be to have attached to it a high-walled garden. The walls should be covered with vines. There should be trees and beds of flowers, with gravel walks, comfortable seats and even gaily colored sun umbrellas. The door leading from the ward into the garden should be left unfastened and the patients at liberty to go in and out as they pleased. A large part of the horror of confinement is the horror of being locked up indoors, away from the fresh air, the sky and the sunlight, of being able only to look out at them through barred windows. Of course a garden of the kind here suggested could not be very large, but neither is the promenade deck of an ocean liner. Yet what a difference this deck makes in the comfort of the passengers! What a nightmare an ocean voyage would be if the passengers were kept locked up within doors, except at such times as they were taken out in batches for

air and exercise under the charge of attendants whose orders they had to obey.

If a ward were on the ground floor and opened onto a walled garden, it might perhaps even be possible to do away with window guards. A barred window is always an unsightly thing, suggestive of a prison, while a walled garden may be a thing of beauty, suggestive of tranquillity, comfort and repose.

The third thing necessary to enable our patient to adjust himself in the hospital is work to do. The need of work as a means of keeping people happy and contented has already been discussed in a previous chapter. It is through the agency of thought that most of our states of nervous tension are produced and if we do not wish a man to be rendered unhappy by the thoughts of his ills and deprivations we must keep him so busy doing something and so filled with enthusiasm for what he is doing that he ceases to think about them. This is just as true of the man on the inside of the hospital as of the man on the outside. The problem of finding suitable kinds of work for the various kinds of patients we have to deal with in our hospitals for the "insane" and of stimulating these patients to interest and enthusiasm for their work is one of our biggest problems in psycho-therapy.

The fourth thing necessary is recreation. Recreation, we have seen, is a form of behavior in which, as a result of some stimulus or combination of stimuli, our nervous energy is given full, free and immediate outlet in singing, dancing, laughter, or some form of play. In our periods of recreation we have, not a single stimulus acting during the entire period, but a succession of stimuli. With the application of the first stimulus we have tension rising and quickly falling as

the energy generated by it is given free outlet. Then we have it rising and falling again with each succeeding stimulus. With this repeated rise and fall of tension the pleasure mechanism is thrown into action and we have a speeding up of all the vital functions which had previously been depressed as a result of the sustained nervous tension which the reaction has relieved. Recreation, like work, is not only essential to the man outside the hospital but also to the man inside. Our patients need a daily period of play just as they need sleep, food, light and fresh air. The problem of developing forms of recreation for our "insane" patients in which they can be induced to participate daily and which will be suited to their individual requirements is another important problem in psychotherapy.

Over and above these four things, there is one more which is of vital importance, and that is that the patient should find, in the doctor who has charge of him, a friend he can trust. For weeks or months before his admission, the patient has, in all probability, been living a life of intense nervous strain. He has been the victim of strange experiences, strange impulses and feelings. Strange thoughts have been running through his head. He has tried to keep a grip on himself, but he has been tossed to and fro, beaten, battered and stunned in an emotional storm, like a ship in a storm at sea. Now that he finds himself marooned in a mental hospital, what is to become of him? Will they ever let him go out into the world again? Is he really a "lunatic?" It is of great importance to such a one from the standpoint of his peace of mind, that he shall have as his physician a man to whom he can tell the tale of his struggles and difficulties and receive

sympathetic understanding, one who will relieve his doubts and anxieties about his present mental condition and his future, and give him the feeling of comfort that comes to a man with the belief that his interests are in good hands and are being properly taken care of.

The first thing we have to consider in the hospital treatment of our "insane" is the problem of preventing them from doing harm to themselves or others. The second is the problem of making them happy and contented in the hospital environment. There is also a third, namely the problem of restoring them to society and a life of usefulness. We know that whenever a man behaves in an abnormal way it is due to one or both of two causes, a difficult situation or a defect of personality. Let us first consider the problem of rehabilitating those whose abnormal behavior has been due to a difficult situation.

