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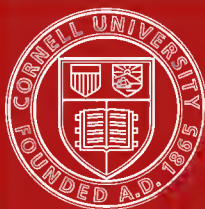
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PSYCHOTHERAPEUTICS

Psychotherapeutics

A SYMPOSIUM

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PREFACE

THIS series of papers originally formed a symposium and were read before the American Therapeutic Society at its annual meeting held at New Haven, May 6, 7, and 8, 1909. They are now published in this form through the courtesy of their authors and **THE JOURNAL OF ABNORMAL PSYCHOLOGY** in which they originally appeared.

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INTRODUCTION *

IN the endeavor to learn what subjects most interested the members of our society, and what, therefore, it would be best to place upon the program of this meeting, I wrote to almost all of them last winter, asking each to suggest topics for the three symposia, which it seemed desirable to arrange. To this appeal there were many responses, which indicated a wide range of interests and a gratifying alertness to descry new remedial measures. Several of my correspondents proposed psychotherapy; and this suggestion coincided perfectly with the purpose which I had already formed to have, if possible, a discussion on this subject, which has not previously been presented at our meetings, and is of such importance that every medical practitioner, whatever his favorite line of work, should be well grounded in its principles and familiar with its methods. Its presentation is generally a grotesque mixture of fact and fancy, of truth and error, the good and bad so speciously blended as to make the product at once alluring and dangerous to untrained minds. Indeed, most physicians and some neurologists have little appreciation of this branch of the healing art, and treat it cavalierly, if they deign to give it any consideration. The time seemed opportune for a careful, serious, scientific study of the subject by this society, the only national organization in America devoted exclusively to therapeutics. Furthermore, it was plain to me that this association, whose single purpose is so conspicuously declared

* [*Prefatory Note*: In his address as President of the American Therapeutic Society, Dr. Frederic Henry Gerrish discoursed on "The Therapeutic Value of Hypnotic Suggestion," beginning his essay with a statement of the origin and purpose of this symposium. These explanatory remarks serve so aptly as an introduction to this series of papers that, with permission, they have been transposed to this place. THE EDITOR.]

by its name, was under a peculiar obligation to the profession in the premises, and ought, as far as possible, to correct the misapprehensions which prevail concerning psychotherapy, and accord the sanction of its interest and influence to this valuable form of treatment. By great good fortune the aid of eight physicians was enlisted in this cause, all of whom are learned in modern psychology, expert in neurology, skilful in psychotherapy, and enthusiastic in expounding their favorite doctrines. They constitute a galaxy, which cannot be duplicated on this continent. Their symposium, which will occupy the entire afternoon to-morrow, will be most illuminating and well worthy of your earnest and studious attention.

Before it was known that a satisfactory symposium on psychotherapy could be arranged, I had determined to consider one phase of it in the address, which custom requires your president to make, and this for several reasons: it is as far as possible from the hackneyed; it ought to interest and be understood by every medical practitioner; it is the least comprehended of the psychotherapeutic methods; that to which the most strenuous and even savage opposition is habitually made, and that, therefore, which needs the most explanation and defense; it is almost uniformly treated unjustly because ignorantly; and finally, it has been the subject of so much study and observation on my own part that on no other topic of general medical importance did I feel as well qualified to speak to you with an approximation to authority. Many years ago, when I had a considerable general practice, I used this psychic agency very extensively for a long time; and while the concentration of my energies on another branch has necessitated the abandonment of this and some other lines of therapeutic activity, my interest in this subject is still strong, and my desire to have it understood and employed by the profession is undiminished. Therefore, I ask your attention for a little time this morning to the therapeutic value of hypnotic suggestion.

THE PSYCHOLOGICAL PRINCIPLES AND FIELD
OF PSYCHOTHERAPY

BY MORTON PRINCE, M.D.

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THE PSYCHOLOGICAL PRINCIPLES AND FIELD OF PSYCHOTHERAPY

SO much that is pseudo-scientific or mere platitude, so many misstatements have been set forth in the lay and medical press both by those who are the advocates of psychotherapy and by those who are its critics; so many erroneous ideas abound regarding both the nature of the disturbances of the mind and body which we seek to allay and the modes by which we endeavor to do it, that it is not to be wondered at that the facts of observation have been mistrusted and the methods of therapeutics have met with cynical criticism.

If we are to judge the soundness of the theory on which this mode of treatment is based, the field of its usefulness, its limitations, and the methods of its application, it is absolutely necessary that we should begin any discussion of psychotherapy, in a symposium of this kind, with an understanding of its underlying principles. There are certain facts of observation with which we may begin.

1. It will be agreed that common experience has shown that certain unhealthy habitual states of mind are apt to be accompanied by various derangements of the functions of the body. By "unhealthy" I would designate those which tend to misadapt a person to his environment, and among these habits or states of mind I would classify depressive or disruptive emotions and feelings; apprehensions, and fear of disease or of the consequences of business or social acts; fixed beliefs in fictitious disease; illogical doubts, scruples, and anxieties; habits of thought such as constant introspection, self-consciousness, the concentration of the attention on the physiological functions of the body, the expectation of ill consequences following any course of conduct, and so on. I need not go into details, for that

such conditions of mind are accompanied by derangements of the bodily functions is a fact of common knowledge which is confirmed by the experience of laymen as well as physicians and psychologists. Furthermore, in certain persons the modes of mental activity I have described if frequently repeated tend to become habits or habitual reactions to the environment that are not easily discarded. Often the mental states when persistent and intense become disabilities in themselves, constituting veritable psychoses, such as the anxiety psychosis, phobias of various kinds, morbid shyness and self-consciousness, association psychoses, etc. It is not to be affirmed that these unhealthy mental states of mind, even when they become habitual psychoses, are accompanied in every individual by disturbance of bodily functions, but the tendency is such in persons of a certain temperament and so-called nervous organization.)

2. It is also a fact of observation which is too well admitted to be mistrusted that, when healthy mental states are substituted for unhealthy ones of the character I have described, the functional derangements of the body tend to disappear.

The two classes of facts just enumerated become comprehensible when we remember that physiological and clinical observations have shown that temporary or passing mental states when accompanied by strong feeling tones often alter in a marked degree the various visceral functions. To mention but a few of these effects: The increase of the heart's action; the increase of the blood pressure; the variations of the vasomotor system; the increased muscular energy and feeling of wellbeing; the pouring out of the appetite juice and saliva (Pawlow), etc., through the influence of ideas associated with sthenic pleasurable emotions — all these have been attested by the observations of the physiologist and of the clinician. Per contra, the suppression of salivary and gastric secretions; the inhibition of peristalsis

and segmentation; the contraction and dilatation of the blood vessels; the increased functions of the sweat glands; the alteration in the rhythm and rapidity of the respiration and heart's action; the inhibition of many functions (gastro-intestinal); the decrease of muscular energy; the awakening of the sense and symptoms of fatigue; these and many such phenomena have been shown by carefully recorded tests to accompany the temporary excitation of ideas that are associated with depressing and painful emotions. That the persistence of such mental states should be accompanied by persistent disturbance of function is not to be wondered at.

3. A third class of facts must, I think, also be accepted as proven; namely, that emotional shocks are apt in certain persons to leave persisting after-effects manifested by disturbances of function of the nervous system. We need not inquire at this moment into the exact nature of these disturbances or give them a name. It is generally agreed that they are of the character which is called functional and owe their evolution to the principles which I will presently describe. In their most obtrusive form they are observed as the traumatic neuroses (psychoses).

4. A fourth class of facts is of importance for psychotherapeutics, viz.: In all persons to a certain extent and in some persons to a large extent suggested ideas tend to work themselves out to fulfilment. In certain diseased states (hysteria) and in certain artificial states (hypnosis) this tendency reaches a maximum and, consequently, by suggestion, intentionally given to persons in such conditions, disturbances of function can be produced artificially and removed again. Likewise ideas originating in the mind of the person himself may induce the same phenomena (auto-suggestion). Thus on the physiological side functional paralysis, contractures, anesthetics, spasms, etc.; and on the mental side amnesias, hallucinations, sleep, trains of ideas and feeling, etc., can be artificially produced and after-

wards modified and removed. In this statement I am not including the basic condition, whatever it may be, that gives rise to the increased suggestibility, but to the phenomena resulting from suggestion. How far that condition comes within the influence of suggestion is another question to which I will later return. The phenomena of suggestion have been determined by experiment over and over again, while the history of medicine testifies to the occurrence of such phenomena under accidental conditions. Indeed a distinguished neurologist (Babinski) has recently advanced the thesis, though as I believe erroneously, that all hysteria is nothing but a group of suggested symptoms.

We cannot be too cautious in generalizing from limited facts of this kind which are observed under special conditions, but the basic principle is of great importance and one that obviously can be made use of in psychotherapeutics. To what extent it can be used is another question that can only be determined by experience.

After this general statement of certain fundamental facts of observation I would call attention to certain principles, if not laws, which observation has shown govern the functioning of the nervous system.

I. COMPLEX FORMATION

It is a law that associated ideas, feelings, emotions, sensations, movements, visceral functions of whatever kind, tend, after constant repetition or when accompanied by strong emotion and feeling tones, and under other conditions, to become linked together into a system or group in such fashion that the stimulation of one element in the group stimulates the activity of the rest of the group. Such a group is conveniently called a *complex*, and as such I shall hereafter refer to it. This tendency to linking of functions obtains, whether the mental and physiological processes when linked form a complex which subserves the wellbeing of the organism and adapts the individual to his environment, or whether they form one which does not subserve the wellbeing of the individual, but misadapts him to his environment. In the former case the complex is called normal, in the latter abnormal. This is only another aspect of the well-accepted principle that pathological processes are normal processes functioning under altered conditions. Both are the expression of one and the same mechanism.

The linking of function may be almost entirely of ideas, as is expressed by the well-known psychological law of "association of ideas." Its pathological manifestations we see in so-called fixed ideas or obsessions. We see it also exemplified within normal limits in so-called moods, when certain large systems of ideas accompanied by strong emotion tones occupy the mental field to the exclusion of other systems which find it difficult to take possession of the field of consciousness. When such moods are developed and intensified to an extreme degree we have veritable pathological alterations of personality and even, it may be, multiple personality. But in moods besides association we meet with another principle in an exaggerated form, namely, *dissociation*. Of this I will presently speak.

The linking again may be of physiological processes as exemplified by synergesis of muscular movements. This is seen in the linked combination of muscles used in writing, piano playing, skilled use of tools, and implements of games (golf, tennis, etc.). Even the simpler movements of a finger, hand, or arm require the coaptative synergesis of several muscles. These synergetic movements are admittedly the result of education through repetition, although undoubtedly the compound cerebro-spinal reflexes so beautifully studied and brought to light by Sherrington are made use of.

The possibility of organizing physiological processes into memories by artificial means and linking them to psychological processes is shown very neatly by the extremely important experiments of Pawlow and his co-workers on the reflex stimulation of saliva in dogs. The facts which I wish here to recite are thus described by Pawlow:

“In the course of our experiments it appeared that all the phenomena of adaptation which we saw in the salivary glands under *physiological* conditions, such, for instance, as the introduction of the stimulating substances into the buccal cavity, re-appeared in exactly the same manner under the influence of psychological conditions — that is to say, when we merely drew the animal’s attention to the substances in question. Thus, when we pretended to throw pebbles into the dog’s mouth, or to cast in sand, or to pour in something disagreeable, or, finally, when we offered it this or that kind of food, a secretion either immediately appeared or it did not appear, in accordance with the properties of the substance which we had previously seen to regulate the quantity and nature of the juice when *physiologically* excited to flow. If we pretended to throw in sand, a watery saliva escaped from the mucous glands; if food, a slimy saliva, and if the food were dry — for example, dry bread — a large quantity of saliva flowed out, even when it excited no special interest on the part of the dog. When, on the other hand, a moist food was presented — for example, flesh, — much less saliva appeared than in the previous case, however eagerly the dog may have desired the food. This latter effect is particularly obvious in the case of the parotid gland.”*

More than this the psychical excitation may be part of a wider complex; everything that is in any way psychologically asso-

*The work of the Digestive Glands (English Translation), p. 152.

ciated with an object which physiologically excites the saliva reflex may also produce it,—the plate which customarily contains the food, the furniture upon which it stands, the person who brings it, even the sound of the voice and sound of the steps of this person.*

“Any ocular stimulus, any desired sound, any odor that might be selected, and the stimulation of any part of the skin, either by mechanical means or by the application of heat or cold, have in our hands never failed to stimulate the salivary glands, although they were all of them at one time supposed to be inefficient for such a purpose. This was accomplished by applying these stimuli simultaneously with the action of the salivary glands, this action having been evolved by the giving of certain kinds of food or by forcing certain substances into the dog’s mouth.”†

It is obvious that reflex excitation thus having been accomplished by the education of the nerve centers to a previously indifferent stimulus the reproduction of the process through this stimulus is in principle an act of physiological memory. [Prince: *The Unconscious*, *JOURNAL OF ABNORMAL PSYCHOLOGY*, Oct.—Nov., 1908.]

In man as an example may be cited the vesical reflex which may similarly, as is well known, be educated to react to the sound of running water.

These pathbreaking demonstrations of Pawlow furnish the key to the mechanism of many neuroses and psychoses, for indeed the educated reactions of the gastric and salivary glands to ordinarily indifferent stimuli from the environment and to psychical states are in reality nothing but an artificially created psycho-neurosis — a perversion of the normal reactions. Such artificial syndromes render comprehensible the mechanism of such neuroses as the well-known neurotic type of hay fever which belongs to the association neuroses.‡

In this type the whole physiological group of functions

*J. P. Pawlow: *Psychische Erregung der Speicheldrüsen*, *Ergebnisse der Physiologie*, 1904, I *Abteil*, p. 182.

†Huxley Lecture, *Br. Med. Jour.*, Oct. 6, 1906.

‡Morton Prince: *Association Neuroses*, *Journal of Nervous and Mental Disease*, May, 1891.

Morton Prince: *Hay Fever, Due to Nervous Influences, Occurring*

composing the neurosis — lachrymation, congestion of the mucous membranes and erectile tissues, secretions, cough, dyspnoea, etc.,—are linked into an automatically working mechanism by repetition and excited by a stimulus from the environment, e.g., the sight of a rose (which may be artificial) dust, sunlight, etc. Psychological expectation (auto-suggestion) of course prepares and keeps alive the association. This neurosis, composed mostly of physical symptoms, strikingly illustrates the principle of an educated functional disease and typifies many forms of neuroses.

In other psycho-neuroses the syndrome may be made up partly of psychological elements and partly of physical processes. This is seen in psychasthenia, where, for instance, fears, anxieties, scruples, confusion of thought, etc., are associated with all sorts of disturbances of the body,—dizziness, palpitation, tremor, perspiration—the whole constituting a phobia or anxiety neurosis.

Now without pursuing these illustrations further, the point I would like to emphasize is that the whole process by which these functional syndromes are created is educational. The education may be unintentional, i.e., accidental, as in the hay fever neurosis and those resulting from continued auto-suggestion; or it may be intentional, as in Pawlow's experiments on the digestive functions.

In these facts which I have only incompletely collated we have the manifestations of a broad general principle governing nervous processes in normal and abnormal life. It is the principle of pedagogy. Unless nervous processes could be artificially linked into coaptative synergetic systems adapted to a purpose, education in any field would be im-

— in Five Members of the same Family, *Annals of Gynæcology and Pediatrics*, 1895.

John E. Donley: Three Cases of Association Neuroses, *Boston Medical and Surgical Journal*, November 3, 1904; Study of Association Neuroses, *JOURNAL OF ABNORMAL PSYCHOLOGY*, Vol. II, p. 45.

possible. Intellectual acquisitions, from the repetition of the alphabet to a complete knowledge of a language or a science, and physiological acquisitions, from the use of a tool to the mastery of the piano or the vocal apparatus, not only would be unknown but would be unthinkable. The education of the mind and body depends upon the artificial synthesizing of functions into a complex adapted to an end or useful purpose. By the same principle functions may be synthesized by education into a complex which does not serve a useful purpose but rather is harmful to the individual. When this is the case we call it abnormal or a psycho-neurosis.

From this point of view how inadequate is the allegation which we often see stated that there is no such thing as a functional disease. What can be the conception of function which must be held by those who maintain such a theory is something that passes comprehension. A functional disease is a perversion of the normal processes brought about by some acute, intense experience or by repetition of an experience, i.e., by education. Theoretically it would follow that what can be done by education can be undone by the same method, and in practice we find this to be true. We shall presently see that there are often types of functional disease, but each is based on a perversion of the normal mechanism.

2. CONSERVATION

Another principle or tendency of the functioning of the nervous system has been firmly established by repeated experimentation and observation. Its importance for psychotherapy can hardly be exaggerated. It is this: All our experiences — anything that we have thought, seen, heard, or felt — tend to be *conserved* in such a way that they can be reproduced in a form approaching that of the original experience. Upon this memory depends. It is evident that we never could remember anything, that all experiences would be lost to consciousness, unless somehow and somewhere they were preserved, unless there was some physical arrangement for preserving them. In what *form* mental and other experiences are conserved we do not know, we can only theorize; but we must infer that some kind of residue or impression, chemical or physical, is left in the neurones in consequence of which they have a disposition to reproduce, when again stimulated, the original experience, whether an idea or physiological reaction. Hence these residues are called unconscious “residua” or “dispositions.” They have a hypothetical existence like the atoms and molecules of physics, but upon them the theory of memory is based. They may be likened to the impressions left in the wax cylinder or the magnetization of the wire of the phonograph by the spoken word. A complex of such residua is an “*unconscious complex.*”

But besides mental experiences all observation and experimentation show that pure physiological reactions associated with a given mental experience are conserved as a part of that association. The ideas, for example, belonging to a fright complex which originally were accompanied by palpitation of the heart, tremor, perspiration, muscular weakness, etc., when reproduced in memory are again accompanied by all these physiological reactions. So in Pawlow's

dogs the repeated experiences of a sensation of touch, accompanied with the physiological reactions of saliva, became a complex which was conserved and reproduced on subsequent occasions. The nervous system faithfully conserves and reproduces its experiences. Conservation is fundamental for education; for upon it the law of linking of complexes depends. It is obvious, for instance, that the education of coaptative synergies of muscular movements for purposeful acts would be impossible unless by the act of experience something capable of reproduction were impressed upon the neurones. Now the more often an experience is repeated and the stronger its emotional tone, the more likely it is to be conserved. Thus we repeat a verse or a rule of grammar until we know it by heart; or we repeat a movement until it becomes automatic.

But without repetition the elements of an experience may become linked and conserved. We undergo an emotional experience accompanied by various bodily reactions, as in a railroad accident, or we experience an abhorrent idea, or one of apprehension, or repulsive desire — in each case the nervous organism remembers the experience and upon proper stimulus can reproduce it. The emotional tone seems to intensify the impression on the brain organization.

Further, on the principle just described of the linking together of experiences into complexes, or associated groups of ideas, feelings, and physiological reactions, it is evident that large unconscious complexes, representing experiences, may be conserved and afterward reproduced as a whole by stimulation of the neuron residua. Observation shows that this is exactly what happens; and when these complexes are of an unhealthy kind we call them obsessions, phobias, etc., which in reality are nothing but experiences faithfully conserved as residua and reproduced from time to time. They may also be called association psychoses or neuroses on the basis of their mechanism.

Now another fact which has been proved by experimentation and observation: A complex, i.e., the unconscious residua of a complex, may be almost photographically conserved notwithstanding that we may not be able to voluntarily reproduce it, i.e., recall the original experience. It may be preserved in the unconscious neurons and be made to reproduce itself by some special device. E.g., a childhood experience may be entirely forgotten, yet that it may be still preserved is shown by the fact that it can be recalled in even all its minute details in hypnosis, dreams, etc. When recalled in dreams it often takes on a distorted form and, freed from a true appreciation of its meaning, it awakens the liveliest and often terrifying emotions. This latter is a matter of considerable significance, for the same principle plays a part in hysterical crises.