I presented elsewhere the case of a young man who. as a result of a situation growing out of certain difficulties which he encountered in his work, gave up his job, stayed at home in bed and behaved in such a way as to cause him to be committed as "insane." Now this lad, when he came under my care very shortly after his commitment, had apparently recovered from his "insanity" He no longer showed any of the abnormal behavior that had led to his commitment. How is this sudden recovery to be explained? The answer is obvious. When the lad was taken out of his home environment and placed in a hospital, he was withdrawn from the difficult situation which was the cause of his abnormal behavior, the stimuli which had been keeping him in a state of nervous tension were cut off. And, in the absence of the stimuli which had been causing his abnormal behavior, this abnormal behavior did not occur.

Obviously the rehabilitation of cases such as this is a comparatively simple matter. All we have to do is to put the patient back into the world again under conditions which do not overtax his capacity for adjustment and he will be as good a man as he ever was. Better, perhaps, for he may have learned something from experience. Cases of this sort, however, are exceptional. Most people who have been behaving abnormally as a result of difficult situations do not clear up immediately on admission to a hospital. Let us consider the causes of the continued abnormal behavior of these cases and how we are to deal with them.

One cause of failure to return to normal on entering a hospital is that the stimulus responsible for the abnormal behavior is one which the patient carries with him. For example, a man has suffered some terrible loss. His fortune, his good name, all that he holds dear has been swept away. It is, however, not the loss itself, but the thought of the loss which is keeping him in a state of tension, and in the hospital this thought is still with him. To rehabilitate this man we must free him, or rather help him to free himself, from the thought that is keeping him in a state of nonadjustment, and this we may do by talking his problem over with him, showing him the attitude he must take in order to make his adjustment, and by giving him in the hospital a wholesome environment in which he will find other things to do than to sit around and brood over his troubles.

A second cause of failure to return to normal on entering a hospital is that in it the patient may find

a situation just as difficult to cope with as that from which he was withdrawn. It is a psychological handicap to be branded as "insane," to be deprived of liberty. Here is something that may serve to produce in a patient a state of even higher nervous tension than that produced by the evil from which he has escaped. It has been a case of out of the frying pan into the fire. There are not a few psychoses in which the most serious etiological factor is to be found in the fact that the patient has had the misfortune to become an inmate of a hospital for the "insane."

Mr. X. was a man of brilliant mind and strong ungoverned passions which more than once had gotten him into trouble and had prevented him from achieving the success in life to which he would have otherwise been entitled. He was, moreover, as the result of an injury sustained in youth, very badly crippled and deformed. This had not only proved a serious handicap to him in his work, but had also had an unfortunate effect upon his disposition, tending to make him bitter and irascible. As showing the kind of man he was, it may be said that he had led his class all through college and then, in the final year, failed miserably and without graduating because a girl jilted him. Some years later, he again proposed marriage to this same girl and, when she again refused him, he swallowed a culture of typhoid bacilli and very nearly died in consequence. Apparently this was not an attempt at suicide. The woman was a nurse and the man thought that if he made himself ill enough she might come and take care of him.

Previous to the mental break which brought him under my care, he was working very hard, getting insufficient sleep and living apparently under heavy nervous strain. Suddenly he became violently excited, was delusional and hallucinated. His excitement was of very short duration and cleared up as rapidly as it developed. In fact, the episode was practically at an end by the time the family was able to complete the necessary steps to get him into the hospital. When I talked with him shortly after his admission, he admitted that he had been "out of his head," but insisted that he was now himself again. He evidently felt a good deal of resentment against his family for having had him committed to a psychiatric hospital; believed that this action might have been avoided. To the handicap with which he had to struggle because of his physical deformity, was now added the stigma of insanity.

He demanded an immediate discharge, but this demand was not granted. His ill-concealed resentment and irascibility was taken as evidence that he was not yet in a normal condition. It was thought that if he were turned out into the world he might have another flare-up or do something that would get himself or his family into trouble. I tried my best to persuade Mr. X. to accept this decision of the medical staff of the hospital with good grace and make the best of the situation in which he found himself and I believe that, for a time at least, he really tried to follow my advice. Unfortunately he was not the kind of bird to be happy in captivity. He waited with such patience as he could muster for what seemed to him a reasonable length of time and then, as no one showed any tendency to do anything for him, he again demanded his discharge. When this demand was refused he grew very angry and resentful at the medical staff, at the hospital, and more particularly at his own family who could have