Another fact of observation needs to be grasped in all its significance, for it underlies one practical method of psychotherapy. The failure to appreciate this has led to misunderstandings of the principle of hypnotic suggestion and indirectly to a denial that such suggestions are of therapeutic value, while at the same time it is admitted that waking suggestion is efficacious. The fact is this: It makes no difference in what state complexes are formed, whether in every day life, in sleep, trance, dissociated personality, subconscious states or *hypnosis*, they are or may be equally firmly organized and conserved, and they are conserved whether we can voluntarily recall the experiences or not. Whether they are to become organized depends upon the mode and conditions under which the impression is made upon the mind or nervous system, but once organized they are conserved and become a part of our personality. We cannot get rid of them unless they are effaced by the corroding action of time or disease. We are accustomed to think of experiences belonging to such states as not belonging to ourselves. This is a mistake. All experiences, however, and wherever formed, if conserved, are a part of our-

selves and belong to the storehouse of our knowledge, though we may or may not afterwards draw upon that storehouse in practical life. We know that dreams which are not even remembered may be not only conserved but may influence the personality during quite long periods of time for good or for ill. I have now a case under observation where an idea complex occurring in a dream persisted after waking as an obsession, and has continued as such to the present time, a period of twelve years.

If a complex then of ideas, which make up points of view, attitudes of mind, beliefs, hopes, and aspirations, is once firmly formed and organized in hypnosis, it remains as a part of our personality.

Further, experimentation and clinical observation have conclusively proven that a complex of ideas formed in hypnosis, whether remembered when the personality is awake or not, *can* affect, modify, or determine the ideas, beliefs, feelings, emotions, etc., of the individual. The elements of the hypnotic complex enter the stream of thought of everyday life and modify it. Whether it will do so or not depends on various conditions. *How* it does so is another question which we cannot enter into here. *That* it may do so is a fact which can be proven as often as we wish to try the experiment. If this is so when there is complete amnesia after waking from hypnosis it can be understood how much more easily it may be the case when, as happens in nine tenths of such procedures, hypnosis is little more than a state of relaxation and abstraction and is not followed by amnesia, but, on the contrary, the whole hypnotic experience, all the ideas of the complex which were therein formed are remembered by the subject. When it is remembered that in hypnosis there is increased suggestibility, and that there may be induced a dissociation of all ideas which clash with and antagonize the suggested ideas, thereby allowing a new synthesis to be formed, we can see what a powerful influence can be exercised on the personality by this procedure.

3. DISSOCIATION

The next principle to which I would call your attention is one to which I have already referred above, namely *dissociation*. It is a general principle governing the normal psycho-nervous mechanism and therefore in a highly marked form only is pathological. A characteristic type is functional amnesia by which an epoch or a long period of time is blotted out of the memory. You will recall cases where following an emotional trauma the preceding hours or days or months are forgotten. The experiences of this time cannot be recalled as memories; but they are still preserved as brain residua, for they can be reproduced by artificial means through hypnosis and other methods. The amnesia for the hypnotic state and dreams after waking is also due to the same principle, as is also that following numerous other states which I cannot spare the time to mention here. What has happened in such conditions is a dissociation between the systems of brain residua which correspond to the psychological experiences. There is an inability to synthesize these systems into one personality and hence the amnesia.

Amnesia, of course, as a technical term, includes only ideas, but dissociated systems or complexes may include motor and sensory functions, and these we meet with as paralyses and anesthetics as observed in hysteria. That such dissociations are purely functional is shown by the fact that they can be produced by suggestion and removed (synthesis) by suggestion. When, as sometimes happens, a single symptom like paralysis and anesthesia cannot be removed by suggestion, if the whole dissociated system to which this symptom belongs is synthesized by suggestion the symptom, paralysis or anesthesia, disappears. Here again we have a fact important for psychotherapeutics,—the fact that we can produce dissociation and synthesis by suggestion,—for if, as experimental investigation has shown, the

basis of certain psycho-pathological conditions like hysteria is dissociation, we have a means at our command which may be used for the resynthesizing of the personality, i.e., the restoration of the normal individual. It is important not to lose sight of the fact that dissociation is a function of the normal mechanism of the mind and nervous system, and is made use of in normal life for the adaptation of the individual to the constant and ceaseless changes of the environment. It is the enormous exaggeration and perversion of this dissociating mechanism that constitutes abnormality. A suggested idea simply stimulates and makes use of the normal mechanism, otherwise it can have no effect.

Among the normal phenomena of dissociation are to be reckoned temporary and some permanent forms of forgetfulness, the limitation of the field of consciousness in absent-mindedness, moods, anger, and other strong emotional states and sleep. Amongst the artificial and pathological conditions characterizing largely or chiefly the dissociations are hypnotic and hypnoidal states; suggested and hysterical amnesia, paralyses, contractures, anesthesiæ, etc.; somnambulism, trance, psycholeptic attacks, etc.

Emotion, again, is a powerful factor in producing dissociation as well as the linking and conservation of complexes.

In the so-called neurasthenic state and hysteria dissociation plays a very important part. All cases of hysteria and many of neurasthenia are, as I see the matter, cases of dissociated personality,* but it would carry us too far from our main subject to discuss this aspect of the matter at this time.

Subconscious Ideas. There are certain important phenomena of dissociation and conservation that ought not to be omitted, considering the important part which they sometimes play, and the large amount of attention which they have received.

*Morton Prince: Hysteria from the Point of View of Dissociated Personality, JOURNAL OF ABNORMAL PSYCHOLOGY, October, 1906.

Γ When the conserved residua of an unconscious complex are stimulated, this complex becomes a conscious memory of which we are aware, but sometimes something else happens—it becomes a conscious memory of which we are not aware. Ideas are awakened, but we are not aware of them. These are what are called subconscious, or better, co-conscious ideas, which means ideas dissociated from, split off from the main consciousness. This is an interpretation of certain phenomena belonging to abnormal psychology which would carry us too far afield to consider here; but the evidence is so strong that it is impossible to resist the conclusion. Now when this is the case such ideas often resemble dreams—fixed dreams. The ideas, like dreams freed from the control of the personal consciousness which has no appreciation of their existence or meaning, take on a distorted form, and when accompanied by emotions acquire all the characteristics of nightmares—subconscious nightmares they may be called. That they should produce psychological and mental disturbances is not to be wondered at. This is what is sometimes found in hysteria when they produce the so-called hysterical crises. To get rid of such subconscious nightmares must plainly be an object for psychotherapy. A simple type of the dissociated co-conscious idea is found in hysterical anesthesia. Here there is no absolute anesthesia. The lost tactile sensations are only split off from the personal consciousness and, although the patient is unaware of them, they are preserved as co-conscious perceptions or tactual ideas. To resynthesize these perceptions with the personal consciousness is to make the patient aware of them and remove the anesthesia.

I pass over as a controversial matter the mechanism by which co-conscious ideas are dissociated from the main content of the personal consciousness, i.e., by which the person becomes no longer aware of them. Differing views are maintained. By some it is held that in disease, as in

hysteria, the splitting of the mind is due to fatigue and emotional trauma; by others that it is due to the direct volitional repression, or the pushing out of consciousness of ideas which are unacceptable to the individual. But whichever mechanism is the correct one, whether dissociation is brought about by voluntarily repressing painful or unacceptable ideas or whether by an over-intense stimulus from an emotional trauma to which the individual is not adapted, or by fatigue, in any case the pathological dissociation is but an exaggeration or perversion of a normal dissociating mechanism. That it still remains functional is shown by the fact that a functional stimulus (suggestion) is capable of producing it and removing it. We have here a type of functional disease which is somewhat different in form from that which results from the educational process, although this may come later into play in evolving subsidiary symptoms. I hardly need point out that the secondary effects of dissociation — hysterical stigmata, etc.— are but the products of the normal functioning of the mutilated and dissociated fragments of the personality.

4. AUTOMATISM

In the mechanism of normal psychic life, automatism plays a much larger part than is generally realized. This principle tends to the economy of effort. We see it in habit actions and absent-minded acts when our attention is directed to some other train of thought than that engaged in the actions. Even language symbols tend to become associated into set phrases and formulas, which tend to become automatic and labor-saving devices for the expression of thought. In expletives and explosive phrases which almost unconsciously give vent to our feelings we easily recognize these language automatisms. Less conspicuous as automatism is the activity of complexes of ideas, however formed, which function more or less automatically as a group and determine the direction of our thought and its content. The association experiments have done much to bring to light this automatic activity of complexes, and we are under deep obligations to Freud, Bleuler, and Jung for having directed our attention to this principle and emphasized these particular facts. In pathological fixed ideas which rush into consciousness unbidden and undesired we can clearly see this automatic activity. So in establishing fixed habits of thought, in forming deeply rooted ideas and points of view, beliefs, etc., we form complexes which are capable of more or less autonomous action.

When psychological and physiological processes become dissociated, and thereby freed from the inhibitory control of the personal consciousness, automatism is observed in its most highly developed form. The split off groups of psychological or physiological elements acquire what may be called a hyper-excitability and are capable of extremely independent functioning. The manifestations may be in the form of subconscious ideas, hallucinations (sensory automatisms), tics, spasms, convulsions, contractures (motor automatisms),

etc. Primarily such pathological phenomena depend upon dissociation of the nervous organism and the stimulus by some excitation from within or without of the nervous mechanism involved. With reassociation and cessation of stimulus the automatisms logically cease. The aim of psychotherapy, therefore, must plainly be to reassociate the split up personality, and to form such healthy complexes of ideas as will not stimulate the undesired complexes, but by their automatic activity will contribute to the well-being of the individual and adapt him to his environment.

5. EMOTIONAL ENERGY

It is a fact of observation that intense sthenic emotions and feelings are accompanied by an increase of the vital functions while, per contra, certain depressive emotions and feelings are accompanied by a decrease of the vital functions. Further, it is generally recognized by psychologists that most, if not all, ideas have a feeling tone attached to them. Consequently if certain complexes of ideas which have intense sthenic feeling tones are brought into the personal consciousness there is awakened a state of energy, a feeling of wellbeing and capacity, and an invigoration of the whole organism. If, on the other hand, complexes of ideas which have depressive or distressing feeling tones are brought into the personal consciousness, the contrary effect is produced. Stating the same fact in another way, exalting emotions have an intense synthesizing effect while depressing emotions have a disintegrating effect. This last we see exemplified in emotional trauma (traumatic neuroses) where sometimes a complete dissociation or splitting of the personality occurs being manifested by altered personality, anesthesia, paralysis, etc. Every one who has studied the hypnotic states must have observed these phenomena experimentally produced. With the inrushing of depressive memories or ideas whether originating autochthonously in the associations of the mind of the patient, or accidentally or intentionally suggested by the experimenter, there is suddenly developed a condition of fatigue, illbeing, and disintegration, followed after waking by a return or accentuation of all the neurasthenic symptoms. If on the other hand exalting ideas and memories are introduced and brought into the limelight of attention there is almost a magical reversal of the process. The patient feels strong and energetic, the neurasthenic symptoms disappear, and he exhibits a capacity for sustained effort. He becomes revitalized so to speak. This, I believe, is the

secret of those changes of character and physical capacity which William James has so brilliantly illuminated in his essay on the "Energies of Men." Complexes of ideas accompanied by strong feeling tones which have long lain fallow are brought out of their dormant abode and made to become a part of the working force of the mental factory.

In this principle, then, we see a mechanism which tends to the development of the neuroses and psychoses on the one hand, and to states of invigorating health on the other, according as whether disintegrating or synthesizing emotions and feelings are brought into the conscious field of the individual. In the hypnoidal state of Sidis and in hypnosis it is particularly easy to bring out of the dormant consciousness into this active central field memories and ideas which have been pushed aside or upon which the individual has lost his grip by reason of their having become dissociated by fatigue, friction with the environment, or by other disintegrating factors. It is thus easy to modify the personality at will by measures which make use of this principle. The transformation effected by the development of energy in this way is often most striking and is often commented upon by the patient. On the other hand, I have observed that when for any reason depressive memories and such idea-complexes enter and remain in the mind of the hypnotized subject, no matter what suggestions are given, the patient on waking becomes or remains correspondingly depressed and neurasthenic.

I have thus far briefly formulated the main psychological principles upon which psychotherapy rests. The point I wish to bring out into strong relief is that these principles or tendencies govern the normal functioning of the psychonervous system, and that it is the perversion of these tendencies which constitute functional disease; that is to say reactions which misadapt the individual to his environment and which result from normal functioning under conditions

to which the individual is not adapted. Functional disease is therefore a process of perverted functioning. Conversely psychotherapy makes use of these same principles or tendencies to re-adapt the individual to his environment, to re-educate him to healthy reactions.

Psychotherapy simply makes use of the normal mechanism of the mind and body, (of the physiological machinery) to bring about a restitution of the disordered functions and restore the individual to health. Thus suggestion can only act by stimulating the physiological mechanism, it can only make use of machinery already provided; it cannot create anything anew, do anything that is not in accord with the laws of the nervous system. As a method psychotherapy is comparable in every way to what is now known as physiological therapeutics which has taken such an important place in modern treatment in internal medicine.

I fear my exposition has been too brief to enable these principles to be clearly grasped by those who have not systematically studied and observed the phenomena of abnormal psychology. The field of investigation is a wide one, and to thoroughly comprehend the meaning of the facts that are to be observed one must make himself familiar with them at first hand as one would expect to do in bacteriology if he would understand the principles of infectious disease and immunity.

The psychological principles I have attempted to elucidate may be summed up as: First, Complex formation; second, Conservatism; third, Dissociation; fourth, Automatism; fifth, Emotional Energy.

Each of these principles is made use of by psychotherapy in greater or less degree according to the conditions presented. If we are dealing with a simple psycho-neurosis of the neurasthenic type where the disturbance can be traced to the first class of facts I have mentioned,—i.e., to unhealthy ideas, self-examination, worry, erroneous beliefs in and

apprehension of disease with the depressive emotional tones that go with such states, to habits of introspection and concentration of the mind on the functions of the body, etc., — the main principle to be made use of is the organization and substitution of healthy complexes in place of the unhealthy ones. This is not a simple procedure, but an art. It often requires all the skill which can be acquired from a knowledge of human nature, of life, the data of abnormal psychology, and, above all, from a recognition of the principles above formulated. The point of view, the attitude of mind, the beliefs, the habits of thought, must be modified by the introduction of new points of view, of data previously unknown to the patient and drawn from the wider experience of the physician; by instruction in the meaning of symptoms and in their organization and causes; by the suggestion of expectations that justly may be fulfilled; of ambitions that ought rightfully to be entertained; of duties to be assumed but too long neglected; of confidence and hope; and, above all, by the suggestion of the emotion and joy that go with success and a rosyate vista of a new life. There is no fact of life that does not have more than one aspect, no conduct that does not have more than one interpretation, no judgment that does not have an alternative, no conduct that does not have more than one relation. Thus the old systems of ideas carrying with them apprehensions, anxieties, and depressive emotions are modified by being interwoven with new ones, and new systems of ideas or complexes are artfully created and substituted for the old. These systems should be such as will stimulate healthy reactions of the body in place of the unhealthy perverted reactions.

Finally the whole complex, by repetition, emphasis, and the stimulus of emotion, is firmly linked and organized until it becomes conserved as unconscious brain residua and a part of the individual's personality. If thus conserved it will be reproduced whenever stimulated. To be effective ideas

must be fixed, conserved, else they become the sport of every passing thought and feeling. But for this they must be accepted and to be accepted they must be the truth, as they should be on ethical and rationalistic grounds. Every person can bear the truth but it should be the whole truth and not half the truth or only one aspect of the truth or the truth that allows erroneous interpretations. All this therapeutic procedure of course means the education, or perhaps better, the re-education of the patient. It is the same process that in Pawlow's dogs led to the secretion of gastric juice and saliva by educated reactions to the environment, and in hay fever neurotics to the creation of the coryza complex as a perverted reaction to mental and physical stimuli. Only the therapeutic process is the association through education of healthy ideas and stimuli that adapt the individual to his environment.

THE RELATIVE ADVANTAGES OF EDUCATION IN HYPNOSIS AND
IN THE WAKING STATE

This is a much discussed question. One meets often with assertions rather than arguments which are made with a warmth and acrimony of feeling that betokens prejudice rather than a masterly knowledge of the subject. From the point of view of formation of complexes it must be evident, if the psychological principles which I have set forth are well grounded, that it matters little in what state these therapeutic systems of ideas are formed, whether in hypnosis or in the waking state. When once formed they become a part of our personality and take part in swelling, modifying, and directing the stream of mental life. This can readily be apprehended when it is remembered that in ninety per cent of cases so-called hypnosis is little more, as I have already said, than a condition of abstraction with relaxation in which suggestibility is heightened. On returning to the full waking state there is complete memory of the whole hypnotic episode, so that the suggested ideas are accurately remembered. As a matter of fact hypnosis is only necessary in a small minority of cases. In obstinate cases hypnosis has the advantage that, suggestibility being increased and antagonistic ideas being dissociated or inhibited, the new ideas are more readily accepted and the complexes more easily and firmly organized. Then after waking the patient who remembers the suggested complexes finds that his whole state of mind is modified.

But even when amnesia follows after waking the result is the same. Then* on examination we find, however complicated, that the suggested ideas and emotions weave themselves into the thoughts of the conscious individual and modify them; or the emotions, alone, may intrude themselves and determine the mood and the whole psychic con-

*Cf. *The Unconscious*, JOURNAL OF ABNORMAL PSYCHOLOGY, April—May, 1909.

tent. To take an actual case, I suggest to B. C. A., in hypnosis, ideas of wellbeing, of recovery from her infirmity; I picture a future roseate with hope, stimulate her ambitions with suggestions of duties to be performed, deeds to be accomplished. With all this there goes an emotional tone of exaltation which takes the place of the depression and of the sense of failure previously present. This emotional tone gives increased energy to her organization, revitalizing, as it were, her psycho-physiological processes. The whole I weave artfully and designedly into a complex. Whatever neurotic symptoms were previously present, I do not allow to enter this complex. Indeed, the complex is such that they are incompatible with it. The headache, nausea, and other bodily discomforts, pure functional disturbances in this instance, are dissociated and cease to torment. After "waking," there is complete amnesia for the complex. Yet it is still organized, for it can be recovered again in hypnosis. It is simply dormant. But the emotional tone still persists after waking and invades the personal synthesis which takes on a correspondingly ecstatic tone. The aspect of her environment, her conception of her relation to the world, and her past, present, and future mental life have become colored, so to speak, by the new feeling, as if under a new light. But more than this, new syntheses have been formed with new tones. If we probe deep enough we find that many ideas of the dormant complex have, through association with the environment (*point de repère*), become interwoven with those of the previous personal consciousness and given all a new meaning. A moment ago [her view was that] she was an invalid, incapacitated, exiled from her social and family life, etc. What was there to look forward to? Now: What of that? She is infinitely better; what a tremendous gain; at such a rate of progress in a short time a new life will be open to her, etc.,—a radically new point of view. Now, too, she feels buoyant with health and energy, ready to start afresh

on her crusade for health and life. Her neurotic symptoms have vanished. Such is the change that she gratefully speaks of it as the work of a wizard. But the mechanism of the transformation is simple enough. The exaltation, artificially suggested in hypnosis, persists, altering the trend of her ideas and giving new energy. The perceptions of her environment, cognition of herself, etc., have entered into new syntheses which the introduction of new *ideas*, new points of view have developed; thus the content of her ideas has taken a definite precise shape. Whence came these new ideas? They seem to her to have come miraculously, for she has forgotten the hypnotic complex. But forgetting an experience is not equivalent to its not having happened or to that experience not having been a part of our own psychic life. The hypnotic consciousness remains a part of one's self (as a psychological complex), however absolutely we have lost awareness of it. Its experiences become fixed though dormant, just as do the experiences of our personal conscious life. . . . The mechanism is the same.

The following letter from this patient, received by chance after these paragraphs were written, well expresses the psychological conditions following hypnotic suggestion.

"Something has happened to me — I have a new point of view. I don't know what has changed me so all at once, but it is as if scales had fallen from my eyes; I see things differently. That affair at L — was nothing to be ashamed of, Dr. Prince. I showed none of the common sense which I really possess; I regret it bitterly; but I was not myself and even as [it was] I did nothing to be ashamed of — quite the contrary, indeed. . . . Anyway, for some reason — I don't know why, but perhaps you do — I have regained my own self-respect and find to my amazement that I need never have lost it. You know what I was a year ago — you know what I am now; not much to be proud of, perhaps, but I am the work of your hands and a great im-

provement on [my poor old self]. I owe you what is worth far more than life itself . . . namely, the *desire* to live. You have given me life and you have given me something to fill it with . . . I feel more like myself than for a long time. I am 'my own man again' so to say, and if you keep me and help me a little longer I shall be well."

When dissociation exists it becomes self-evident that a restoration of the healthy organization can only be attained by a reassociation of the dissociated functions. It is obvious that subconscious ideas, when disturbing, need either to be so modified that they cease to function, i.e., to be subconscious and dissociated, or to be reintegrated with the personal consciousness, i.e., brought into the full light of conscious knowledge, and thereby realized in all their meaning, rearranged and modified; just as a dream becomes modified and loses its psychological meaning and its physiological effects after waking with a full awareness of its falsity. Disintegrated personality needs to be reassociated into a unified complete personality, with full possession of its faculties and functions, etc. There are many empirical ways of doing this, physical and psychological, but amongst the methods experience has shown that there are several psychological procedures which are rational and prove efficacious when physical and empirical methods fail. So-called psycho-analysis, suggestion in the waking state and abstraction, in so-called hypnoidal states and hypnosis, mental and physical hygiene, all have proved to be efficient in bringing about a reintegration of dissociated functions. But all these methods are only different forms of education.

The principle of dissociation and association is exemplified by the process of hypnotizing and awaking an individual. Hypnosis is dissociation; in awaking a person what we do is to re-synthesize the personality and to restore the normally functioning organism.

Finally I would point out that a prerequisite for such psychotherapeutic measures is a preliminary painstaking and exhaustive analysis of the symptoms, of the genesis of the psychosis, of the logical relation of the symptoms to each other and to mental and external causes, of the pathology of the symptoms and their significance; what are due to auto-suggestion, what to habit or education, what to fatigue, what to true organic disease— in short the complete meaning or philosophy of the disease must be determined. If, as is often the case, incidents in which the psychosis developed or which are the subconscious cause of repeated attacks are forgotten, the memories of these should be revived by one or the other of various technical methods of psycho-analysis. Only through a knowledge gained in this way in each individual case can a rational psychotherapy be undertaken. After such an analysis it is generally surprising to find that what at first seemed a mere chaos of unrelated symptoms will turn out to be governed by law and order.

HYSTERIA

When we come to deal with the more profound psychoneurotic states, those of the severer hysterias, a somewhat different therapeutic procedure is usually required. Here we have to do with dissociations, often of a profound type, with paralysis, anesthesia, alterations of personality and subconscious ideas of which the patient is unaware, or unconscious automatism freed from the inhibitions of a fully synthesized personality. For psychotherapy reassociation of the dissociated functions is the essential principle, although again the formation of new healthy complexes is necessary to maintain the association. Our ingenuity is often taxed to the utmost in devising methods to reintegrate the psychophysiological personality. Various technical devices can be made use of. I cannot go into this here, as I am only dealing with principles. Suffice it to say that sometimes reintegration can be formed in a special state of hypnosis; sometimes by suggestion in hypnosis or to the waking personality; sometimes by recalling to the full light of the waking consciousness the subconscious ideas or "dreams"; sometimes by recalling them to the full light of the hypnotic consciousness, etc. By doing this the subconscious "dream" or fixed idea — generally a memory of some emotional incident — becomes fully recognized as to its meaning and character, and thereby interwoven with the logical processes of waking thought; in other words, synthesized into a new, healthy complex. We see the same principle when, on waking from a nightmare, not only the dream but the *realization that it was a dream* comes into the full light of consciousness. With this realization the terrors and all the bodily disturbances cease.

I have pointed out that one theory of the mechanism by which ideas become dissociated is that of voluntary repression; the individual pushes out of his consciousness ideas which are

painful and unacceptable. Consequently it is held by those who adopt this theory that those dissociated ideas must be resynthesized with the personality, i.e., brought to the full light of awareness — to effect a complete and permanent cure, and that the *mere act of making the patient aware of them* effects the cure. To accomplish this a special form of psycho-analysis (Freud's) has been devised, not only to discover the dissociated ideas, but to synthesize them.

That this method is often useful and efficacious will be admitted, but its mode of working, as I interpret it, is not that which those who employ it suppose. Like other methods too, it is not always successful nor is it the only effective one.

Thus it is often not difficult by suggestion, with or without hypnosis, along the lines I have described, to effect a cure although the patient never becomes aware of the troubling ideas. More than this, it is worth while insisting that if psycho-analysis merely synthesizes the repressed ideas theoretically it is not the logical method to be employed. The assumed mechanism would require something more. The repressed ideas are pushed into the subconscious because they are in conflict with other wishes and feelings of the individual; the latter rebels against and will not tolerate them. Now if nothing more were done than to bring them back into the consciousness of the individual he still would not tolerate them and would push them out again. Theoretically, therefore, the method would be useless. But in fact the patient does, we will say, tolerate the ideas that before were unbearable; the conflict ceases. Empirically the method works. Why? The reason is simple: the complex of ideas has been changed by the technique of psycho-analysis and by the very act of bringing to the light of consciousness the repressed ideas—an elaborate process. We do more than this: we give the patient an insight into the meaning of his trouble; we let him see new points of view; we

introduce new ideas and feelings into his complexes; in short, re-educate him. It is impossible to practice psychoanalysis without doing this; hence, it is nothing more than a special form of the educational treatment and has the same therapeutic value.

When the hysterical manifestations are due to the functioning of dissociated subconscious ideas it is not always necessary, as some writers insist, to recall those ideas to the personal waking consciousness. It is enough to break up the subconscious complex or to suggest antagonistic ideas, or to resynthesize the ideas, in the manner already described, into a healthy complex which gives a true appreciation of the facts which they represent. This can be done in hypnosis. After waking, though amnesia for the previous subconscious ideas may persist, the symptoms disappear, for those harmful subconscious ideas which caused the trouble have ceased to exist.

Some hysterical attacks are what have been aptly called by Boris Sidis recurrent mental and psychomotor states; that is, dissociations of the personality and the reproduction of systems of ideas which originally were an emotional mental accident that the patient once upon a time experienced. These experiences have been conserved as brain residua and come to life again from time to time as attacks. If a rearrangement of these conserved experiences, by education along the lines already laid down, can be brought about, a disappearance of the attacks may be expected.

Hysterical attacks that are due to auto-suggestion can be removed, as a rule, by simple suggestion. Automatism, like contractures, tics, spasms, convulsions and crises, tend to cease with the restoration of the fully synthesized personality if the dissociating apprehensions and emotions have been removed and healthy complexes have been substituted therefor.

Whatever technical methods are employed, it will be found that they are all based on the psychological principles which have been above discussed.

It is needless to insist that a preliminary psycho-analysis is, as always in psychotherapy, a prerequisite procedure.

PSYCHASTHENIA AND OBSESSIONS

In so-called psychasthenia we are dealing with a somewhat different pathological condition from hysteria. Here we have recurrent mental states in the form of obsessions, represented by doubts, scruples, anxieties, phobias, impulses, etc. The obsessional ideas are preserved as brain residua. When stimulated, instead of becoming subconscious, they enter the consciousness of the principal personality. The obsessional ideas occur in the form of attacks of which psycho-analysis will not only show the origin and meaning but that the attack in each instance is excited by association with some related thought which has flashed into the mind or other stimulus from the environment. Apprehension and expectation, acting as auto-suggestion, play in my experience a predisposing part in the mechanism. The pathology is too complex to go into here, but the same psychological principles underlie the psychotherapy, viz., psycho-analysis and education, the latter having for an end the substitution of healthy complexes for those organized systems of associated ideas which have become conserved as residua in the unconscious and which reproduce themselves as automatism over and over again.

THE THERAPEUTIC VALUE OF HYPNOTIC
SUGGESTION

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THE THERAPEUTIC VALUE OF HYPNOTIC SUGGESTION

IT is important that hypnotic suggestion should not be confounded with other psychotherapeutic methods — it is only one of various psychic means by which curative results can be attained; and in my advocacy of it as a valuable remedy there is no intention to disparage or belittle any of the other psychotherapeutic methods, or even to institute a comparison between it and them. We ought to have a scientific acquaintance with all of them, so that we can select whatever method is best adapted to any case in which some psychic remedy is needed. It is pertinent to remark at this point that, as hypnotic suggestion is treated in this essay, it will not be included in the topics of the symposium on psychotherapy.

Although the history of hypnotism is intensely interesting, nothing of it will be given here, as our time is quite sufficiently occupied with more important matters. For the same reason the various theories which have been advanced to account for its phenomena will not be rehearsed. Even that evolved by modern psychology will not be given, as Dr. Prince, who will open the symposium, is to discourse upon the principles involved in the different phases of the broad subject, and may be relied on to do the work in a masterly way. My humbler task will be to set forth the practical usefulness of hypnotism in the daily routine of medical work, and to clear away many misconceptions which have prevented the general employment of this agency.

We are all amenable to suggestion in greater or smaller degree. The training of the infant is almost wholly by suggestion. To a less but yet to a very important extent the same method is operative on the older child — the example of his associates in the family or out of it is more potent in the formation of his character and habits than are

all the precepts that are dinned into him. As one's years increase the susceptibility to suggestion gradually diminishes, apparently just in proportion to the loss of naturalness and the cultivation of the artificial restraints which convention imposes. Suggestibility is generally commensurate with simplicity of nature. In full maturity we have become so cautious that we involuntarily distrust the suggestions that come to us — an incredulous, perhaps even a cynical, element has crept into our natures, which prompts resistance and demands that reason shall be convinced. And yet some suggestibility remains — the hardest headed of us can be reached by a sufficiently frequent and skilful repetition of a suggestion. This suggestibility is the basis of the benefit that undoubtedly comes to the patient from the cheerfulness of the physician, from his heartening words, from his confident assurance that recovery is ahead, from his strong personality and appearance of wellbeing — for health is, in a measure, catching, as well as disease — from his irradiation of strength, of comfort, and of courage. Now, in the condition which is known as hypnosis, suggestibility is marvelously increased. Suggestions which in the ordinary condition of the personality are unheeded, in the hypnotic state are accepted with avidity. So large is this hospitality that almost any suggestion will be welcomed that is not repugnant to the moral sense of the hypnotized person. This eagerness for suggestion may be taken advantage of in therapeutics. If the patient is the victim of a disease to which the name "functional" is usually applied, and can be hypnotized, he has a good chance of getting relief through the agency of suggestion; if his malady is organic, a cure is not to be expected. (The words "functional" and "organic" are here used in their ordinary sense, as a matter of convenience.) For example, the patient has insomnia, not due to any appreciable structural change. He is hypnotized, and the suggestion is made that he will go to sleep as soon as

he goes to bed, and remain in slumber a given number of hours. He is then brought out of the hypnotic state, and experiences no immediate effect of the treatment. Perhaps he is utterly incredulous, and derides the idea that a noticeable impression will follow the process. But, if he is as suggestible as the average, when he goes to bed, he tumbles into sleep, and continues in sleep substantially as predicted; or, if sleep has been suggested for a particular hour, he goes to sleep when the time comes, unless he makes the most strenuous efforts to keep awake and beat off his drowsiness.

The hypnotic state is induced not because it is in itself curative, but because that condition is peculiarly favorable to the reception and retention of suggestions. It is a question of the relation of soil and seed. In the ordinary waking state the seed of suggestion falls on the stony ground of indifference, which is hostile to its development, or on ground where the rank weeds of conventional usage spring up and choke it; but the hypnotic condition furnishes the richest kind of loam for suggestions, and in it they take root and rapidly grow up and bear fruit abundantly.

Hypnosis should not be regarded as an abnormal, a pathologic condition — it is simply unusual. Individuals differ widely in their capacity for hypnotization, for at one extreme are some who cannot be put into that state, and at the other end of the scale are some who seem to be almost hypnotized all of the time.

METHODS OF INDUCING HYPNOSIS

Hypnosis may be induced in various ways. That which will be described has proved serviceable. (It is assumed that the patient consents to be hypnotized, and, more than that, is willing to co-operate with the physician.) First, the process is explained to the patient, who probably has hardly a single correct idea on the subject, and needs to have his misconceptions removed. He is told a number of things, such as follow:

1. That all persons are more or less amenable to suggestion in the ordinary waking condition, as is illustrated in many familiar ways, such as gaping involuntarily, even against one's strenuous attempts to avoid it, on seeing another yawn; beating time unconsciously on hearing the measured throb of martial music; becoming wildly excited for no other reason than that one's companions are panic-stricken; and, contrariwise, having one's fears allayed by the tranquil appearance of his associates in a terrible emergency.

2. That, in some way, the mental mechanism of which is not thoroughly understood, when a person is hypnotized, he accepts suggestions more readily than when he is in his usual condition; and that hypnosis is induced only for the purpose of taking advantage of this fact, and thus enabling the patient to receive the benefit of suggestions, to which, in his ordinary mental state, he is practically impervious.

3. That no harm to the patient in any direction will result from the hypnotizing, either immediately or at any future time.

4. That the patient is not desired to surrender his will, but, on the contrary, is asked to exercise it in co-operation with the physician.

5. That he is not to expect to lose consciousness, for the lighter degrees of hypnosis are sufficient for the accomplishment of remedial results in all but a minority of cases.

6. That the word "sleep" in this connection is a term of convenience, and means only that early stage of sleep that is consistent with consciousness: a transitional stage which any one who has analyzed his sensations has recognized as a brief period immediately preceding the unconsciousness of slumber, when by an effort he can become wide-awake, or by lying still and guarding his mind against exciting thoughts can insure speedy and perfect sleep.

7. That there will be nothing unpleasant in the process — no shock, no electric-like thrill, no startling sensation; but that, if the attempt is successful, he will experience a feeling as if tension was relaxed, a mental and physical calm, a soothing drowsiness.

8. That he must not be discouraged by complete failure at the first attempt, as it often happens that the excitement, incident to the novelty of the situation, defeats the efforts of both parties; and that, when he perceives, as he will from observing the process pursued, that there is nothing ungentle or in any way objectionable about it, there will probably be no difficulty in achieving success.

9. That the suggestions will be made more emphatically than will seem to him necessary; for example, if a night's sleep is desired, it will be suggested that he will get twelve hours, this being on the principle followed by a marksman in putting up his sight for a long shot. If the barrel of the weapon is directed exactly at the bull's-eye, the force of gravity will draw the projectile downward, and the mark will be hit below the center, if at all. So, too, allowance must be made for the downward deflection of a suggestion in an inveterate or otherwise difficult case. As the sight of the rifle must be raised so that the barrel is aimed above the mark, so the suggestion must be exaggerated, must be aimed high, in order to reach the desired point.

10. That the patient must not contradict or resist, and must not try to open his eyes until permission is given him.

The patient, thus instructed, then lies down on a couch, or seats himself in a lounging chair, in which he has a comfortable rest for his head. He is told to concentrate his attention upon sleep, to try to go to sleep; and, to assist him in this effort by preventing his taking in distracting ideas through his eyes, as they wander around the room and see the pictures, books, and furniture, he is asked to fix his gaze upon some indifferent object, as, for example, the finger of the physician, which is held a foot or so from the face of the patient. He is instructed not to try to keep his eyes open, and not to close them voluntarily, but merely to let the lids go as they will. The physician places his free hand upon the forehead of the patient, and, by a continuous stream of quiet, monotonous talk, encourages the patient in his effort to go to sleep. For example, he says, "Try to sleep, think of nothing but sleep, keep your thoughts fixed upon going to sleep. Your lids are heavy, they are drooping, you are going to sleep. Every moment you are getting more drowsy; you feel the sleep stealing over you. The lids are closing; you are almost asleep. Now the eyes have closed; you have gone to sleep." Meantime a little pressure has been made upon the brows; and, when the lids slip down and cover the eyes, they are gently stroked. The hand is kept upon the forehead, and the physician enforces his assurances by some such words as these: "You are asleep, though you have not lost consciousness. You hear my voice, the sounds in the house, the noises in the street — and yet you are asleep. You feel the sleep all through you — head, trunk, and limbs are all heavy with sleep. Your nerves are all relaxed, there is no tension anywhere, you are perfectly tranquilized. You will not move a muscle, except to breathe, until I bid you wake."

This process may take a minute, or it may occupy a quarter hour; but when it is completed the patient is ready for the remedial suggestions — the soil is prepared for the

seed. Then the physician makes the necessary suggestions, speaking them plainly, putting them strongly, repeating them, emphasizing them in the most positive and insistent way. Generally he cannot tell how much effect has been produced; but something can be judged by the degree of quietude of the patient. If he is perfectly still, the probability is that all is working well; but certain limited movements are not inconsistent with fine success. A constant quivering of the lids is sometimes observed in the profoundest stage of hypnosis; but swallowing commonly indicates that only a slight degree has been reached.

Having finished the remedial suggestions, others are made to the effect that the hypnotic state can be induced more readily at each subsequent session, that the patient can be hypnotized whenever he wishes it, and particularly, that he can never be hypnotized by anybody without giving his entire consent. In this way the patient is locked against the attempts of designing hypnotizers, and may successfully defy any efforts to control him in this manner.

All of the suggestions appropriate to the case having been made, the patient is allowed to remain quiet for a longer or shorter time, according to the seriousness of the condition — a few minutes or more than half an hour; and the effect is deepened by a gentle though emphatic repetition of the suggestions. When the time for rousing the patient comes the physician says, "You may wake now." Sometimes the awakening will be prompt, sometimes slow and reluctant, the latter being more likely when the hypnosis has been profound. If no permission to wake were given, the hypnotic condition would gradually disappear, and the patient would rouse himself as from ordinary sleep.

This method need not be followed in detail; indeed, every hypnotizer develops his individual procedure, and finds his own the best for his purposes. But there are common features in all of them, the essentials — quietude, confidence,

gentleness, discreet sympathy, intelligent appreciation — are practiced in various ways.

After a very few successful sessions it becomes unnecessary for the patient to begin the process with open eyes; he is instructed to close them at the first, and the physician gently strokes the forehead and then the eyelids, speaking words which encourage the patient to sleep, and in a few moments hypnosis is effected. More than this, even, in the case of some peculiarly susceptible persons, the spoken command is sufficient for the induction of the desired condition.

In chronic cases it is generally necessary to have many sessions with the patient, and speedier results are attained, if the intervals are short. This method of treatment is comparable with that by medicines — the doses must be given frequently in order to keep the system impressed, as otherwise the effect of one wears off before another is administered.

Much time, great persistency, vast patience, abundant good nature and tact are needed in the inveterate cases. Perseverance in attempts to hypnotize will sometimes be rewarded with brilliant results, even though many early trials have utterly failed.

Having discussed the nature of hypnotism, and described the methods of its induction, we now come to the consideration of the conditions in which it can be advantageously employed.

CONDITIONS IN WHICH HYPNOTIC SUGGESTION IS VALUABLE

Some authorities think that it is unscientific to separate functional and organic diseases, that there is no perversion of action independent of an alteration in structure. And yet, a practical discrimination may properly be made without offending pathologic proprieties; and I trust that, for convenience, it is permissible for me to employ the terms in their ordinary signification. Assuming, then, your indulgent forbearance, it may be said that, in a general way, hypnotic suggestion finds its field in the domain of functional diseases of the nervous system. It may be used advantageously in relieving some of the sufferings incident to organic diseases; but in these cases it is only palliative and not curative. It is not claimed that all patients afflicted with such disorders as usually yield to suggestion will be helped by this treatment; but in this respect, as in others, the remedy resembles therapeutic agencies of physical character. It is not reasonable to look for universal success with any agent, or to expect that every patient will respond to any treatment as does the average one. The ailments in which hypnosis is of the most conspicuous value are those characterized by pain, insomnia, abnormal nervous irritability, depression of spirits, phobias, obsessions, neurasthenia, moral obliquity, spasm, nausea, sexual perversions, and drug habits. The cases which will be cited in illustration occurred in my own practice, and are selected almost at random from a vast number. The reports are necessarily limited to the essential features in order to keep this paper within reasonable bounds.