taken him out against the advice of the physicians if they had wished to do so. He gave expression to his resentment by writing home angry and abusive letters and by making sarcastic remarks about the various people whom he held responsible for his detention. He would probably have tried to run away if he had possessed a pair of sound legs to carry him; but being a cripple, such action was impossible. He was fairly trapped, which did not make him feel any more sweet-tempered toward those responsible for his incarceration. So, as time went on, he grew more savage and sullen. Much of his time he spent sitting by the window smoking his pipe and brooding over his wrongs. Occasionally something would happen to open the flood gates and then he would give expression to his feelings in a fine outburst of curses and abuse for the hospital and everything connected with it.

When I saw how badly this man was reacting to the hospital environment, I came to the conclusion that the best thing for him would be to let him go. I did not think there was much likelihood of his harming anyone if he were at liberty, and there was little chance, in view of his personality and the mental attitude which he had developed, of getting him to make a satisfactory adjustment in the institution. My colleagues, however, did not share this opinion. They believed that a patient should stay in the hospital until he was fully recovered. This man's attitude of savage resentment they saw, not as a reaction to the treatment he was receiving, but as the symptom of a mental disease, and, as long as he continued to show this symptom, in the hospital he should remain.

When I severed my connection with the institution in which this patient was confined, he was still there.

I do not know what became of him. Maybe in the course of time he lost hope and interest in the outside world, ceased to expect or long for liberty and settled down quietly in the hospital environment. In that case he probably received his discharge. What is more likely is that, from constantly brooding over his wrongs, his thinking as time went on became progressively more distorted until he eventually developed well marked delusions of persecution, which outcome would be taken by those responsible for his detention as clear evidence that they had done quite right in holding him. His delusion would be looked upon as symptoms of a mental disease which he had from the beginning. It would never be supposed that the unsatisfactory outcome of his case might perhaps have been the result of the treatment which he had received.

How are we to overcome this obstacle to recovery which confinement in a hospital may present? The first thing to do is to make the hospital environment as tolerable as possible. The question of how this is to be done is one we have already discussed. But if, in spite of all we can do, a patient still fails to adjust himself, it is necessary for us to consider the question of whether the hospital is the right place for him. Because an institution has been built and equipped for the care of mental cases, it does not necessarily follow that every man who suffers a mental breakdown is going to find it suited to his requirements. Different cases call for different environments and different methods of handling. The disposition and treatment of each patient must be determined by his own individual needs and limitations and the circumstances of the case.

So much for the problem of rehabilitation in those cases in which the cause of the abnormal behavior has

been a difficult situation. Let us now proceed to consider those in which the trouble is due to a personality defect. As a matter of fact, of course, the problem of dealing with personality defects is one we encounter in practically every case that comes to us. A man's abnormal behavior may have been a response to a difficult situation, but if he had been of a different personality, if he had not been handicapped by certain limitations or defects, he would not have responded to this situation in this way. Also, practically every difficult situation which a man fails to meet as he should serves to produce in him a personality defect of greater or less duration. When, as a result of some form of mental stress or strain, a man develops a depression, an excitement, or a delirium, in which he hallucinates and becomes confused in his thinking, he has undergone a temporary change of personality, and rehabilitation of such a one is mainly a matter of giving him the care and medical attention he requires until he swings back to normal.

Personality defects are due to three things, bad heredity, bodily disease or injury, and bad education. Heredity we cannot change. The treatment of bodily disease is outside our province. The only method of correcting personality defects with which we are here concerned is re-education. Re-education is largely a matter of replacing wrong habits with right ones, and right habits can only be developed by the practice of right living. What we must do with the patients in our hospitals who have developed habits which unfit them for the outside world is to make them discontinue their abnormal forms of action and conduct themselves as they should, day after day, until satisfactory behavior tendencies have been established. Thus, if a man has

developed the bad habit of working all the time, never taking needful rest or recreation, we must make him practise the wholesome and necessary habit of play. If he has acquired the habit of day dreaming or brooding over his troubles instead of working, we must train him in habits of industry. If he has the habit of flying into a temper whenever things do not suit him, we must train him in the habit of self-control.