Pain. A man of 45 years of age had been operated on twice for trifacial neuralgia. After each operation he had experienced a year of comfort, and then the trouble returned violently. The removal of the ganglion was all that surgery offered at that time, and from this he shrank

on account of the danger to life; but he was willing to try hypnotism. When he presented himself in my office, and tried to answer a question, the effort threw the muscles of one side of his face into such a spasm, attended evidently with extreme pain, that he motioned to his wife to speak for him. His diet was restricted to liquids, because chewing meant agony; and he was compelled to almost complete silence, because of the direful penalty of speech. He had a treatment twice daily for ten days. From the first day he was measurably relieved, and he had no pain after the fourth day. His wife went home at the end of a week, as she was no longer needed as nurse and interpreter; and he followed on the tenth day, declaring that there was no need of remaining, as he was perfectly well, and he could return at any time if his trouble came back. His abandonment of treatment was against my judgment and advice, for the case was too chronic and severe to justify the expectation that it could be permanently relieved in so brief a time; but he never returned, or reported in any way. But even supposing that there was not a cure, the effect of the treatment illustrates the availability of the remedy and its advantages over physical anodynes, which, in producing an equal effect, would almost certainly establish a drug habit.

Insomnia. A great affliction, prolonged overwork, and anxiety had so affected a man of 35 years, that his capacity for sleep was seriously reduced. For three months he had slept only two or three hours in the twenty-four, and not only felt ill, but looked haggard and worn. A single hypnotic treatment refreshed him greatly. He was instructed to come daily for a while, as the case was chronic and severe; but a month went by without my seeing him. Then at a chance meeting he was asked to give an account of himself — why he had not come often, as he had promised. He joyously replied, “What’s the good of going to a doctor when one is perfectly well? I slept like a log all that night, and

I've slept like a log every night since." Many years have passed, and he has had no recurrence of insomnia.

Nervous Irritability. A young matron applied for relief of pronounced hyperesthesia. Her sensibilities were constantly on edge. The slightest sound, like that attending the lighting of a gas jet, if it came as a surprise, would set her nerves aquiver for an hour. In railway travel she always felt obliged to take the most remote available seat in the last car of the train in order to be as far away as possible from the noise of the bell and the whistle of the locomotive. Life was a series of alarms and distresses. The first attempt at hypnosis was an utter failure — the patient was wrought up to the highest pitch of excitement, and therefore could not concentrate her attention in the needed direction. She was in despair, feeling certain that her last hope of relief had vanished, and no encouraging assurances had any effect. Two days afterward a second visit was made. The patient was in tears, mourning over the assumed impossibility of being hypnotized. While she was in that state of mind it was plainly useless to attempt hypnosis, so the effort was made to distract her attention from herself. For an hour nothing was said about patient or sickness or anything depressing, and the time was spent in the recital of droll stories and in whatever else might help to divert the self-centered and morbid current of her thought. At what seemed a favorable moment she was told to close her eyes, and she obeyed instantly. The lids were gently stroked, and hypnotization was accomplished in that moment. Suitable suggestions were made, and the cure promptly began, and was finished in a few weeks. Tranquility succeeded excitement, and life took on a very different aspect.

This case shows that primary failure is no indication of ultimate results. Excitement is inimical to hypnosis, as it is to true sleep; and the patient should not only be willing, but calm enough to be able to concentrate his attention.

Depression of Spirits. A man of 30 years, gifted, well educated, and of fine character but moody disposition, had been afflicted for many months with extreme depression, which he was utterly unable to throw off. He was not a good hypnotic subject; but he was practically restored in a fortnight of daily sessions. He became cheerful, regained interest in his work, liked to mingle with his friends, and now, after many years, is in full enjoyment of life.

Fear of Travel on the Water. A gentleman whose occupation occasionally required him to make little journeys to the islands in the harbor had constitutionally so great a dread of water-travel that sometimes he would leave the steamboat just as it was about to start, abandoning the projected trip, even though he appreciated the urgency of his business, which always involved the interests of others as well as his own. After a few hypnotic sessions he was able to make excursions on the boats, not only without mental disturbance, but even with some enjoyment.

Extreme Timidity. A lady in early middle life gave this account of her case: "Before my marriage I was a teacher, and experienced no trouble in addressing a roomful of people whenever my work required it. But for seventeen years I have never appeared before an audience. To-morrow afternoon I am announced to read a paper before one of the large clubs of women, and I am frightened almost to death at the thought. My paper is a good one, and I am not at all afraid that it will not be satisfactory; but when I try to read it aloud at home and entirely alone, I break down; I cannot help seeing that critical audience, and the thought of it scares me so that I have to stop. Can you not hypnotize my terror out of me, and put courage in its place?" She was an entire stranger to me, and the prospect for success was not flattering. Besides, my time was so engaged that it was impracticable to make an appointment before the next noon. Then, only two hours before the meeting at which she was to perform,

she received the hypnotic suggestion which she desired. The next day she called to report. Her face was radiant, and she gave an enthusiastic account of herself, saying, "I had no fear, no difficulty whatever in reading. A lot of the women were moved to tears, and when I was through my friends thronged around me with their congratulations and praised not only my essay but the way in which I read it. But I told them that all the credit for that should be given to hypnotism." As her name has often appeared in connection with public performances since then, it is fair to suppose that she has had no further difficulty.

This case may strike some as trivial, and so it is as compared with many or most of those with which we have to deal. But it does not seem to me unworthy of the efforts of a physician. The slight ailments need wise treatment, and their correction may prevent serious illness, may even save life. A disturbance such as this woman had may easily enough be the initial step in a series that leads to an asylum; but being corrected, obstacles are removed from the path to happy and successful endeavor.

Obsession. A young matron from her earliest recollection had been in constant dread of assassination, but had never mentioned the horror until she revealed it to me. Even then she would not have spoken of it but that she had been relieved of neuralgia by hypnotic suggestion, and hoped that her greater trouble could be dissipated by the same means. She was afraid of the dark, even when she had a companion, and she never allowed herself to be left in the house alone. Half a dozen treatments cured her completely.

Neurasthenia. A lady of 43 years for a whole decade had been in a condition of nervous prostration, with marked digestive disturbances. She was under treatment during the whole time, but had received no benefit. She was advised to try the effect of hypnotic suggestion by a physician

who had declared to me with great positiveness that hypnotism was justifiable only in absolutely hopeless cases, in which desperate means could be sanctioned. After a prolonged examination the conclusion was reached that no organ was appreciably diseased. She was given treatment every day for a month, but long before that time had elapsed she was practically well. Her distresses were all banished, her feebleness disappeared, her digestion was restored, and her spirits became buoyant.

Moral Obliquity. A lady applied in deep distress of mind concerning her ten-year-old son, a strong, healthy, genial, little fellow, who had no interest in his school duties, habitually played truant, and lied in the most abandoned manner. His nature was very affectionate, and he was very fond of his mother; but she had exhausted her means of influencing him without avail. She consented to have hypnotism tried on him. In three weeks his parents declared that he was a different boy. He attended school regularly, took good rank in his studies, and was proud of it, and his word could be relied upon implicitly.

Asthma. An old lady who had suffered from asthma for many years and found no relief beyond slight palliation, sent for me when she was having a severe attack. She had never been hypnotized, and her orthopnea forbade her lying down or even reclining, but she could endure for a little while a slight inclination backward, so that the head rested against a pillow. In this position she was quickly hypnotized, and was wholly relieved in a few minutes.

Seasickness. A young lady who had been across the Atlantic several times, and regularly suffered nausea marina, appealed to me for prophylactic treatment. She had deferred the matter until a few days before her voyage, and the attention which it was possible to give her seemed altogether inadequate, but the event was happy. She was not at all disturbed during the journey, and took her meals regularly

with enjoyment, all of which was the more remarkable as her room-mate was violently seasick every day of the voyage, and depended upon the ministrations of my patient constantly.

Sexual Perversion. Schrenck-Notzing says that the grossest sexual aberrations, even when they are deeply rooted and have changed the entire personality, are frequently cured by hypnotic suggestion. Krafft-Ebing, in his *Psychopathia Sexualis*, seems to depend entirely upon this remedy in the cases of which he speaks. It has not been my fortune to have as a patient a person afflicted with any of these maladies. But a case was sent me by a friend, a specialist in neurology, who was unable to help the patient, and, although thinking lightly of hypnotism, desired me to try it in this case. The patient was a medical student, a young man of neurasthenic tendency, who was hyperesthetic sexually, and was troubled especially with priapism. He was hypnotized several times with acknowledged benefit, but ceased his visits before being discharged as cured. One day my neurologic colleague called on me and reported that the patient was apprehensive that the treatment had been carried too far; not only was he relieved of his priapism and other evidences of his sexual over-sensitiveness, but he had positive sexual apathy. Without difficulty the normal equilibrium was found and established.

Drug Addictions. An apothecary, about 30 years of age, had the alcohol habit. He did not drink intoxicants every day, but once in a few weeks he drank persistently until his stomach revolted, and then he was abstinent until the furore for alcohol seized him again. His necessities prohibited abandonment of his work, and his persistence in it kept him constantly in an atmosphere of temptation. No encouragement to expect a cure under these circumstances was given him, but his urgent pleading induced me to try

the effect of hypnotic suggestion. After twenty sessions the treatment was given up on account of my absence from town for nearly two months; and while the signs were hopeful, it was highly improbable that he would not relapse into his wretched slavery. But he did not, and years afterward he remained entirely cured.

CORRECTION OF MISCONCEPTIONS CONCERNING HYPNOTISM

There is a multitude of errors concerning hypnotism, which are almost as prevalent among physicians as in the non-medical population, and a number of these will be stated and corrected.

It is commonly supposed that a person must lose consciousness in the process. In most cases the patient retains consciousness perfectly. For the production of some results the deepest stage of the hypnotic condition is requisite; but for the ordinary therapeutic effects it is by no means necessary. Brilliant cures are sometimes achieved with patients who are hardly made drowsy by being hypnotized.

It is a prevalent belief that only the weak-minded, or, at best, the hysteric, are amenable to hypnotic suggestion. Nothing could be farther from the truth. The experienced hypnotizer dislikes to deal with either of these classes of patients; he would rather for every reason have strong men with cultivated minds and disciplined wills. The physician who uses only physical therapeutic means prefers the well-balanced, sensible, intelligent for patients, and so does the one who employs psychic means, and for the same reasons. The hypnotizer asks his patient to exert his will in a specified direction; he wants the intelligent co-operation of the patient, and this requirement is most difficult for the feeble-minded, the untrained, the heedless to meet.

Another mistaken notion is that only a minority of persons can be hypnotized. This is true only if one has in mind the idea that, in order to be hypnotized, one must lose consciousness — which has already been declared to be an error. The great majority of people can be hypnotized to an extent quite sufficient to make them susceptible to remedial suggestions.

A misconception which it is very difficult to displace ascribes to the hypnotizer a peculiar and rare natural endow-

ment. That some men are better hypnotizers than others is unquestionably true, just as some men are more capable than others in any line of activity. He who has a strong and healthy physical organism, a powerful mind, and, perhaps best of all, an engaging presence, has elements that make for success in any affairs where man meets man; and, of course, such a one gets the best results with his medicines, with his surgical operations, with his electrical applications. Why should he not do better than most others in the use of suggestion, hypnotic or non-hypnotic? But while this type is the highest, there are others who, while not quite or nearly as well endowed, are yet capable of excellent work; and as they will pass muster in the other styles of therapeusis, so, too, they will succeed in hypnosis. Any man who has the attributes which every medical practitioner should possess can practice hypnotism. But he must believe in it, and he must declare his belief by the confidence of his bearing. Self-distrust, timidity, uncertainty in the physician inevitably beget reluctance, fear, and antagonism in the patient, whatever the former undertakes to do, and whatever the method by which he essays to do it.

A common fallacy ascribes whatever result is experienced to a mysterious, subtle emanation from the physician which enters and pervades the system of the patient. This error is partly due to the persistence of a theory which was upset long ago; and partly, doubtless, to the likeness which is popularly thought to obtain between hypnotism and electricity. The real explanation is suggestion, pure and simple.

A frequent objection is that, in the hands of an unscrupulous person, great wrong may be perpetrated by hypnosis, and therefore it should not be used. The same line of argument would lead us to abandon treatment by medicines, because it must be admitted that patients have been killed by drugs administered by physicians, and to

give up cutting operations in surgery, because many persons have died on account of these procedures. That there are scoundrels and incompetents in the medical profession, as in all others, is a lamentable fact; but they constitute but a small minority, and the danger of their doing harm, maliciously or innocently, by employing hypnotism is exactly on a plane with the peril which attends their practice in any other line. Every real authority on modern hypnotism says emphatically that a suggestion that offends the moral sense of the person hypnotized is either disregarded, or has the effect of rousing the subject immediately. If it were practicable to incite to criminal acts through the agency of hypnotic suggestion, there would be no lack of examples of this fact; but in many years of observation not an authentic case of the kind has come to my knowledge. The possibilities of such a method in the hands of a skillful romancer are too obvious to escape the attention of novelists, and we know that thrilling tales of absorbing interest have been pivoted on this supposition; but we never encounter such occurrences in actual life, and we may confidently disabuse our minds of this groundless apprehension.

It is objected that hypnosis, especially if often repeated, weakens the will of the patient and makes him dependent upon the mind of the operator. Such a result is imaginable, but can never occur, if the physician is as careful in using this agency as he always should be when administering drugs or doing surgery. As a matter of fact the will may be strengthened by hypnotic suggestion, and the moral vigor increased in every respect. All of the cases of injury from hypnosis of which I have ever heard have resulted from the reckless employment of it for exhibition purposes, mostly by irresponsible mountebanks. The shows conducted by hypnotizers for the amusement of popular audiences should be sternly repressed. That this treatment has not been their fate is, in my opinion, in considerable degree to be ascribed

to the attitude of physicians. Repeatedly I have known doctors to accept and use complimentary tickets to these wretched performances, thus tacitly bestowing their professional sanction on indefensible applications of hypnotism, while at the same time they display a strong disposition to outlaw a fellow practitioner who brings to bear upon his patients the altogether beneficent uses of the same agency. If used discreetly, hypnotism does not induce insanity, does not weaken the mind, does not do harm in any direction.

Hypnotism should be used only by educated physicians, and by them only as a remedy or a means to diagnosis. If it had never been employed outside of its legitimate domain there would be little or nothing of the prejudice against it which is constantly encountered in the community; and the sufferers, for whom it has an easy and effectual relief, would eagerly avail themselves of its help.

To some the practice of hypnotism is objectionable, because there are many charlatans who employ it or advertise to do so. Those who argue thus, to be consistent and logical, should abandon the use of all medicines, all hygienic measures, everything, indeed, by which they try to affect their patients, for there is nothing that the quacks do not exploit. One can hardly look at a daily paper or a popular magazine without having forced upon his attention some flamboyant announcement of a drug, a method of exercise, a kind of battery, a drink, a food — something presented with an attractive picture and an adroitly worded statement, which, it is promised, will positively put disease to flight, prolong life to the ripest old age, and supplant misery with exuberant happiness. But none of us are so disgusted with these mendacious advertisements that we think it necessary to throw away the pharmacopeia, cease to recommend physical culture, give up electricity, forbid the use of alimentary remedies. We continue to employ whatever means we think will benefit those persons who honor us with their

confidence by seeking our advice and skill. Why, then, should we select one particular kind of agent, and avoid it on the ground that it is used by pretenders? The breadth of mind which we like to believe characterizes our profession should enable us to welcome any agency, whatever its origin, however unwisely or dishonestly it is used by others, whatever compromising associations it has previously had, provided only that it will enable us more readily, more agreeably, more perfectly, to diminish suffering, prevent disease, or restore health. Therefore, when one hears hypnotism likened to any of the popular mind-cure movements, which to his trained intellect are manifestly unscientific and illogical, let him ascribe the statement to ignorance, and enter upon the investigation of this form of psychotherapy with confidence that the more he learns about it the greater will be his respect for it.

It has been alleged that a belief in the remedial virtues of hypnotism would do away with the necessity for diagnosis. Nothing could be wider of the mark. The physician who includes this agency in his armamentarium does not change his attitude toward pathology, etiology, or physical diagnosis. He sees, as plainly as one can, that the first thing is to find out what is the matter, to ascertain the character of the malady, and he does not use hypnotic means in treatment unless his investigation persuades him that the trouble is of a kind to which this remedy is scientifically applicable.

One of the commonest criticisms of hypnotism is to the effect that the ailments which it relieves are all imaginary. If a patient is said to have been freed from pain, some astute skeptic asks, "Was the pain real?" To such the answer should be: "When a patient comes to you complaining of pain, do you distrust his word? After he has taken the anodyne which you administer, and declares to you that his pain has disappeared, do you question his veracity? You cannot prove by the evidence of any or all of your senses

that either statement was true or false, for his symptom is absolutely subjective. But you do know your patient, and have no reason to doubt his truthfulness in this matter any more than in any other; and so you do not hesitate to give him the remedy that your experience has taught you is suitable to his condition. Now, suppose such a patient is treated with hypnotic suggestion, and the suffering is promptly abolished, is there any sense, reason, or fairness in thinking that his pain was imaginary, and not as real as that which was relieved by your drug? ”

It has been charged that hypnotism is not scientific; but it is difficult to perceive upon what ground this opinion is based. Tested by any of the rules which we apply to the remedies which we all employ it is not found wanting; and it is not just to subject it to severer tests than we think sufficient for all the others. If it is objected that we do not know the mental mechanism by which hypnosis is induced, it is fair to remind the critic that he cannot explain the mechanism of memory, a fundamental and comparatively simple intellectual process. If it is alleged that there is a large empirical element in hypnotic treatment, it is proper to ask if, in this respect, it is on a lower plane than our usual method of using drugs.

It has been alleged that the therapeutic effects of hypnotic suggestion are but transient: that, if any benefit results from it, in a short time the patient will relapse into his former condition. Nobody acquainted with the facts could possibly make this criticism. The effects of no remedy, with which a comparison can fairly be made, are more enduring than are those of hypnotic suggestion.

Equally inapplicable is the comment that groups hypnotism with methods of treatment in which prominence is given to a mystical element, which appeal to the superstitious, which associate theology and therapeutics, which demand faith in a dogma. The psychology on which hyp-

notic suggestion is based is as far removed from mysticism or religion in any form as is physiology — indeed, it may be said to be physiology applied to mental processes. The hypnotist is not spiritistic in any sense of the word; he asks his patient for no faith, save that which every physician has a right to expect in any person who confides health and life and reputation to his care. In treatment by any method it is universally recognized that confidence in an expected, or even hoped for, result is a helpful factor. No well-informed person that doubts that wonderful cures are sometimes wrought under the ministrations of the most dishonest charlatans, as the result of religious exaltation, in consequence of absorbing belief in absolutely senseless doctrines; and he knows, too, that these beneficent effects are as abundantly manifested among the worshippers of idols and the practisers of obscene and degrading rites as among the people of his own creed. That expectation is desirable in hypnotic treatment, as in any other, must be manifest; but in none is it less essential. Particularly may it be insisted that in hypnotism there is no occult or esoteric element, there is nothing to conceal, there is no desire to take advantage of credulity, or to play upon the confiding nature of the ignorant and superstitious.

That hypnotism is often but little understood by men to whom the profession has a right to look for enlightenment in such matters is frequently demonstrated. Some of the high priests of neurology are the greatest sinners in this direction; but none, probably, have displayed their incompetency and ignorance quite as conspicuously as has Dubois, the author of a book on the psychic treatment of nervous disorders. This has been translated into English and has evidently deeply influenced many physicians and awakened a wholesome interest in a certain form of psychotherapy. His treatment by persuasion has undoubted merit, though little novelty; but it is pitiful that he should assume the atti-

tude which he does toward hypnotism — an attitude which reveals at once ignorance, narrowness, prejudice, and inconsistency. He girds at hypnotism, at every opportunity, he holds it up to ridicule and contempt; and yet he admits that, on occasion, he uses it, as he certainly should not, if it is the evil thing that he would have us believe. In doing this he unconsciously pays it the highest tribute. Let me quote a passage:

“This is one of those exceptional cases where I would not fear to have recourse to hypnosis, although the attitude of the wonder-worker that one has to take is so repugnant to me that it brings a blush to my cheeks when I decide to use it.”

“Wonder-working” to him evidently means rapidity of effect, for in another paragraph he says:

“The practice of hypnosis has accustomed one to immediate success, to theatrical effects.”

Are we to refrain from employing any method because its results are prompt? We have been accustomed to consider speed in attaining a desired end a decided merit. The motto on the seal of this society, “*Curare cito, tuto, et juncude,*” which we adopt from the ancient Asclepiades, is universally acclaimed as the ideal rule of action; and hypnotism fulfils all of these conditions, for it does cure quickly, safely, and pleasantly. Apply the objection to another class of cases: a patient comes to a physician with a chronic irritative cough. Examination reveals a relaxed uvula dangling onto the tongue and constantly tickling the pharynx. Does anybody advocate the cutting off of the sixteenth of an inch a day for the sake of avoiding the suddenness of cure effected by complete ablation? But the method by which instant and permanent relief is afforded is open to the criticism of being theatrical. Dubois objects to “wonder-working,” if the quick cure is brought about by hypnosis, as if one appealed to the thaumaturgy of the ancient magicians; and yet he says:

“ The art of the physician lies just in choosing in each case the most rapid and powerful means of improvement.”

Can inconsistency go further? If his vaunted method achieves an immediate result, it is praiseworthy; but, if hypnotism does the same thing, it is damnable.

To show how utterly ignorant of the principles of hypnotic treatment this author is, one more sentence may be quoted: “ What is more absurd than to fall asleep by daylight, when one has no need of sleep, by stupidly yielding to the command of the hypnotizer ? ”

It seems almost incredible that a physician who poses as a neurologist and a psychotherapist, should not know that the purpose of the hypnotizer in inducing the sleep is solely to put the patient into a more suggestible condition. When a man of the eminence of Dubois is capable of so humiliating an exhibition as this, we may look with more charity and patience upon the men who constitute the rank and file of the profession, when they, as a result of dense ignorance, declare hypnotism to be dangerous, foolish, quackish, fraudulent, necromantic, and altogether unjustifiable.

It ought to be unnecessary to say that the employment of any form of psychotherapy is not incompatible with the use of physical agents of any description. In many cases it is important to associate different kinds of therapeutic agents, which are not psychic, as we all know; the case in which a psychic method is desirable makes no exception. Psychotherapy should be regarded as an additional means of promoting the welfare of the patient, whatever other kind of treatment has been instituted.

In this essay I have not attempted an exhaustive treatment of my subject, but I have tried to show as well as possible in the time allowed what hypnotism is, and what can be done with it by any well-educated, competent physician for the benefit of the sick and suffering; and, finally, I have endeavored to make it clear that the objections to its use

are not based upon knowledge, but upon ignorance and prejudice. The points touched upon are those about which questions are most frequently asked or adverse criticism made, and the answers and explanations are founded upon a large observation of the practical workings of the method.

I have no expectation of effecting a wholesale conversion of opponents to these views — I know too well the ingrained conservatism of our profession regarding psychic remedies; but I entertain a little hope that what I have said will arouse in some minds an intelligent interest in the subject; and I am confident that no open-minded physician can look into it fairly, as he would into any other therapeutic method, without being persuaded that in hypnotic suggestion are possibilities for good, which our profession should no longer neglect.

SIMPLE EXPLANATION AND RE-EDUCATION
AS A THERAPEUTIC METHOD

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SIMPLE EXPLANATION AND RE-EDUCATION AS A THERAPEUTIC METHOD

TWO difficulties are evident in the present aim to rationalize psychotherapeutic procedure. One is its supposed simplicity and the other its reputed complexity. A very considerable group of men in the medical profession apparently considers that nothing new has been discovered within the past few years relative to the treatment of disease by mental means. Another group is equally insistent that the whole subject constitutes a special branch of medicine and is quite beyond the practical reach of the general practitioner. Both of these positions are wrong. In the first place, it is apparent that the investigation of recent years has so far rationalized old methods that the physician now has in his hands a perfectly definite means of attack against many abnormal and distressing conditions. However widely psychotherapeutic measures have been practised from the earliest period of medicine, the time has now come when such measures may be used with a degree of scientific accuracy hitherto unattained, a precisely similar situation to that prevailing in all other departments of therapeutics. The means of treatment have always been at hand. The use to which those means are put constitutes advance. On the other hand, it is true that the final solution of the complex problems upon which we have now entered is no doubt far distant, and the pioneer work in this somewhat limitless field must be left to the special student. There is, however, no longer a question that sufficient facts have been established to render certain of these therapeutic measures available for the practitioner. Here again the situation is not different from that of other departments of medicine. The problem of immunity, for example, remains obscure, and in great measure unsolved,

but the practical applications of this laborious work are already in a measure available.

It should in general be our aim to place this whole much discussed question of psychotherapeutics on precisely the same plane as other therapeutic problems. So far as facts are ascertained and capable of practical application, it is the manifest duty of practitioners to employ such facts for the benefit of their patients. So far as facts are still in doubt it is the natural work of special students of the subject to bring what order is possible out of the existing chaos. Our methods of procedure should be the same, so far as the character of the subject permits, our results should be subjected to the same strict scientific judgment, and our liberality toward this branch of therapeutics should be precisely similar to that toward any other which promises much for the future.

The object of this symposium, so far as I understand it, is for the time being to lay aside theoretical considerations and to bring to the attention of this society such facts and practical considerations as the time at our disposal and our individual experience permit. It is my purpose in what I shall have to say under the somewhat inadequate title selected to draw attention to the simplest and therefore most widely available method of psychotherapeutic procedure and to attempt to show how such a method may be made practically useful by the physician in a degree hitherto not always attained.

In discussing the general psychotherapeutic problem with physicians, the purely practical question of method is almost invariably raised. What the practitioner needs and rightly demands from those who claim any special knowledge of the subject are directions as to treatment of individual patients. The evident difficulty heretofore in treating even the simple neuroses has been the failure on the part of physicians to recognize clearly that such neuroses very frequently have a mental cause in the life of the individual precisely as

a murmur over the heart area, for example, has a physical cause in the life of the individual. Our first object as practitioners is the determination so far as lies in our power of the exact cause of the condition we are called upon to treat. In other words, a diagnosis is demanded. This we make readily enough in the physical sphere or admit our incapacity to do so. In the mental sphere, we too often make no attempt, however apparent the cause might be after adequate investigation. The first point, therefore, I would make is that we must be as conscientious in one field of medicine as in another. We must search the mind of the individual for the source of his discomfort in appropriate cases in exactly the same spirit in which we search his body for the source of other discomforts. This certainly requires no special personal attributes on the part of the physician, and is surely available for practitioners of no special education in this field. The word "explanation" used in the title describes somewhat inadequately the actual procedure, which consists essentially in the following steps:

First. After eliminating or properly estimating physical causes the mental attitude of the patient toward his ailment should be carefully determined; in other words, a diagnosis should be made.

Second. This is best accomplished by allowing him to tell his complete story rather than by a primary process of interrogation on the part of the physician.

Third. Having determined the false point of view almost invariably revealed which has led up to the neurosis the attempt is made to explain why such a series of events as that disclosed would be likely to lead to this result.

Fourth. Having impressed the patient with the correctness of the physician's point of view the process of readjustment begins, or, to use the more popular but possibly too comprehensive term, his re-education.

Fifth. This is accomplished by pointing out in a painstaking way the correct way to mental health through a realization on the part of the patient of his previous misconceptions and through an accompanying effort toward the establishment of more rational mental adjustments.

The method outlined above is the simplest possible psychotherapeutic procedure. As in more complex methods described by other writers in this symposium its essential feature is the analysis of the mental state. Its value lies in its simplicity and in its appeal to the reason through the medium of commonsense. We are justified in calling it a method because it works in practice, when mere unmethodical encouragement and reassurance fail. That such a method stripped as it is of all appeal to the mysterious or to any form of sensationalism is capable of wide and legitimate application is self-evident. It is also apparent that it must often prove unsuccessful in those cases in which the course of a developed neurosis is so deeply buried in the past life of the individual that it cannot be brought to the surface by this simplest and in one sense most superficial of the analytic methods.

It may with truth be said that no person is wholly free from false conceptions of his own mental and physical condition, and this naturally applies to those who consult physicians in the most varied fields of practice. It is an error to stigmatize such persons forthwith as abnormal or neurotic or neurasthenic or psychasthenic. Many of the common neuroses met with in practice represent nothing more than aberrations of normal nervous systems into temporary useless or detrimental channels. As a matter of fact, a large proportion of so-called nervous invalids are incapacitated through no inherent fault of their nervous systems as such, but rather through the use to which their nervous systems have been put by circumstances or training or false instruction or unwise and superficial medical advice.

Quite apart from any psychophysical speculation as to the relation between the mind and the body which is wholly unessential from a practical standpoint, the clear recognition of the predominant mental origin of the neuroses, whether or not they have accompanying physical manifestations is of the utmost importance and unquestionably constitutes the essential advance of recent years in their intelligent treatment. We have gained much, if, for example, we may authoritatively tell our patients that their apparently disordered nervous symptoms have reacted in a perfectly normal way to the circumstances in which they have been placed, and to the ideas to which they have been exposed, and that their difficulties have been due to the character of these ideas and circumstances rather than to the much feared inherent weakness of the nervous system itself. The function of the physician at once becomes apparent. He hears the story, he sees wherein the individual has failed, wherein he has dissipated his energies in side issues, or, in popular parlance, wasted his opportunities. Out of this he recognizes that a so-called neurosis has developed which it becomes his task to diagnose accurately, to explain in an understandable way the steps by which he has arrived at his diagnosis, and to readjust the patient's mental attitude on the basis of this knowledge.

In order to avoid any possibility of confusion I have used the word "explanation" to describe this rational process. It requires little actual experience to demonstrate that in order to explain these matters effectively to our patients we must follow some definite method. Otherwise, as in other departments of endeavor, we shall simply confuse and not benefit. It is furthermore imperative, with all the present day talk in the popular press as well as in medical literature regarding treatment by mental means, that we adopt a definite, commonsense basis of procedure, free from all subtlety or demand for highly specialized training.

From the foregoing discussion I wish to emphasize the following points: First, the wide prevalence of neuroses based on ignorance rather than inherent or acquired weak nervous organization. Secondly, the vital importance of recognizing the normal character of the nervous systems in which these neuroses have developed. Thirdly, the possibility as a rational means of treatment of explaining to an intelligent patient the mechanism of the development of his symptoms, and finally the probability of a readjustment of his mental state based on this explanation with the disappearance of the neurosis. The analogy of the mental state of the child is useful in this connection. Explanation forms the chief means of increasing a child's mental stability. Fear of the dark, to take a commonplace example, is not met on the part of the wise parent by harsh criticism and summary dismissal of the subject, but rather by explanation suited to the child's comprehension that the dark in reality has no terrors, and by a demonstration of the truth of this fact. Similar fears in adult life are manifestly treated with far less consideration; on the part of the patient there is a tendency toward concealment of special anxieties, on the part of the physician there is often a wholly unsympathetic attitude in which explanation plays no part. The position of the adult is, however, precisely analogous to that of the child. Neither is the victim of disease or necessarily possesses a damaged nervous system. Both are victims of insufficient knowledge and both demand sympathetic explanation in order that their false points of view may be corrected. Both are real and often extreme sufferers from conditions which are not self-limited, but which tend to progress and become more complex in their organization. Our attitude toward children has on the whole been correct; our error has been the failure to realize that wisdom does not necessarily come with the years.

Examples may make this clearer. A patient consults a physician in a highly disturbed nervous state popularly

known as neurasthenic. The analysis of the entire situation reveals the fact that this patient considers that he has lost his memory. He has arrived at this conclusion because he finds that he is no longer able to read attentively and remember what he has read. From this as a starting point he argues, legitimately enough from his knowledge, as follows: I cannot remember what I have read; my memory must therefore be weakened; memory is a fundamental quality of the normal mind; my mind therefore must be failing, and forthwith one of the commonest and most distressing and incapacitating phobias is developed, namely, the imminent fear of insanity. In such a commonplace instance as this it is clear that the patient's mind has worked out a rational conclusion from false premises, the original false premise being that because he could not remember what he read, therefore his mind was failing. It is easy to set such a person right by the simple explanation that his original difficulty arose from lack of concentration, a common human weakness, and that out of such lack of concentration the mental alienation which he feared is extremely unlikely to develop. This rational point of view is on the whole easy to impress, and its result on the developed neurosis with its various accompanying manifestations of sleeplessness, anxiety, incapacity for work, loss of appetite, and all the other phenomena of a disturbed mental state, forthwith becomes apparent. The essence of the benefit in such a case is to be attributed purely to a reasonable explanation of a series of events which the patient has himself been unable to estimate properly.

A further example illustrative of the point of view I am attempting to impress is the mental condition ordinarily associated with insomnia. There is a deeply rooted feeling in the popular mind that sleep is an absolute essential to continued mental health and conversely that deprivation of sleep is a direct sign of both physical and mental breakdown.

Assuming this statement to be correct the ordinary person finds himself in a state of extreme anxiety when for any reason his sleep is interfered with. The result of this anxiety very naturally is such a fixation of the attention upon his physical and mental condition that sleep for this very reason becomes increasingly difficult. Thus, the ordinary vicious circle is formed. I have in mind a patient, a middle-aged man of active business interests, who was so strongly impressed with the idea that without sleep he must necessarily go to pieces, that his life was becoming a burden to himself and to his friends. Reasoning from his premises, he assumed that inasmuch as sleep was essential to continued health and he was certainly not having a normal amount of sleep, he could not continue well. The treatment of this situation stated in barest outline was in the first place to explain that he had a wrong conception of the significance of sleep, that complete physical and mental rest without sleep would suffice to restore him for the work of the succeeding day, and finally that could he compose himself to such complete physical and mental rest, sleep would naturally follow. This, as a matter of fact, is what actually happened. The cause of the sleeplessness in this instance was essentially the mental state induced by the fear that he would not sleep. A more striking instance is that of a man from the Provinces, also of middle age, who for some six years had been unable to sleep and had developed various so-called neurotic symptoms as he supposed in consequence of this sleeplessness. The origin of his difficulty he definitely attributed to a single occasion when he had more or less voluntarily remained awake practically all night in anticipation of a very early morning journey. From this simple and commonplace event, the habit of sleeplessness apparently was formed, and from that time to this it has been kept alive evidently by the anxiety which has developed in consequence of his conception of the necessity of sleep, precisely similar to the case just cited.

Here also it was not difficult, after three or four interviews in which explanation alone was used, to show the patient wherein his knowledge had been deficient regarding various physiological processes connected with sleep and to make clear to him the pernicious part his faulty mental attitude had played in the development of his neurosis. The patient was easily relieved of his difficulty, at least until he left Boston to return home. I have not heard from him since.

It would be easy to multiply cases of this sort, illustrative of the part which incorrect deductions play in the development of most varied neurotic conditions. The foregoing instances, however, may suffice to illustrate in simplest form the principle underlying this method of psychotherapeutic procedure.

The possibilities and limitations of the method I have attempted to outline may be summarized but not detailed in so brief a communication as this. Its possibilities are that it may be used by any intelligent physician who realizes its importance; the personality of the physician about which we still continue to hear plays a small part in its success. It requires no special training, psychological or otherwise, beyond that which every educated physician might easily acquire. It is not limited to the treatment of so-called "nervous" cases. It should, for example, be applied antecedent to surgical operations, particularly on the pelvic organs of women. It is a commonsense method of approach to many of the minor ills and some of the major disorders to which all persons are exposed. It does not demand hypnotic procedure, or the use of suggestion as that word is ordinarily employed. Its essential basis is an appeal to reason and herein naturally lies its wide applicability. Its limitations are no less apparent. It will naturally fail in the psychoses, in hysterical states associated with fundamental disorders of personality, and in obsessional conditions of a high degree of fixity, matters to which no doubt others taking part in this discussion will refer.

THE TREATMENT OF FATIGUE STATES

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THE TREATMENT OF FATIGUE STATES

TAKING the various forms of the psycho-neuroses as a group there is no one symptom so frequently encountered as that of fatigue. Whether it be present early in the course of the disease, and seems to be the soil from which other symptoms develop, or whether it makes a later appearance as if in consequence of the struggle against existing symptoms, it too often presents a barrier to recovery which at times seems unsurmountable. Any effort on the part of the patient to struggle against this symptom so increases the fatigue as to accentuate other symptoms, and cause great discomfort, while on the other hand continued rest is courted in vain. In order to determine how this condition is to be met, let us turn our attention to the elements which go to make up this fatigue.

I. PHYSIOLOGICAL FATIGUE

That the production of energy of every sort is the result of a katabolic process in the tissue called into activity is a fact too well established to require discussion, but unfortunately fatigue cannot be explained on the simple ground that the consumption of muscular substances alone produces exhaustion.

In addition to the diminished supply of the substances in the muscle necessary for the production of energy which results from muscular activity, we have also to recognize the rôle played by the action of the toxic products of oxidation accumulating in the tissue. The laboratory experiment of stimulating the isolated frog's muscle until it can perform no more work, and then flushing out its blood vessels with normal salt solution to enable it to again respond to stimulation, represents the normal physiological process constantly going on in the human organism during its daily life.

While these two processes — the combustion of substances, and the local action of the products of katabolism — diminish the power of the muscle to carry on its function, the liberation of the poisonous substances into the general circulation gives rise to the general sense of fatigue in the individual. This has been well shown by Mosso, who demonstrated that the introduction of the blood of dogs that had been tetanized a few minutes, into the cerebral circulation of healthy dogs, gave rise to the signs of fatigue (difficulty in breathing, and more rapid beating of the heart), and Mosso believes that these noxious products, acting on the nervous system through the circulation, not only contribute largely to the feeling of fatigue, but also lessen the power of the nerve cells to carry on their function.

Parallel to these manifestations of muscular activity is a group of physiological and histological changes taking place in the central nervous system as a result of cerebral and

reflex activity. Hodge demonstrated in 1892 that definite changes are to be found in cerebral and spinal ganglion cells of various animals resulting from normal activities of daily life as well as from excessive stimulation. He found that a comparison of nerve cells of animals killed in the morning with those of similar animals killed at the close of a day of activity, showed a diminution in the size of the nuclei with loss of the open reticulate appearance, and shrinkage in cell protoplasm with vacuolation and lessened staining power.

That this change in structure is associated with liberation of harmful products has been shown by Halliburton in his lecture on "The Chemical Side of Nervous Activity," in which he maintains that under normal physiological conditions the injurious choline products of nerve katabolism can be demonstrated in the body, while in states attended with abnormally rapid nerve degeneration marked changes may be produced.