But how is this re-education to be accomplished? To train a man to behave normally inside the walls of an institution, the first thing necessary is to provide there an environment in which a normal manner of life is possible. The old-fashioned type of institution, still extremely common, where a patient is locked up in a ward with a group of other unfortunates and left to twiddle his thumbs or talk to himself, does not provide such an environment. In addition to providing the facilities which make right living possible, it is also necessary, as we have already had occasion to remark, to so regulate the stimuli to which the patient is subjected that he will be impelled to make proper use of these facilities. The problem of just what stimuli are to be applied to a man in order to impel him to do those things which he ought to do and to deter him from doing those things which he ought not to do, is in its main essentials much the same inside the walls of a hospital as it is anywhere else. We shall not attempt a detailed discussion of it here. The principles are always the same, but the practical applications vary and must be worked out to meet the requirement of the individual case.

Of course the wrong forms of behavior which we are trying to correct in the re-education of our hospital patients have their roots, many of them, in the patients'

wrong beliefs. How are these beliefs to be dealt with? There are, as we know, a variety of forces or tendencies which enter into the determination of a man's beliefs. To mention the more important of these, there is, first, what may be called the force of logic, the tendency or inclination for one to make his various beliefs harmonize with each other and with the facts of external reality. Second, there is the force of habit, the tendency for the streams of thought to keep on flowing in their accustomed channels, so that one continues to believe a thing, even in spite of strong evidence to the contrary, for no better reason than that he always has believed it. Third, there is the gregarious impulse, the tendency to go with the crowd, to believe that what other people think must be so. Related to this we have the force of prestige, the tendency to follow the leader, to accept wihout proof whatever one is told by those who are able to impress him with their authority. Fourth, there is the force of the emotions, the tendency to make one's beliefs conform to his feelings, to believe that everything is all right when he feels happy, to believe that things are all wrong when he feels depressed, and to believe that dangers threaten when he feels afraid. Fifth there is the force of desire, the tendency to believe that things are as one would like them to be, to come to rest in those beliefs in which one feels comfort and satisfaction.

These various forces or tendencies, as we know, frequently conflict with each other and pull a man in different directions. Thus the force of a man's logic, his tendency to make his beliefs agree with the facts of his experience, may impel him to reject a certain doctrine as absurd, while the fact that his fellow men accept this doctrine without question impels him to

accept it also. Similarly, the emotional force of a great fear may impel a man to believe that all kinds of evil things are hanging over his head ready to fall upon him, while the forces of logic and desire combine to make him reject the thoughts of these dangers as absurd. Ordinarily, a man's belief in regard to any matter is not due to action of one force only, but is the resultant of the combined action of several forces; which is the chief reason why most human beliefs when subjected to logical analysis are found to be full of inconsistencies and absurdities.

With this understanding of the causes of a man's beliefs, it is easy to see what we should do when a man displays an abnormal or unsatisfactory belief and we wish to change it. The thing to do is to analyze the situation, seek to determine the nature of the forces which are operating to give rise to this particular belief, and then seek to modify these forces in such a way as to make him think differently. In other words, we must cure the false belief by dealing with the forces which are its cause.

Suppose, for example, that, owing to some stimulus from which he is unable to free himself, a man is in a state of depression or fear that is making him believe in certain imaginary ills or dangers. The course to pursue will obviously be to free the man from the stimulus responsible for this emotional condition, and, with the passing of his depression or fear, the delusions to which it gives rise will tend to pass also. A large proportion of the patients who enter our hospitals in states of anxiety or depression display delusions or distortion of thought, which for the most part clear up as the patient's mood returns to normal. The thing to do is to relieve emotional stress and strain

and the disturbance of thought associated with it will, as a rule, take care of itself.

When a false belief which a man has developed as the result of some emotional disturbance fails to pass with the passing of the emotion, it may not infrequently be overcome by an appeal to reason; in other words, by bringing the force of logic into play. There is generally little use in arguing with a man about his delusions as long as he remains in the grip of the emotion which is giving rise to them. The thought-deforming power of this force is too strong to be held in check by such means. But, when the emotional storm has passed, one can help the convalescent patient to get his twisted thinking straightened out again by going over things with him and showing him where and how his ideas have become distorted. Even in those cases where a man's logic is poor, so that he cannot be made to see for himself that a certain belief is absurd, he may not infrequently be made to give it up by merely assuring him that it is wrong. Not sufficiently intelligent or well-informed to be moved by the force of logic, he may be influenced by the power of prestige.