2. PSYCHOLOGICAL FATIGUE

Aside from these physiological processes which contribute to make up what may be called physiological fatigue, there is a varying psychological factor which is present in all of us, tending to accentuate or diminish the degree to which it shall be recognized and admitted, whether consciously or not. The power of music to quicken the lagging steps of tired soldiers; the influence of the emotions in redoubling one's strength; the driving force of exhortation or promised reward, are well-known examples of the way in which the feelings of fatigue may be dispelled. Is it that the marching soldier is actually rendered less tired by the music, or that the threat or promise of reward makes any change in the physical condition of the individual? Such an assumption would be obviously absurd. This sudden change in the feeling described involves what might be termed the psychological element in the symptom of fatigue. In the minds of all of us a feeling of fatigue indicates a call for rest on the part of nature. When one begins to feel tired his mind becomes impressed with the fact, and the continued consciousness that this state exists serves to intensify the sensation to a greater or less degree, depending on the suggestibility of the individual. A veritable *fatigue hyperesthesia* develops. In some this psychological element may play by far the greatest part in the production of the symptom, so that the slightest muscular activity produces a feeling of exhaustion lasting for days, while in others, determination of purpose or interest in work may engender a disregard or an anesthesia for the symptom and thus enables them to do tremendous amounts of work with little discomfort. It is to this latter class that James refers in his "Energies of Men" in which he describes the process as a breaking through the zone of fatigue, or getting one's second wind. That the adoption of this habit

has its merits to a certain extent in the former class is undoubted, but I am convinced that it is a dangerous recommendation for the latter class, which is naturally the one to carry it out most zealously.

3. PSYCHOPATHOLOGICAL FATIGUE

It is an interesting problem for solution as to what takes place in those cases of pronounced fatigue in neurotic individuals, who at times are so quickly relieved of the symptom by a suggestion, as well as in those who are suddenly overwhelmed by a sense of exhaustion as a result of a nervous shock or a fright. Surely such sudden and decided changes cannot permit an explanation on the grounds of any of the physiological causative factors of fatigue. Is it not that a synthesis takes place in the former, and a dissociation in the latter, much as other manifestations of these processes may occur under similar conditions? The verification of this hypothesis might be found in the appearance and disappearance of fatigue encountered in the alternations of personalities described by Prince, Janet, and others.

That fatigue states, whether physiological, psychological, or psychopathological, may form a fertile soil for the development of psycho-neurotic symptoms is too often demonstrated to us to admit of question. In the routine of daily life, if one is assiduously devoting his energies to accomplishing certain ends, the rested individual who starts the day presents a very different mental attitude to his surroundings, to the one who returns home at night weary from his labors. The one starts out fresh and vigorous and filled with the joy of living, the other too often returns with slower step and perhaps with tired or aching head, irritable to those about, and critical of things he overlooked so easily in the morning. It requires, however, but the reconstructive power of sufficient nourishment and a good night's rest for the pendulum to swing back and establish the diurnal state of freshness. Fortunate is he who can carry on his life from day to day unruffled by the stress of extra burdens or the worry of added cares. In those who voluntarily undertake excessive amounts of work, or who are the unfortunate victims of the "slings and arrows of out-

rageous fortune," the periods of recuperation may not prove sufficient to maintain the state of equilibrium, and a more or less prolonged state of fatigue may result with its various concomitant symptoms.

Continued fatigue with insufficient periods of rest may develop in strong, healthy individuals various forms of physical and mental symptoms similar to those seen in well-defined neuroses and psychoses. Attention has been called to this by Tissié and Feré, and it was well illustrated in the condition developed in the bicycle riders of the six-day race in Madison Square Gardens a few years ago. Various sorts of delusions and hallucinations were manifested by these men towards the close of the race — the idea that spectators were doing things to prevent their winning led to their repeatedly turning to escape imaginary obstacles, etc.

The ill effects of over fatigue from excessive muscular exercise are usually quickly recovered from, but the conditions resulting from prolonged mental strain and worry are more liable to persist from the very nature of their cause, in being more continuous and unremitting. The story is a common one. One's duties necessitating mental application have been requiring too many hours; they are not dropped in the evening; sleep is more difficult, and the diminished hours of recuperation lessen the power of application; recognition of this fact brings worry to the attack to precipitate the uncomfortable feelings of fatigue. Aside from lassitude and loss of power to concentrate, the most frequent symptom experienced in this state is a sense of discomfort in the head varying in character and location. This engenders the idea that something must be wrong within, and too frequently suggests that insanity is imminent, and gives rise to overwhelming fear and constant introspection, with all its harmful influences.

Distinct from the fatigue states of such etiology which may exist as a simple condition of weariness and diminished

power of application, or may present the complication of morbid ideas developing from it, is the state of so-called "nervous exhaustion" found in individuals with a neurotic family history. Patients suffering from this condition have often experienced a series of nervous breakdowns, and never seem able to struggle to the normal level. Such individuals, though they present the same symptoms as the class described have the psychological element of fatigue developed out of all proportion to the physical, and every attempt at a departure from their life of rest and quiet is made under protest, and with the firm conviction that disaster is sure to follow.

That the type of fatigue brought about by prolonged overwork or strain requires rest, relaxation, and change of surroundings, combined with advice best adapted to counteract the morbid mental state which may be present, is apparent. This class comprises the cases which do well by giving up absolutely the sort of life which has absorbed them, and combining rest with activities of a different nature which will afford sufficient interest to divert the mind and prevent reflection.

The point must be recognized and seized, however, when this regime has played its part, and the time has come for putting the hand to the plough again, for it is all too easy for the memory of a previous breakdown and fear of its recurrence to render one loth to resume his former life again. It is on account of this fear and hesitation that it is advisable to keep in touch with the patient and prevent backsliding until he is well launched in his old life.

The larger class of patients so often descended from neurotic parents and presenting a history of attacks of previous nervous breakdowns, attempting again and again to take up the duties of life, but never seeming able to get sufficient reserve to carry on the struggle for any prolonged period of time, require management of a different sort. Such cases,

as has been said, represent the psychological element of fatigue in its fullest development. The conviction that exhaustion will follow any amount of effort, physical or mental, is already a guarantee that it will result. On being told to do certain things a patient recently remarked, "Very well, I'll do it, but I know what will happen, and you must take the consequences." Of course if she had followed orders in such a spirit the result must have been as she determined.

Frequently these patients have indulged in rest for months, or even years, without beneficial results. Physically sound, but unable to assume duties and responsibilities of life, they form a group too often misunderstood, and classed as uninteresting by the physician, yet woefully in need of proper direction.

Various systems for the management of this type of cases have been advanced by different men. The earliest complete method was that recommended by Dr. S. Weir Mitchell, and has since been referred to as the rest cure. In 1875 he published his first paper treating of this subject under the title of "Rest and the Treatment of Nervous Diseases," and a few years later brought forth the first edition of his monograph "Fat and Blood." As is well known, the essence of his method consists in pursuing his course along certain definite lines, treating all cases alike. Seclusion, rest, massage, electricity, and feeding have been the points on which he has laid particular stress. That he has been eminently successful in carrying out this method can be attested by the large number of patients who have been benefited under his care. That the principles he employs exercise their results according to his theories is, however, a question. It has been pointed out by Prince and others that the point on which he lays special stress, namely the increasing of the body weight and the production of more blood, does not by any means lead to the amelioration of

functional nervous symptoms; that although change of surroundings may prove beneficial in many cases complete isolation undoubtedly does harm in certain types, and that the general result produced by the completeness of the regime owes its success rather to the suggestive influence than to any physical change that takes place. This system has been more or less widely adopted with modifications by most of the sanatoria devoted to the treatment of nervous invalids, and the criticisms which may be applied to this method as employed by its originator are even truer here. For, lacking the unusual personality of the father of this regime, and the confidence inspired by his continued successes, the patient is too ready to accept the "rest cure" as such, in every sense of the word, and thus derive from it the feature which should be minimized, while he misses in so doing the factor which should be working against his psychic attitude toward his condition.

This has been so much recognized by many of the sanatoria during recent years that the facilities for exercise and occupation have to a large extent replaced those of rest and seclusion with gratifying results.

A new impetus has been given to the interest in psychotherapeutics by the widespread reading of the methods of Dubois, as set forth in his book, "The Psychic Treatment of Nervous Disorders," published in 1905. This method, which has been termed the system of rational therapeutics, has for its aim the education of the patient oftentimes through more or less Spartan discipline, and through the presentation of bare facts and truths regardless of the patient's attitude towards his own condition. Whereas the method followed by Mitchell with its modifications as advocated by Déjerine and Barker have been to rest and isolate the patient and gradually win him from his symptoms by education as to their nature, and encouragement, meanwhile treating the various discomforts and increasing the patient's powers for

activity, Dubois, on the other hand, begins by explaining to the patient the actual condition of things, and forces his opinion as to the psychic nature of the discomfort, and refuses treatment of this by drugs or chemical means. "Never," said Dubois, in discussing the use of drugs a short time ago, "will I give a sleeping powder to a nervous patient except in cases of actual melancholia." Whether this method can be generally adopted by practitioners is a great question. The remarkable personality of Dubois, and his firm conviction as to the ethical and therapeutic value of his method, render it peculiarly efficient. It is difficult to conceive of a patient not being strongly moved by his remarks, which are presented by him so forcibly, and clinched by his frequent repetition of his favorite phrase, "C'est la verité."

It is apparent that the mental attitude of patients suffering from this chronic state must be changed. New groups of complexes must be formed. The knowledge that experience has shown that certain sensations have resulted from certain activities must be replaced by a conviction that these efforts may be made without harm.

Whether the result may better be brought about by the establishment of new complexes in the hypnotic state, or by persuasion and conviction established in the waking state, may be a question in some cases. If we are to consider that the unhealthy complexes dominant in these cases, rendering them unable to respond in a normal way to their surroundings, are to be looked upon as a dissociation, much as moods of depression are to be regarded, hypnosis may be offered as a rational method for establishing the normal state. Both Tuckey and Bramwell have reported cases in which the fatigue state has been successfully treated in this way.

Personally I have used the conversation method practiced by Dubois. Needless to say, the physical condition must be thoroughly investigated and any deficiencies recognized, while it should be assured that the bodily secretions are functioning in a normal manner.

At the start, the attitude of the patient toward his condition must be changed. The discouraged doldrum state must be attacked by a careful and truthful statement of the existing condition, and the possibilities set forth which must be attained, and will result as surely as the physical law of cause and effect is true. He must regard his condition in a new light, and new groups of complexes must be called into play and associated with his individual symptoms as well as with his attitude toward the future.

When physical or mental effort is called into play the fatigue or discomfort resulting should call up the new complexes established, and in order that this may follow, the association of the new complex groups must be more strongly welded to the symptoms than are the old groups of discouragement, indifference, fears, etc. It is here that the mistake is too frequently made of using general unmethodical encouragement, in place of strengthening the association between the desired complexes and the tasks to be performed. This is not to be accomplished in a hasty consultation, but the physician must spend sufficient time to feel himself thoroughly "en rapport" with his patient, so that both have a tacit understanding that they are taking up a task together which is going to be accomplished. Enthusiasm for the undertaking, increasing amounts of activity, and occupation best suited to the individual, form steps by which the patient may mount to his normal plane.

The rational acceptance of the feeling of fatigue must be forced upon him until it becomes for him a natural reflex, and this carries him a long way towards disregarding it, and its final disappearance. Frequently the patient remarks, "Yes, doctor, I have done as you said, but I feel so tired." "That may be true," is the reply, "but you were just as tired last week, and then you were accomplishing nothing. The difference is, that to-day you are so much nearer the goal."

I am not in accord with the belief of Dubois that abso-

lute disregard of all symptoms depending on the psychic state should be enforced upon the patient. Certainly the road is a much easier one for him to travel if the distressing head feelings are alleviated by a static current, or if a gastric disorder is controlled by some simple remedy. The danger is to be avoided however, of too much treatment of this sort.

The following cases are illustrative of the conditions which may be benefited by these methods.

CASE I. This patient was a student twenty-one years of age. His father and mother were both of neurotic families, and were themselves subject to moods of depression, while his sister was of a high strung and sensitive temperament. The patient had always been strong and rugged physically, and, except for certain disturbing ideas in real life such as come to imaginative children, had never had any nervous disorders. Slow to learn, he had found it difficult to pass the entrance examinations to college, and had some difficulty in keeping up with his class work. This was the more difficult on account of his love of sports. His whole ambition seemed to be to make the 'Varsity team in football. His continued efforts to do well in his studies, with his constant worry lest he should not be able to do well in his athletics, caused him toward the middle of his first year in college to become more and more fatigued. This sense of weariness once started developed more rapidly, and made it nearly impossible for him to accomplish any work. In fact, so pronounced was the symptom, that repeatedly, on simply crossing the college yard, he returned to his room so exhausted that he felt obliged to lie down and rest.

His inability to keep up with his duties caused him greater and greater worry, and he suffered constantly from his head feeling tired, which rendered it impossible for him to concentrate his mind any length of time. This tired feeling in the head soon gave way to a constant sense of pressure over the forehead and the vertex, which caused

him much alarm. Frequently when this was very distressing, he would be seized with the idea that he was going to lose his mind.

A careful examination of the patient showed an almost perfect physical condition. Never have I seen more splendid muscular development. There was no evidence of any disturbance of the organs of the thoracic or the abdominal cavities. The pupils were normal in size and reacted well. The knee jerks were equal and slight. The contrast between his story of utter physical exhaustion, and the picture he presented of such strength was very striking. Nor was he able to understand why he could not enter into things with his customary vigor. After explaining in detail to him the nature of his condition and the factors which were helping to keep him from recovery, he was made to realize what his possibilities were, and how he must apply himself to gain his ends. The tasks put upon him were made rapidly more and more difficult, so that at the end of six weeks he was doing a normal amount of studying, and was rated as one of the first-class men in putting the shot and throwing the hammer.

His condition continued to improve so that the following fall he played on the 'Varsity football team, and then as well as during the two succeeding years of play was considered a tower of strength.

Except for a temporary difficulty of an entirely different nature this patient has been quite well since his recovery, a period now of several years.

CASE II. The second patient was a strong, well-looking man of twenty-two, who for years had been incapacitated for carrying on the work of daily life on account of his nervous condition.

A few years ago he was working very hard in college, and studying in a law office in addition. This he was able to keep up for a year, although he grew progressively more tired, and found himself more and more limited in his capacity for

performing his duties. At the end of this time, one evening when he arrived at his home, as he was going upstairs he was suddenly overpowered with a sensation as if he were let down through a stairway, and were melting away into nothingness, and was conscious of a feeling of overpowering fear. A cold sweat broke out all over him, so that he got hot water bottles and crawled into bed under heavy coverings, still feeling strange. From that night on, the feeling of exhaustion which had been increasing for a number of months became doubly strong, and rendered him unable to carry on his work and studies. In the mean time similar attacks of fear and unreality returned at various intervals, and he was advised to leave his home and to enter a sanatorium.

The following two years were spent in various sanatoria and retreats, the patient meanwhile getting no stronger, but more and more losing confidence in himself. At the time when he made his first visit to me he was unable to go about alone on account of his great sense of fear that something would happen. The outside world seemed strange in a way which he found it difficult to explain. There was no power to concentrate the attention in following a conversation or in attempting to read; to such a degree did this symptom exist that he found it impossible to read a single paragraph in the newspaper understandingly. Attempts to move about simply rendered him more tired, and on the whole he declared himself utterly discouraged in trying to make any progress against his illness.

The treatment of the condition was rendered difficult in the beginning by the inability of the patient to give his attention long enough to grasp a continued line of argument. This was overcome gradually by forcing him to devote all his energies to mastering the content of longer and longer passages of reading at stated intervals, till he found himself able to read or attend lectures without effort. Meanwhile his fears were dispelled by the substitution of new complexes,

so that now for a year he has been carrying on more work than is done by the average law student, and performing his duties in an eminently satisfactory manner.

Whereas the first case cited represents the psychological fatigue (hyperesthesia) as related more to physical effort, the second case is the type in which a physiological fatigue state developed into a psychopathological fatigue and finally into a condition of psychasthenia. Such cases at times have the distressing attacks of unreality and the overpowering fears developed to such a degree that hypnosis is necessary to overcome them. That new complexes may be forced upon them in the waking state when the distressing symptoms are not too deeply grounded is evidenced by the frequency with which this end has been accomplished.

PSYCHO-ANALYSIS IN PSYCHOTHERAPY

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PSYCHO-ANALYSIS IN PSYCHOTHERAPY

THE evolution of psychotherapy, like that of all other modes of treatment, is marked by an ever-increasing precision in method and an ever-deepening comprehension of the conditions to which it is applicable. Progress in these two respects must always go hand in hand, for the moment therapeutics becomes divorced from pathology and diagnosis it leaves its scientific basis and stands in danger of approximating to that medical charlatanism which it is the highest interest of our profession to resist. The two studies are peculiarly interwoven in the case of the psycho-analytic form of psychotherapy, for, as I shall presently indicate, treatment is here carried out by simultaneously laying bare and remedying the pathological mechanisms at the basis of the malady. From this point of view we can discern two stages in the development of any new method of treatment, and these I can best illustrate by a reference to more familiar methods, for instance the operations of trephining or of laparotomy. When the possibility of these operations was first realized we saw the first stage in development, in which, namely, they were regarded merely as an adjunct to the therapeutic armamentarium, and were applied in the relief of conditions that were already well known and studied on established pathological lines. The second stage arose when, through the repeated performance of such operations, conditions that could be relieved by them came to be studied anew, fresh aspects of pathology opened up, and questions of precise diagnosis that had previously been academic problems of trivial interest now became urgent matters of life and death. A moment's reflection on the history of appendicitis will remind you of how little we knew of the pathology, the diagnosis, or even the existence of the affection until the surgeon's knife showed that it could be cured. We might, in fact, paraphrase the motto under-

lying British Imperialistic policy, to wit, that trade follows the flag, and say that in medicine diagnosis follows treatment.

Now in psychotherapy most of the medical world is at present only entering on the first stage. That the medical world of America will definitely enter on this stage as a prelude to further advancement will, I trust, be one of the results of this afternoon's conference. In this stage we clearly recognize that we have secured a new therapeutic weapon of the utmost value, which we may describe as the capacity to alleviate certain complaints by purely mental measures, in other words as psychotherapy in its broadest sense. Our attitude towards the nature of these complaints, however, remains in this stage substantially the same as it was when they were treated only by physical remedies. Hence we may see the strange picture of a physician removing by verbal suggestion a symptom which he considers is produced by a toxin circulating in the blood. However, a thoughtful person who employs any form of psychotherapy soon realizes that a symptom which can be removed by mental measures is in all probability of a mental nature. It may parenthetically be remarked that he further realizes how the suffering endured by the patient, so far from being unreal, is all the more dreadful and formidable for having a mental and not a physical origin. A non-appreciation of this important fact is still all too common. Only recently an article appeared in one of the leading medical journals in which the writer remarked: "In this manner I hope that we will always be able to trick a malingerer or hysterical subject into betraying the falsity of his claim." This attitude, though rarely in such an outspoken form, is frequently implicit in medical writings, and cannot be too strongly condemned. Apart from yielding an inkling of the mental nature of various disorders, the first stage in the evolution of psychotherapy is characterized by an indeterminate attitude towards the origin and pathogenesis of them. The older conceptions

have begun to dissolve, but the knowledge won by the new method of treatment has not yet been formulated. Psychotherapy is in this stage employed in a quite empiric way, and the physician either does not concern himself with the intrinsic *modus operandi* of his treatment, or else offers explanations of it which are so superficial as to be of little scientific value.

Psycho-analysis represents the second stage in the evolution of psychotherapy. Here a deeper insight is sought into the essential nature and origin of the morbid phenomena with a view to obtaining a fuller understanding of the aims of treatment and so to achieving a greater precision in the application of it. The psycho-analytic method we owe almost completely to the genius of Professor Freud of Vienna, who in the past sixteen years has wrought it into an elaborate science of which I can here give only the most summary outline. The method is based on the knowledge that the symptoms present in the psycho-neuroses owe their origin to a conflict between two groups of ideas or mental processes which cannot be brought into harmony with each other. One complex of mental processes is for some reason or other of such a kind as to be unacceptable to the main body of the personality. The personality fails to assimilate it, will have nothing to do with it, tries to forget it, to submerge it, to repress it. The repressed complex then takes on an automatic existence, and acts as an irritating foreign body in the same way as any physical foreign body that has not been absorbed. From this point of view we may define the pathology of the psycho-neuroses as a *defect in assimilation*.