Of course, if we are to influence a man's beliefs, we must make use of the arguments which will appeal to him, and to do this we must study the nature and limitations of his personality. One man is by nature a follower, in his thinking he always accepts the opinions of those in authority. If we are to induce such a one to accept a certain belief, we must do so by impressing him with the notion that it is a belief which is now being held by the most weighty and dignified authorities. It would be waste of time trying to persuade a man of this type to accept a doctrine, admittedly unorthodox, by mere logic or factual evidence. Another

man is an opportunist. His beliefs are determined mainly by self-interest. If he were to find that his ends could best be achieved by embracing Mohammedanism, he would believe in Mahomet. If Christian Science seemed more likely to give him what he wanted, he would believe in the doctrines of Mrs. Eddy. Obviously the only way to make a man of this type accept or retain any belief is by convincing him that in it he has the thing which will best serve his interests. There are also some men whose dominating desire is the desire for truth and who, therefore, can be most readily influenced in favor of a belief by showing them that it fits the facts. Such people, however, are not numerous, either in our mental hospitals or the world at large.

Mrs. P. developed the morphine habit as a result of being given the drug during a long and painful illness. Later she undertook to break herself of the habit and called in the family physician to her aid. He put her to bed and placed her in charge of a nurse. Presently she became excited and violent so that the nurse could no longer handle her and she was committed to a hospital. Here she was first placed in the reception pavilion, but she was so violent and obstreperous that it was found necessary to have her transferred to the ward for excited cases. Here she came under my care. After a short stay in this ward, she calmed down and I was able to move her to a quiet ward where she was much more comfortable.

Following her recovery from this brief episode of excitement, her behavior was fairly satisfactory except in one respect. She refused to recognize the fact that she had had a psychosis. She said that she had fought with the nurse in her own home because this woman

had treated her badly. Her violent conduct while in the reception pavilion she explained in the same way. The fact that she had ceased to fight after coming under my care she attributed, not to any change in herself, but to the difference in the treatment she had received. I was the only doctor in the hospital who had treated her properly, the only one who had understood her. There never would have been any struggles or unpleasantness of any sort if other people had dealt with her as I had.

But, although she began by merely laying the blame for her abnormal behavior on the doctors and nurses who had had charge of her, she did not stop there. She started in to think of reasons to explain the illusage which she had received. Why had the family physician taken sides against her with the nurse whom he had engaged to attend her? And why had he had her certified as insane and put away in an institution? He must have had some motive. Evidently some nefarious scheme was afoot. She suspected that perhaps he had evil designs on her young daughter and wished to get her out of the way for that reason. But what of the physician in charge of the reception service who had first had her under his care when she was brought to the hospital, the man who by his ill-treatment had goaded her to acts of violence and then placed her on the disturbed ward with noisy and obscene patients? Surely this man too had a reason for acting as he did? He was probably the partner or paid accomplice of the family physician in the plot against her. He probably wished, not only to keep her locked up in the hospital, but also, if possible, to drive her insane.

The more Mrs. P. thought of these possibilities, the more she believed in them, and the more she believed

in them, the stronger grew her detestation and hatred for the scoundrels who had injured her and who were now, no doubt, proceeding with their scheme to ruin her daughter. She spent her hours on the ward with her fingers for the most part idle, but her brain extremely busy marshalling all the facts available in support of her theory. Every day when I passed through the ward she would buttonhole me and repeat he story, adding in all the new details which she had succeeded in thinking up since the day before. Under my eyes, she was rapidly developing an elaborate and well organized system of delusions, and it was very interesting to watch this system grow from day to day.

Obviously, this pathological process could not be permitted to go on unchecked. Something must be done about it. So one day I took the woman aside and proceeded to talk to her. First, I reviewed the facts of the case. She had developed a drug habit. This, under the circumstances, was a misfortune for which she could be held in no way to blame. It might have happened to anyone. Then she had undertaken to break herself of the habit and in this undertaking she had been successful. Here she had shown unusual strength of character. The whole incident was very much to her credit. Then, as a result of the strain to which she had subjected herself in breaking off her drug habit, she had developed an excitement. This had made it impossible to take care of her at home. It had been necessary to send her to a psychiatric hospital. There was, however, nothing to regret or be ashamed of in this, any more than there would have been in the development of a delirium in an attack of typhoid. Now she was not only free of her drug habit, but also recovered from her excitement. She had passed through a severe struggle and come out a victor. She was in a position to go back home and take up her life again, a normal healthy woman, free from the burden of the drug habit she had previously carried. The outcome of the whole affair was extremely gratifying and should afford her satisfaction and pleasure.

Unfortunately, she failed to see the situation in this light. She held the absurd opinion that a mental break, necessitating hospital treatment, was something to be ashamed of. Being unwilling, therefore, to admit having had such an attack, she had adopted what seemed to be the only alternative; she had laid the blame for the whole proceeding on those who had been responible for placing her in the hospital and keeping her there, explaining this action on the grounds that there was a plot against her.

Having pointed out the motive that lay back of her delusion, I then went on to talk to her somewhat after this fashion:-"No doubt since coming to this ward, Mrs. P., you have become acquainted with your three fellow patients, Mrs. L., Mrs. R. and Miss S. Proably you have heard them give expression to the various strange ideas which they entertain. Have you any idea how long these women have been living in this hospital? Mrs. L. has been here for twelve years, Mrs. R. about nine years, and Miss S. for more than twenty years. Do you know what is wrong with them or why it has been necessary for them to remain here all these years? I will tell you. They began, as you are now beginning, by allowing their beliefs to be governed by their emotions and desires, rather than by an honest and sincere effort to get at the truth. As time went on, one false belief naturally led to another, and the habits of wrong thinking grew more fixed and pronounced, until finally these ladies grew so twisted and warped in their beliefs, so incapable of seeing the facts of life as they really are, that they became mental cripples, unfitted to lead any life outside of an institution and incapable of cure. So here they are, and here, in all probability, they will remain until such time as death releases them.

"Now why am I telling you all this? What bearing has it upon your case? Simply this. You yourself, at the present time, are at the parting of the ways. Two courses of action lie open to you. You may, if you like, look the truth squarely in the face, admit the simple, obvious and by no means discreditable fact that you have had a psychosis, and go back into the world again, there to take up your life a stronger and better woman for the experience through which you have passed. On the other hand, you may, if you prefer it continue to do as you are doing now; shut your eyes to the truth and build up a system of delusions where the blame or discredit, which you mistakenly associate with the idea of commitment to a mental hospital, will rest on other shoulders than your own. Only remember that if you follow this second course of action, your thinking will, like that of these three other ladies on the ward here, become more distorted as time goes on. You will lose the ability to see and understand the facts of life as they really are, and you will condemn yourself to spend the rest of your life in an institution. Here are the two alternatives that lie before you. Take which you prefer."

The result of this interview was that Mrs. P. gave up her delusions, was discharged from the hospital and returned home in due course. At the time I last heard of her, which was some years ago, there had apparently been no recurrence of her paranoid ideas.

I give this case to show what may sometimes be accomplished in the way of correcting false beliefs when one has the necessary understanding of his case to use the right argument or stimulus. What we have here called the force of logic was in this woman's thinking a factor of very little consequence. I might have argued with her for a month, trying to show her the unreasonableness of her position without budging her; for what she was trying to do was not to get at the truth, but simply to preserve her own prestige and self-respect. She had no desire to make her theory fit the facts, although, like many other people, she would have been very glad indeed to establish harmony between fact and theory, if she could have done so by altering the facts. But, although she had little desire for the truth, there were other motives or tendencies within her which could be utilized. Convince her that her delusional thinking, instead of affording a means of escape from the stigma of insanity, would lead to an incurable psychosis and life-long incarceration in a psychiatric hospital, and she would give it up readily enough, especially if at the same time she were shown that the disgrace attaching to the episode of excitement from which she was trying to escape did not really amount to anything, so that there was no occasion for her to run away from it. There were, of course, two things which made this woman an easy case to deal with. First, I had the good luck to catch her early. Changing her persecutory ideas after they had had sufficient time to become organized and to set would have been a very different matter. Second, I had her liking and confidence. If she had not first come to look

upon me as her faithful friend, she would, in all probability, have rejected my warning as a mere attempt to deceive her.