Let me illustrate my meaning with a concrete instance. A man conceives an attraction toward the wife of a near friend or relative, and in his imagination perhaps plays with the thought of what might happen were the friend to meet with a fatal accident. If he honestly faces his wish and realizes its nature he will instantly see that, though possibly

a perfectly natural one, it is of such a kind that for social and ethical reasons it must obviously be suppressed. If he adopts this healthy attitude he will probably think no more about the matter except in the most harmless way. The wish-complex is here assimilated by the main body of the personality. If on the other hand he regards the mere possibility of entertaining such a wish as a sin and a sign of the most desperate iniquity he may refuse to own up to himself that he has ever felt it, even momentarily; whenever the thought occurs to him he endeavors to put it from him, to get away from it, in other words to *repress* ('verdrängen') it. The complex here is not assimilated, it therefore continues to act, and the more the man strives to escape from it, the more hauntingly does it torment him. He has now become the prey to a fixed idea which is out of his control, and which evinces its independence by appearing irregularly whether he wills it or not. In actual practice we never meet with cases so simple as this, but the instance will serve to illustrate the notion I am trying to convey, namely that certain mental processes, particularly strivings, desires, and impulses, if they are not absorbed in the main stream of the personality are apt to manifest an independent activity out of control of the will. This activity is usually of a low order, of an automatic and almost reflex kind, and — if I may be allowed to use the term in a clinical and non-philosophic sense — it is generally an *unconscious* activity, that is to say it operates without the subject's being aware of it.

As I have just said, matters are not so simple in practice, and what actually happens is that the activity of the repressed complex is manifested not directly but indirectly in some distorted form that is often hard to recognize. In the above example, for instance, the subject might have counter-balanced his real attitude towards his friend by developing an exaggerated solicitude for his welfare, and have shown great concern and dread whenever the friend ran the slightest

risk of accident or danger. Again, an abnormally strong emotion might be evoked by anything accidentally associated with the persons in question, a condition that Professor Morton Prince described some ten years ago under the name of "association neurosis." This distortion in the manifestation of the activity of the mental complex is often exceedingly involved, and one of the main difficulties in the psycho-analytic method is the unravelling of the confused end-product, which clinically we call a symptom. The psychological mechanisms by means of which the distortion is brought about are very intricate, so that in the time allotted it would be impossible for me to describe them. They have been worked out with great accuracy and detail by Freud and Jung, and an exact study of them is essential to the use of the psycho-analytic method.

Investigation on the lines presently to be indicated discloses the fact that every psycho-neurotic symptom is to be regarded as the symbolic expression of a submerged mental complex of the nature of a wish. The wish itself on account of its unacceptable nature is concealed, and the symptom arises as a compromise between it and the repressing force exerted by the main personality. The stream of feeling that characterizes the wish is dammed up, it can find no direct outlet, and so flows into some abnormal direction. The metaphor of "side-tracking" is, I believe, used in American psychiatric circles to indicate this process. In more technical phraseology we may say that the affect of the original complex is inhibited, and so becomes transposed on to an indifferent mental process. This indifferent mental process has now become invested with the strength of feeling that properly belongs to the original complex, and so may be said to replace the complex. Thus arises what Professor Adolf Meyer calls a substitution neurosis, in which an abnormal outlet has been found for a pent-up affective process. The outlet may be in a purely mental direction, in which case we

have such a symptom as a phobia, or towards various bodily processes, a condition that Freud calls conversion-hysteria, in which case we have such symptoms as a tremor or a paralysis. In the symptom the patient obtains a certain unconscious gratification of the repressed wish, and this means of obtaining the gratification, however perverse and abnormal it may be, is still the only means possible to the patient under the circumstances. This fact explains the obstinacy with which such a patient may instinctively cling to his symptoms, and is one of the causes of the resistance that the physician encounters when trying to remove these. I need hardly remind you that this obstinacy is often erroneously interpreted even by physicians as indicating mere wilful perversity, a mistake that does not conduce to success in treatment. Not only does the observer commonly fail to understand the significance of the symptom, but the patient himself has no knowledge of its meaning or origin. In fact, *enabling the patient to discover and appreciate the significance of the mental process that manifests itself as a symptom is the central aim of the psycho-analytic method.*

In carrying out this method several procedures may be adopted according to circumstances. The hypnotic state, for instance, may be utilized in the search for forgotten memories. Only a very few of those acquainted with the psycho-analytic method employ this procedure at all extensively, for it has grave disadvantages which I need not here discuss. Personally I employ it only as a rare exception and for special reasons; under certain circumstances, however, it undoubtedly has a legitimate place. The procedure introduced and developed by Freud is the one most generally used, and gives by far the most satisfactory results. It is one of the ways of obtaining what is known in psychology as "free association," and is carried out by getting the patient to concentrate his mind on a given idea, generally one in relation to a symptom, and asking him to relate in the order

of their appearance the various thoughts that come to his mind. It is essential for him to do this quite honestly, and fortunately we have several objective tests of his behavior in this respect. He must suspend his natural tendency to criticize and direct the thoughts flowing in, and must therefore play a purely passive part during this stage. At first he will omit to mention a number of thoughts on the ground that they are apparently irrelevant, unimportant, or nonsensical, and others because they are of a painful or unpleasant nature. After a time, however, the length of which largely depends on his intelligence and sincerity, he acquires the capacity of adopting the non-critical and passive attitude essential to success.

Other means of reaching buried mental complexes may briefly be mentioned. A study of various mannerisms, symptomatic movements and tricks of behavior, and slips of the tongue or pen, often reveals the automatic functioning of some repressed train of thought. The word-reaction association method as developed by Jung is of the highest assistance, particularly in furnishing us with a series of clues to serve as starting points for future analyses. In this method a series of test-words are called out to the patient, who has to respond with the first word or thought thus called to his mind. From a general review of the kind of responses given much can be learned about the mentality of the patient and the type of psychosis present. Further, by noting certain peculiarities in the individual reactions we may discover certain complexes or trains of thought which possess for the patient a high emotional value, and these can then be followed and studied more fully. The peculiarities I refer to are ten or twelve in number. The chief are: undue delay in the time of reaction, failure to respond at all, response by repetition of the test-word, perseveration affecting the succeeding reactions, anomalous clang associations, assimilation of the test-word in an unusual sense, and

erroneous reproduction of the reaction when the memory for it is subsequently tested. Last but not least is the analysis of the patient's dreams by means of the special technique introduced by Freud. The study of dreams is in this connection of supreme importance, for of all the means at our disposal it is the one that best enables us to penetrate into and understand the most hidden parts of the mind. No one can have more than an outsider's notion of the psychoanalytic method who has not thoroughly studied Freud's *Traumdeutung*, for in this work he has laid down the technique of his methods, and discussed the principles on which they are based, with a fulness to be found nowhere else in his writings.

By means of the methods just outlined we are enabled to determine the origin of the symptom by retracing the steps along which its pathogenesis proceeded. It is impossible to deal with the underlying complexes, to discharge their pent-up affect, to render them more assimilable by the patient, unless one succeeds in this task and brings them to the full light of day. The symptoms constitute a veiled language in which hidden thoughts and desires find the only means allowed them of coming to expression. We have to get the patient to translate his symptoms into more direct language, and thus to understand and appreciate the origin of them. In so doing we give the patient a deeper insight into the workings of his mind, so that he is enabled to correct abnormal deviations, to overcome internal inhibitions and impediments, and to acquire a more objective standpoint towards the repressed mental complexes, the automatic functioning of which has produced the morbid manifestations. He is in this way able to free his personality from the constraining force of these complexes, and, by taking up an independent attitude towards them, to gain a degree of self-control over his aberrant thoughts and wishes that was previously impossible. The method is thus in almost every respect the

reverse of treatment by suggestion, although several would-be critics have naïvely exposed their ignorance of the subject in maintaining that the successful results are produced by suggestion. In suggestion treatment the physician adds something to the patient's mind,— confidence, belief, etc.,— and thus makes the patient more dependent on him. The psycho-analytic method does not add; it takes away something, namely inhibition. It enables the patient to disentangle confused mental processes, and, by giving him control over the disharmonies of his mind, leads him to develop a greater measure of self-reliance and independence. The training received by the patient is thus an educative one in the highest sense of the word, for he not only achieves a richer development of will power and self-mastery, but acquires an understanding of his own mind which is of incalculable value for future prophylaxis. He grows both in capacity to know and in ability to do.

The conditions that lend themselves to psycho-analytic treatment comprise practically all forms of psycho-neurosis, the different types of hysteria, the phobias, obsessions, anxiety neuroses, and even certain kinds of sexual perversions. I shall refrain from relating any individual cases, for to do so would be only to weary you with the recital of a list of typical and atypical instances of these various conditions. It is further impossible for me to narrate any single instance of an analysis, for in every case the richness of material is so great that it would take several hours to give even an outline of the main points in the case.

The results obtained by the treatment, though by no means ideal, are yet very gratifying. They surpass those obtained by simpler methods in two chief respects, namely in permanence and in the prophylactic value they have for the future. Although most symptoms can be removed by other methods, such as hypnotism, yet any one who has devoted much time to the study of these cases knows how great

is the tendency to relapse, to recurrence, and to the appearance of fresh groups of symptoms. Mild cases can indeed be not only alleviated but even cured by the simpler psychotherapeutic measures, so that these all have their sphere of usefulness; severe cases, on the other hand, need a more radical treatment, an uprooting of the actual morbid agents. It is easy to understand how this must be so. Hypnotic and other suggestion acts merely by blocking the outward manifestation of the underlying pathogenetic idea. The idea itself persists, because it has not been reached and dealt with, and sooner or later it will again manifest itself either in the same direction or in some fresh one. The analogy of a tubercular, or better still of an actinomycotic abscess occurs to me in this connection. If the suppurating sinus is forcibly plugged then the symptom of discharging pus is removed, but sooner or later the pent-up pus will find a vent in either the same or a fresh direction. Before satisfactory healing can take place the tension must be relieved by instituting free drainage for each pus pocket, and the more thoroughly the focus of the disease is dealt with the better will be the result.

A few words are now necessary on the clinical applicabilities and limitations of the method. It is a method that makes great demands on both physician and patient. Apart from technical knowledge the physician must evidently possess, not only unimpeachable integrity, but also a considerable measure of tact, patience, and sympathetic understanding; without these qualifications he is unlikely to gain the patient's confidence to the requisite degree. The treatment further makes a great call on his time. Freud often finds it necessary to devote to a patient an hour a day for three years, but he acknowledges that the cases sent to him are generally of a very severe nature. In milder cases one can achieve very satisfactory results in a few months, a fact to which I can fully attest from my own experience.

The amount of time may appear excessive unless one remembers the hugeness of the task imposed, for in all cases the roots of the trouble go back to early childhood, and important modes of reactions have to be altered which have been fixed and stereotyped for many years. When we consider how much trouble and time frequently has to be expended in the orthopedic straightening of a deformed limb, we should not grudge the same to the far more intricate task of the orthopsychic training of a deformed mind, especially when this results in converting an intolerable existence into a happy life, and a person paralyzed by doubts, fears, and suffering into an active and useful citizen.

The demands made on the patient are no less great. The results of the treatment will vary with the intelligence, courage, honesty, and perseverance he shows. With stupid and quite uneducated patients relatively little can be done, so that happily we can most help those whose value to the world is greatest. Again, age sets a formidable barrier to our efforts. In old age, when the plasticity of the mind is diminished, far less can be done than at an earlier period, and furthermore the time necessary to trace back the erroneous mental reactions through so many years is naturally longer. Still I have had a few fairly satisfactory results even above the age of fifty.

It will be realized that the method is at present not one generally applicable by the practising physician. Not only is the time necessary for the treatment a great hindrance, but also a laborious special training is necessary before the technique of psycho-analysis can be acquired to an adequate extent. It is generally admitted that this demands three years' incessant practice, a good previous knowledge of neurology being assumed. Here, as elsewhere, therefore, good work exacts arduous labor, and there is no royal road to the art of handling the most intricate and delicate machine we know of, the human mind.

You may now legitimately ask why I have taken up so much of your time in describing a mode of treatment which I acknowledge not many will have the opportunity to learn or to apply. My answer is a twofold one. In the first place I am not one of those who hold that the general physician should be cut off from all advancing knowledge except that which he can immediately apply in his daily work. No physician can apply all methods of diagnosis and treatment, but it is surely well that he should at least be aware of the existence of them. I cannot believe that because a country practitioner is not expected to apply the Wassermann test in the diagnosis of syphilis, or to perform excision of the Gasserian ganglion for the relief of trigeminal neuralgia, it is therefore better for him not to know about such methods. In the second place I wish to contribute to the general effect that this symposium must have in bringing home to you in some degree the present unsatisfactory state of medical education so far as psychology is concerned, for this is the main cause of the helplessness of the medical profession against the very maladies that are the triumph of the quack, religious or otherwise. The sooner we honestly face the shameful but undeniable fact that unqualified empirics can relieve distressing affections in cases that have defied medical skill, can produce results where we fail, the sooner will this flagrant lack in our system of education be remedied, and the better will it be for the dignity and honour of the medical profession. While the present state of affairs lasts, in which most physicians are given not five minutes' training in psychology in the five years of their student life, and in which there is no teacher of clinical psychology in any university or medical school in the country, our profession must submit to being the prey of the charlatan and the mock of the scoffer.

THE PSYCHOTHERAPEUTIC VALUE OF THE
HYPNOIDAL STATE

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THE PSYCHOTHERAPEUTIC VALUE OF THE HYPNOIDAL STATE

HYPNOSIS has long ago been brought before the scientific world as a state in which maladies of a functional or of a psychic origin, such as the various forms of hysterias, obsessions, and phobias, can be alleviated and even permanently cured. Dr. Frederic H. Gerrish, your president, has in his address opened this subject before this society. The works of Braid, Charcot, Liebault, Bernheim, Forel, Vogt, Breuer and Freud, Schrenck-Notzing, Prince, Bechterew, Janet, Babinski, and others, are well known to the student in abnormal psychology. Recently, however, many medical men of reputation, such as Dubois, Freud, Prince, Putnam, Taylor, Waterman, Donley, and many others, could not help being impressed by the practical limitations of the hypnotic state. Many patients refuse to submit to treatment, being afraid of occult influences. Then again a great number of patients are difficult to hypnotize. There is no denying the fact that there exists a strong feeling of distrust among many conservative men who are not acquainted with the amount of scientific work that has been lately done in the domain of abnormal psychology. This strong feeling against the use of the hypnotic state as a therapeutic agent in psychopathic diseases is unfortunately often found among many representative men of the American medical profession.

An American editor of a well-known American medical journal unhesitatingly rejects work on psychopathology and psychotherapy. The editor is apparently under the impression that he is keeping up the high standard of American medical science,—that papers, disquisitions, and discussions on diarrhea, constipation, enemas, eczema, hemorrhoids, and cognate scientific investigations are essen-

tially valuable, dignified, and suitable to the mind and needs of the medical reader. In Germany, France, Italy, Austria, Russia, work in abnormal psychology has long ago gained recognition as a science of theoretical and practical importance to the physician and even to the lawyer, while in the United States conservatism in regard to abnormal psychology is still paraded as a badge of orthodox medical respectability. The opposition to psychopathology is manifest, when it comes to the use of the hypnotic state.

Since hypnosis meets with so much opposition the question naturally arises,—Is it possible to affect and modify pathological mental states outside hypnosis? The problem is practical and requires a solution. In “The Psychology of Suggestion” I pointed out on the strength of a number of experiments that suggestibility can also be induced in the normal waking state. I have also shown that among the conditions of normal and abnormal suggestibility monotony and limitation of activity play an important rôle. Any arrangement tending to produce monotony and limitation of voluntary activity brings about a state of suggestibility termed by me *subwaking* or *hypnoidal*, a state in which mental life can be affected with ease. The induction of the state is termed *hypnoidization*.

In the hypnoidal state consciousness becomes somewhat vaguer than in the waking condition; memory is more diffused, so that experiences apparently long forgotten come in bits and scraps to the foreground of consciousness. Emotional excitement subsides, voluntary activity is changed to passivity, and suggestions meet with little resistance. The subwaking state is above all a rest-state, a state of physical and mental relaxation.

The favorable therapeutic results obtained by me led to a closer study of what I, some thirteen years ago, regarded as a peculiar mental condition. The subwaking or hypnoidal state is essentially an intermediate state belong-

ing to the borderland of mental life. On the one hand the hypnoidal state closely touches on the waking state, on the other it merges into hypnosis and sleep. A close study of the subwaking state shows that it differs from the hypnotic state proper and that it cannot be identified with light hypnosis. In my years of study of patients and subjects I have observed the presence of the subwaking state before the development of hypnosis and also before the oncome of sleep. When again sleep and hypnosis pass into waking, the hypnoidal state reappears. The hypnoidal state may therefore be regarded as a transitional, intermediate state.

The subwaking state may be said to partake not only of the nature of waking and sleep, but also to possess some characteristics of hypnosis, namely *suggestibility*. It is clear that from the character of its mixed symptomatology the hypnoidal state is variable and unstable. The subwaking state should, in fact, be regarded as an equivalent of sleep. Like sleep the hypnoidal state has many levels of depth. It differs, however, from sleep by the rapidity of its oscillations from level to level. In the experiments of various investigators sleep is found to be represented by a rapidly rising curve during the first couple of hours, and by a gradually descending curve during the rest of the hours of sleep. No such regularity of curve can be observed in the subwaking state. *The depth of the hypnoidal state changes very rapidly and with it the passive condition and suggestibility of the patient.*

Thus far the work was confined to observations and experimentation on human subjects and patients, both from a theoretical and practical therapeutic standpoint. Recently, however, I undertook at the physiological laboratory of Harvard Medical School, and also in my own psychopathological laboratory, a series of experiments on the manifestations of sleep in the ascending scale of animal life,—from the frog and guinea pig, the cat, the dog, to the infant and

adult.* The experiments prove that the hypnoidal state is by no means confined to man, but is also present in the lower stages of animal life. Furthermore, the experiments clearly show that the further down we descend in the scale of animal life, the more prominent, the more essential does the subwaking state become. From the facts one is forced to come to the conclusion that the hypnoidal state is the primitive rest-state out of which sleep has arisen in the later stages of evolution. Sleep and hypnosis have taken their origin in the hypnoidal state; both hypnosis and sleep are highly differentiated states and have become evolved out of the primitive, undifferentiated, subwaking state, which is the rest-state, still characteristic of the lowly organized forms of animal life. In short, we may say that *the hypnoidal state is the primordial sleep-state*. In man the subwaking state is but in a rudimentary condition,— it has shrunk to an abortive, transitory, momentary stage in the alternation of waking and sleep.