When a false belief cannot be eradicated the next best thing is to render it as harmless as possible. This we may do by preventing the occurrence of the harmful behavior to which it would otherwise give rise. Wrong thoughts are only wrong because of the wrong actions to which they lead. If we can prevent the wrong actions we need not greatly concern ourselves about the wrong beliefs.

Once, on taking over a hospital service, I found in one of my wards a lady who stoutly maintained that she was queen of the hospital—only she did not admit that the place really was a hospital—and that all the people in it, including myself, were her subjects. This delusion was, of course, merely a little game of makebelief in which she indulged to make existence more interesting and I should, in all probability, never have interfered with it if she could have managed to play her little game alone. Unfortunately she demanded that everyone else in the ward should play it with her. She was extremely jealous of her royal dignity and authority and would storm and scold in a loud voice when anyone failed to obey her orders or treat her with proper respect. She was, therefore, a great source of annoyance to her fellow patients.

Seeing no reason why behavior of this sort should be tolerated, I told her that the ward in which she was living was for quiet patients who knew how to behave themselves, and that, if she continued to annoy people with her absurd behavior and pretensions, I should conclude she did not belong here and should be under the necessity of removing her to a ward for disturbed patients where she would be more properly classified. The immediate effect of this speech was to provoke her royal rage and so to the disturbed ward she went. There, for several days, she remained in a fine state of indignation. Then, finding from painful experience that she was no longer going to be permitted to carry things with a high hand, she calmed down and, having promised better behavior for the future, was allowed to return to her old quarters. She tried to reassert her authority and play the queen on several occasions after that, but as each such attempt landed her back promptly in the excited ward, she soon gave up her royal pretensions. This not only made the ward a more livable place for her fellow patients, but even the deposed queen herself was obviously more happy and contented. Uneasy rests the head that wears a crown. As long as this woman had authority and a lofty position to maintain, she was, like some people similarly situated in the outside world, subject to a good deal of irritation and nervous strain owing to the difficulties which she encountered in getting others to obey her orders and treat her with proper respect. But, when her authority and rank were taken from her, she was freed from the necessity of being always on guard in defence of her rights. She could now allow herself to relax, life became much more comfortable in consequence and there was a marked improvement in her disposition.

So much for the subject of re-education in the psychiatric hospital. The problems which it presents are of fundamental importance from the standpoint of treatment although very little serious scientific study is yet being given to them, as anyone can see for himself by merely glancing over an index of the subjects

dealth with in our psychiatric journals. In its service to the patient, an institution for the care and treatment of the insane has three important functions to perform. First, it should be-to use a beautiful old word, now unfortunately fallen into bad repute,—an asylum. That is to say, a sanctuary, a haven of refuge, a place of security and protection, where the man buffeted by the storms of life, unable to meet the demands made upon him, will find a specially prepared environment, suited to his limitations and requirements. Second, it should be a hospital, a place where bodily ailments by which he has been handicapped will receive the most skillful and scientific treatment. And third, it should be a school, an institution in which he will receive the training and instruction he needs to free him from wrong habits of thought and action and equip him to go back into the world and be a victor in the struggle where formerly he was a failure.

TREATMENT OF THE MENTAL DEFECTIVE

The same principles apply here as with the insane. When a mental defective comes to an institution, it is because his behavior has not met the requirements of the outside world, and the first thing to do is to give him, in the institution, an environment, the requirements of which will conform to his capacities and limitations. The second thing is to so arrange conditions in this environment as to afford him the maximum degree of comfort and satisfaction. And the third is to work to correct his defects of personality and raise him to the highest possible level of usefulness and social fitness. As with the insane, so with the mental defective, there are only two ways in which personality de-

fects can be corrected: (1) By medical treatment, improving the bodily health. In the cretin we have, for instance, as everyone knows, a type of case in which wonderful results may be achieved by the feeding of glandular extract. (2) By re-education.

Although great advances have been made along this line during recent years, a large proportion of our mental defectives are still very badly educated. A mental defective cannot learn to do anything very elaborate, but he can, if properly taught, as a rule learn to do some simple useful form of work in which he will find a great deal of pleasure and satisfaction, for the mental defective, like everyone else, must, if he is to be healthy and happy, have work to do. Commonly, outside our institutions, instead of being given the training suited to his requirements, he is put into classes with normal children, or, if he has special teachers, they spend their time trying to teach him things beyond his capacity. The result is that he acquires bad mental habits in this schooling and very little else. It is these cases chiefly which call for reeducation. What must be done for such a one when he comes to an institution is to correct the bad habits he has formed as a result of improper handling and to give him sound habits in their place, together with the training which he should have previously received in the doing of simple useful work. As a result of such re-education, there will be some who will be rendered fit to leave the institution and occupy positions in the outside world, while there will be others who will be obliged to live out their lives in the simpler and less exciting environment which the institution affords.

Since mental defect is in large part the result of heredity, and since mental defectives cannot be relied upon to make use of contraceptive measures or to exercise very much self-restraint, the eugenic problem which they present is a serious one. The only effective way to deal with it would seem to be by the method of sterilization.

TREATMENT OF THE CRIMINAL

Of the treatment of the criminal very little need be said. Criminal behavior, like any other form of abnormal behavior, is due to two things: on the one hand, defects of personality, having their root in bad heredity, bad education and disease and, on the other, stimuli -in the case of the criminal we call them temptations—to which, by reason of his personality defects. the man reacts in an unsatisfactory way. And, as the causes are the same in crime as in other forms of abnormal behavior, so also is the treatment which should consist of, (1) careful diagnostic study of each individual case to determine the nature of the defects in the man's personality or environment which are the causes of his abnormal behavior, and (2) the removal or correction of these causes, and, where this is impossible, the permanent segregation of the patient in an institution where his abnormal behavior tendencies will produce the minimum amount of harm.

CONCLUSION

The great task which today confronts us is the task of building an edifice, a social structure, in which we. individual men and women, are the structural units. In this task we have thus far met with very indifferent success, mainly because we have been unwise in our handling of the human material with which we have to build. We have proceeded with very little understanding of its possibilities or limitations or of the principles which should guide us in shaping it in our uses, and we have constantly subjected it to stresses and strains it was quite unfitted to bear. The result has been exactly what might have been expected. Whether we realize it or not what we are now striving to do, in the development of the science of social psychology, is to get away from the old blundering hit and miss methods of dealing with human nature, which have been followed heretofore. It is the function of the social psychologist to study the human material of which our social structure is to be built, to discover its capacites and limitations as well as the principles that should guide us in the handling of it, so that we may build more intelligently in the future than we have in the past.

That, of course, is looking at the matter from the broad sociological or objective viewpoint, but we may also look at it from the personal or subjective point of view. Thus seen, the goal toward which man's efforts are directed is the attainment of satisfaction. But this thing we call satisfaction, although we may try to achieve it by reaching out after wealth, power

or prestige, is not something which we can hope to find in the world about us. It is something which we must create within ourselves. It is what we are accustomed to speak of as a "state of mind." Looking at the matter from this personal viewpoint, what we are trying to do in building our science of social psychology is to determine the nature and significance of this "state of mind" which we call satisfaction and the lines along which we must proceed in our efforts to reach it.

The conclusion to which we come in this book is that the "state of mind" called satisfaction is at bottom a physiological condition in which a previously existing state of nervous tension has been relieved. We have found also that, broadly speaking, our abnormal or unsatisfactory mental reactions may be looked upon as of two kinds: (1) those in which we fail to achieve satisfaction or relief of tension, in which cases we have what we call a state of non-adjustment; and (2) those in which we get relief of tension, but in a wrong way, in which cases we have a state of mal-adjustment. The great problem of mental hygiene is the problem of preventing the occurrence of states both of mal-adjustment and of non-adjustment. It is the problem of enabling the great majority of people to find satisfaction or relief from tension, and to find it in those forms of behavior which are most conducive to their own individual welfare and the welfare of the social organism of which they are parts.



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