While in the hypnoidal state the patient's consciousness keeps on fluctuating from moment to moment, now falling deeply into a subconscious state in which outlived experiences are easily aroused, and now again rising to the level of waking consciousness. The experiences come often in fragments which gradually coalesce and form a connected series of interrelated systems, apparently long gone and forgotten. The recognition is fresh, vivid, instinct with life, as if the experiences had occurred the day before. The revived experiences are in many cases confirmed by some relative or intimate friend. This characteristic of getting access to subconscious experiences lost to the patient's personal consciousness is what makes the hypnoidal state such a valuable instrument in the tracing of the origin and development of the symptoms of the psychopathic malady. Important, however, as the following-up of the history or of

*Sidis: An Experimental Study of Sleep, JOURNAL OF ABNORMAL PSYCHOLOGY, 1908.

the psychogenesis of the symptoms may be, both to the physician and to the patient, for an intelligent and scientific comprehension of the case, *it does not cure*, as some are apt to claim, *the psychopathic malady*. The value of tracing the growth of the disease to its very germs lies entirely in the insight gained into the nature of the symptom-complex. *The tracing of the psychogenesis has no special therapeutic virtues*, as the Germans claim, but, like all theoretical knowledge, is of the utmost importance for a clear understanding of the causation of the psychopathic state, thus helping materially in the treatment of the case. The information of the psychogenesis given to the patient is valuable only in so far as by a systematic course of direct and indirect suggestion, by mediate associative and immediate associative suggestion, by substitution, disintegration, and synthesis, both in the waking and the hypnoidal states, we help to *transform* the associative course and emotional tone of the patient's mental life.* *The treatment is a highly complex process of disintegration and integration of mental systems.*

From a practical standpoint the therapeutic value of the hypnoidal state is by far the most important. Now as we have pointed out, our experiments on sleep have revealed the significant fact that the hypnoidal state is the primordial rest-state,—sleep is but a derivative form of rest. In many forms of diseases, especially nutritional, it is often advisable to revert to a more simple and more primitive form of nutrition. Similarly in psychopathic maladies a reversion to a simple form of rest-state proves to be of material help to the patient. In plunging the patient into the subwaking, hypnoidal state we have him revert to a primitive rest-state with its consequent beneficial results. *The suggestibility of the hypnoidal state, if skilfully handled, increases the therapeutic efficacy of the hypnoidal subwaking state.* Re-

*Sidis: Psychopathological Research; Multiple Personality; Psychology of Suggestion.

laxation of nervous strain, rest from worry, abatement of emotional excitement are known to be of great help in the treatment of nervous troubles of the neurasthenic or of the more fashionable psychasthenic. We find something similar in the treatment of psychopathic diseases by means of the agency of the hypnoidal state the therapeutic efficacy of which is all the more heightened by the presence of the trait of suggestibility. *Most important, however, is the access gained through the agency of the hypnoidal state to the stores of potential subconscious reserve-energy, which, by a liberation of energy, bring about a reassociation and synthesis of the dissociated mental systems underlying the symptoms of the disease. The therapeutic value of the hypnoidal state consists in the liberation of reserve energy requisite for the synthesis of the dissociated systems.*

The theory of reserve energy is of the utmost importance to abnormal psychology. The theory was advanced independently by Prof. James† and myself,‡ and seems to me to form the very foundation of psychopathology and psychotherapeutics. It is by no means easy to present adequately the principle of reserve energy in this brief paper. The principle is based on a broad generalization of facts, psychological, physiological, and biological, namely, that *far less energy is utilized by the individual than there is actually at his disposal*. In fact, but a very small fraction of the total amount of energy possessed by the organism is used in its relation with the ordinary stimuli of its environment. The energy in use may be regarded as the *kinetic* or *circulating energy*, while the energy stored away is the *potential reserve energy*. There must always be a reserve supply of energy requisite for unusual reactions in emergency cases. Those organisms survive which have the greatest amount of

†James: *The Energies of Men*, *Philosophical Review*, 1907.

‡Sidis: *Studies in Psychopathology*, Ch. xiv, *The Principle of Reserve Energy*, *B. M. S. J.*, 1907.

reserve energy, just as those countries are stronger and victorious in the world-market which possess the largest amount of reserve capital to draw upon in critical periods.

As life becomes more complex inhibitions increase,—the thresholds of stimulations of a complex system rise in proportion to its complexity. With the rise of evolution there is a tendency to increase of inhibitions with a consequent lock-up of energy which becomes reserve. Now there are occasions in the life of the individual, under the influence of training and emotional trauma, when the inhibitions become unusually intense and tend to smother the personality which is weakened, impoverished in its reactions, and is unable to respond freely to the stimuli of its environment. The inhibited system becomes inactive and may be regarded as dissociated from the cycle of life. In case of an emotional trauma there is often a breach in continuity of association, the affected system becomes dissociated from the rest of mental life, and is like a splinter in the flesh of the individuality. Its own threshold when tapped may be very low, but is not directly accessible through the mediacy of other systems. On that account its threshold appears unusually or pathologically high. When the inhibitions are very high they must be removed. This removal of inhibitions brings about an access to the accumulated energy of the inhibited system. In case of disjunction or break of continuity we must stimulate the reserve dormant energy of the systems and thus assist the process of repair and bridge the breach of associative continuity. A new fresh active life opens to the patient. He becomes a different, a “reformed” personality, free and cheerful, with an overflow of energy.

To quote from a former work of mine: *

“The thresholds of our psychophysiological systems are usually raised, mental activity working in the course of

*Studies in Psychopathology, *B. M. S. J.* 1907.

its development and growth of associative processes under ever increasing inhibitions with ever higher thresholds. . . . On account of the high thresholds and inhibitions not the whole amount of the psychophysiological energy possessed by the system is manifested; in fact, but a very small portion is displayed in response to stimuli coming from the habitual environment. What becomes of the rest of the unused energy? *It is stored, reserve energy.*

“Biologically regarded, we can well see the importance of such stored or reserve energy. In the struggle for existence, the organism whose energies are economically used and well guarded against waste will meet with better success in the process of survival of the fittest, or will have better chances in the process of natural selection. The high thresholds and inhibitions will prevent hasty and harmful reactions as well as useless waste of energy, unnecessary fatigue, and states of helpless exhaustion. Moreover, natural selection will favor organisms with greater stores of reserve energy which could be put forth under critical conditions of life. In fact, the higher the organization of the individual, the more varied and complex the external environment, the more valuable and even indispensable will such a store of reserve energy prove to be.

“The course of civilization and education, by continuously raising the thresholds and inhibitions, follows the line of natural selection and keeps on increasing the disposable store of potential, subconscious or reserve energy both in the individual and the race. It is in this formation of an ever-greater and richer store of disposable, but well-guarded, reserve energy, that lies the superiority of the educated over the uneducated and the supremacy of the higher over the lower races.

“Civilization and education are processes of economy of psycho-neural force, savings of mental energy. But what society is doing in a feeble way natural selection has done

far more effectively. What education and civilization are doing now on a small scale and for a brief period of time the process of survival of the fittest in the ever-raging struggle for existence has done for ages on a large scale. We should, therefore, expect that the natural reserve energy would far exceed that of the cultivated one.

“In the treatment of the phenomena of psycho-physiological dissociation, in the protean symptoms of nervous and mental exhaustion we should not forget this biological principle of reserve energy and should make attempts to use it. In many cases the inhibitions become too heavy and the thresholds too high. We must loosen the grip of some of the inhibitions and lower the thresholds, thus utilizing a fresh supply of reserve energy.”

A similar train of thought was developed by Dr. S. J. Meltzer in his excellent paper on “The Factors of Safety in Animal Structure and Animal Economy.”* By a striking series of instructive facts Dr. Meltzer points out that “All organs of the body are built on the plan of superabundance of structure and energy.” I cannot resist the temptation of quoting Dr. Meltzer’s conclusions at some length as they so clearly elucidate our principle of reserve energy which is all the more valuable as Dr. Meltzer has formulated it independently on widely different grounds. “Of the supplies of energy to the animal we see that oxygen is luxuriously supplied. The supply of carbohydrates and fats is apparently large enough to keep up a steady luxurious surplus. . . . The liberal ingestion of proteid might be another instance of the principle of abundance ruling the structure and energies of the animal body. There is, however, a theory that in just this single instance the minimum is meant by nature to be also the optimum. But it is a theory for the support of which there is not a single fact. On the contrary, some facts seem to indicate that Nature meant differently. Such facts are,

*Science, 1907.

for instance, the abundance of proteolytic enzymes in the digestive canal and the great capacity of the canal for absorption of proteids. Then there is the fact that proteid material is stored away for use in emergencies just as carbohydrates and fats are stored away. In starvation nitrogenous products continue to be eliminated in the urine which, according to Folin, are derived from exogenous sources, that is from ingested proteid and not from broken down organ tissues. An interesting example of storing away of proteid for future use is seen in the muscles of the salmon before they leave the sea for the river to spawn. According to Mescher the muscles are then large and their productive organs are small. In the river where the animals have to starve the reproductive organs become large, while the muscles waste away. Here in time of affluence the muscles store up nutritive material for the purpose of maintaining the life of the animal during starvation and of assisting in the function of reproduction. This instance seems to be quite a good illustration of the rôle which the factor of safety plays also in the function of the supply of the body with proteid food. The storing away of proteid like the storing away of glycogen and fat for the use in expected and unexpected exceptional conditions is exactly like the superabundance of tissue in an organ of animal or like an extra beam in the support of a building or a bridge,— a factor of safety.

“It seems to me that the factors of safety have an important place in the process of natural selection. Those species which are provided with an abundance of useful structure and energy and are prepared to meet many emergencies are best fitted to survive in the struggle for existence.”

The hypnoidal state is essentially a rest-state characterized by anabolic activity. There is a restitution of spent energy; inhibitions become removed and access is gained to what Dr. Prince so aptly describes as “dormant” systems or complexes. The awakened “dormant” complex systems

bring with them a new feeling-tone, a fresh emotional energy resulting in an almost complete transformation of personality.

As an illustration of the transformation effected I take at random the following extracts from some of the letters written to me by patients who have experienced this welling up of reserve energy:

“Indeed were I to fill this entire sheet with expressions of the gratitude which wells up from my inmost heart it would be only a beginning of what I feel. Surely the darkness of the world has been dispelled since this *new light* has illuminated my soul, and I *feel that this wondrous light will never fail me*. It were vain to attempt to thank you for this wonderful transformation.”

Another letter reads: “You will be glad to know that all is well with me. Life is one happy day, I am a marvel to my friends in the way of happiness and cheer. I have to confess that I feel almost wicked to be so happy.”

Another letter runs as follows: “Next to the gladness in my own restoration, I am rejoiced at the wonderful transformation that has come to my dear friend T. from your marvelous treatment. She writes me most enthusiastically of her steady and sure progress toward the goal of perfect health, of her strength to take up the home duties which had been so burdensome and which she now finds a delight in the doing of them, and of her husband’s and friends’ joy in the transformation that has been wrought in her.”

Dr. Prince in his “Unconscious”^{*} gives an extract of a patient’s letter which tells of a similar transformation and awakening of dormant reserve energy. “Something has happened to me — I have a new point of view. I don’t know what has changed me all at once, it is as if scales had fallen from my eyes; I see things differently — you have given me life and you have given me something to fill it with. I owe

*JOURNAL OF ABNORMAL PSYCHOLOGY, 1909.

you what is worth far more than life itself, namely *the desire to live.*"

Those extracts are typical of many others and clearly show the enjoyment of new strength and powers until now unknown to the patient. Fresh levels of reserve energy have been tapped and have become available in an hour of dire need. The patient has light and strength where there were darkness and depression. We are confronted here with the important phenomenon of liberation of dormant reserve energy. The patient feels the flood of fresh energies as a "marvelous transformation," as a "new light," as a "new life," as "something worth far more than life itself."

The hypnoidal state helps us to reach the inaccessible regions of dormant energy, it helps to break down inhibitions, liberate reserve energies, and repair the breaches of mental activity. The painful systems become dissociated, disintegrated and again transformed, reformed, and reintegrated into new systems full of energy and joy of life.

It is quite probable that Weir Mitchell's rest-cure has derived some therapeutic value from the empirical use of the subwaking hypnoidal rest-state. Similarly it is highly probable that Freud's success in the treatment of psychopathic cases is not so much due to "psycho-analysis," as to the unconscious use of the hypnoidal state. The use of the hypnoidal state or hypnoidization has been recently employed with great success by other investigators, among whom I may mention Dr. John E. Donley, who has made a valuable contribution to the therapeutic aspect of the hypnoidal state.* I am firmly convinced that the hypnoidal state, if rightly and intelligently utilized, will prove an important factor in the domain of psychopathology and psychotherapeutics.

Now as to the method of hypnoidization. There is nothing rigid about the method,—it admits of many modi-

*The Clinical Use of Hypnoidization, *JOURNAL OF ABNORMAL PSYCHOLOGY*, 1908.

fications. The principal object consists in bringing about the conditions of monotony and limitation of voluntary movements requisite for normal and abnormal suggestibility. The patient is put in a relaxed, recumbent position; he is asked to put himself into as comfortable a position as possible, close his eyes, and attend to some monotonous stimulus such as the regular beats of a metronome or the buzzing of an inductorium. Gentle massage and a warm bath may be of material help in excitable cases. Exercise, fatigue both physical and mental, predisposition to sleep, and the late hours of night or the small hours of morning, are favorable conditions. When respiration and pulse become reduced, sensory-motor reaction diminished, sensory hypoesthesia becoming occasionally hyperesthesia, with occasional disturbances of pulse and respiration, with sudden apparently unaccountable starts, with tendencies of retention of position of limbs, and now and then with a slight tendency to resist actively any change of posture of limbs or of body without the actual presence of catalepsy, the whole feeling tone becoming one of acquiescence and indifference, while memory with amnesic gaps begins to find the lost links and even to become hypermnesic,—when we observe all those symptoms we know we have before us the subconscious hypnoidal state.* Pneumographic tracings taken at the same time help^r to detect the state, characteristic by the numerous transient^h changes and the various oscillations of depth of level which take place in this unstable subwaking state, intermediate as it is between the waking state on the one hand, sleep and hypnosis on the other.

From this general discussion about the nature of the hypnoidal state and the methods of its induction we may

*“The subconscious,” notwithstanding the ill-based attacks now fashionable among some psychologists, forms the very foundation of psychopathology. The subconscious is as vital and essential in psychopathology as “ether” is in physics. I shall discuss this subject in its proper place.

now turn to a brief review of some of the cases treated by hypnoidization. The tracing of the growth and development of the various symptoms by means of the memories restored in the hypnoidal state is here omitted, as the object of the present paper is not the study of the causation and origin of the psychopathic systems or "complexes," but rather their reassociation and cure effected by *the reserve energies liberated in the hypnoidal state*. I give cases of partial as well as complete success so as to give the reader a more or less adequate notion of the therapeutic value of the treatment. Cases of partial success are presented first.

I. Miss P. R. Age 23. American. Mother is very nervous. Sister is "high strung." Father is well. When young, patient was regarded as sensitive. Her present trouble began three years ago. She suffers from digestive disturbances, dizziness, circulatory irregularities, numbness in hands and legs, and especially from continuous feeling of fatigue. Her sleep is restless, she dreams a good deal. Attention is good, but her mental state is one of indecision. If left to herself, she would remain in the same place. To make a change in her surroundings is hard and painful to her. The fear of meeting people and specially strangers is quite intense; in fact, it constitutes her central obsession. At the age of eighteen she fell in love with a young man to whom she became engaged. A year later the engagement was broken off under very distressing circumstances. Since then the present condition has gradually developed. The patient was in a chronic state of mental depression and was not unaware of the real origin of her trouble, but the awareness was vague, often falling below the margin of clear consciousness.

The patient expected to be hypnotized, but she could not go into hypnosis. After a few trials at hypnotization the hypnoidal state was used. At first the hypnoidal state was brief in duration, but with its repetition it became prolonged

and deepened with gradually increasing beneficial effects. The patient was but three weeks under my care. She felt greatly improved and returned home before the recovery was made complete.

II. Mr. A. C. Actor. Age 47. American. There are no special diseases in the family except "nervousness." The patient is imaginative and emotional. When about the age of ten his grandfather gave him Faust to read. Since then he has been troubled with the insistent idea of having sold his soul to Satan. In his childhood he was very religious,—prayed much, was afraid of sins, and suffered from nightmares. About fifteen years ago had syphilis, for which he was treated for a period of two years. Up to the age of 32 patient led a gay life. Seven years ago he suddenly felt that "something snapped in his head" and he became greatly frightened. He thought it was paresis or tabes, "as so many actors suffer from those diseases." This fright, however, soon wore off. A month later, after a strenuous and fatiguing series of plays, he suddenly woke up in the middle of the night with the idea of paresis and intense fear. The overconscientiousness and fear of sin characteristic of his childhood and boyhood have now reappeared, and he is obsessed by the fear of sin, deception, blasphemy. He suffers from vague pains all over the body and from digestive disturbances, but he is specially obsessed by the fear of parasyphilitic diseases, tabes and paresis, the symptoms of which are reflected in his attacks.

In the hypnoidal state he became quieted, much of the fear and depression was gone. In addition to other information obtained, though interesting from a psychopathological standpoint, space does not permit to give here, it was found that the last attack was occasioned by a long visit to a friend of his, also an actor, who suffered from gastric crises of tabes. A series of treatments by hypnoidiza-

tion improved considerably the patient's condition, and he returned to his occupation, which he could not possibly give up for any length of time.

III. Mr. C. S. Age 39. Russian. Builder. Father died of apoplexy at the age of 72. Mother is 77, but has always been nervous. Brothers and sisters are well. Patient is rather undersized and weighs ninety-seven pounds. He is very emaciated, looks cachectic, suffers from anorexia, nausea, indigestion, and from vague abdominal pains. Detailed inquiry into the patient's sexual life disclosed no abnormality. Anything unpleasant awakens a feeling of nausea. This can be traced to an infectious disease from which the patient suffered some twelve years ago. He was frightened over it and worried about the consequences. Nausea and vomiting were present during the course of the disease and persisted afterwards. The patient is introspective and suggestible in regard to sickness. If any of the family happen to have any trouble, he is sure to fall sick with the same symptoms. Thus about two months ago the patient's mother fell and broke her left arm, he, too, soon began to feel pain in the left arm, for which he had to be treated. Every new moon he experiences intestinal disturbances, because about that time, in his childhood, his mother used to administer to him a purgative.

Put into the hypnoidal state patient felt much relieved. The beneficial results of the treatment became manifested at the end of a few weeks.

IV. Mr. M. G. Irish. Age 38. Married. Occupation, liquor dealer. Father alive and well. Mother died of pneumonia at the age of forty. Brother and sister died of some obscure form of "heart trouble." Physical condition is good. Patient has no appetite, worries, has no confidence in himself. He is extremely methodical, things must be arranged in certain order or he feels uneasy and

quite unhappy. Has no headaches, but suffers from insomnia. Does not drink, but smokes excessively. Sexual life normal. Has been sensitive and nervous from his very childhood. He broods much over his incapacity of spelling. Has been lately working very hard on a new business intrusted to his care. He doubts his business capacities and fears to ruin the business. He became greatly depressed and had to give up his work and go to the country, but with no beneficial results.

The patient was brought to me in a state of deep despondency, close on the brink of suicide. He could not be hypnotized. I put him into a hypnoidal state, kept him in a state of relaxation for fifteen minutes. When he came out of it he felt "a little better, but not much." After two weeks' treatment the patient felt so far improved that I advised him to return to his work, while the treatment was being continued. Gradually his despondency gave way, his worries, fears, and doubts disappeared, and confidence in himself became strengthened. Patient declared he "never felt so well before." The treatment covered a period of three months. It is now more than two years, the patient continues to be in excellent condition.

V. Mrs. J. F. Age 28. American. Married. Family history good. For many years patient has been suffering from severe headaches, backache, general fatigue, and weakness of the eyes which occasionally became intolerably painful. The headaches became sometimes so intense that the patient suffered agonies. The pains extended all over the head and even down the arms and back. There were present sore spots in the back of the head, the pressure on which somewhat relieved the pain. Various pains of a more indefinable character were also complained of in the right ovarian region, pains which increased on exercise. The patient had usually no appetite, nothing tasted well,—there

was some unpleasant odor in the food; nutrition was poor. Occasionally she suffered from bulimia alternating with anorexia. The sense organs were hyperesthetic; field of vision was normal. The heart was normal, though occasionally irregularity of heart-beat could be observed, due to the patient's extreme nervousness. A gynecologist diagnosed salpingitis and advised an operation on account of adhesions formed. The patient, however, refused to be operated on, and the family physician carried out a long course of gynecological treatment. The oculist treated her eyes, and after a long examination and treatment fitted her with glasses; but the eyes were no better and the headaches were as severe as before.

After a fair trial had been given to various treatments I had to resort to hypnoidization. A year's treatment by the hypnoidal state made the symptoms disappear. The patient gained in flesh and in strength, and felt, as she put it, "younger than ever."

VI. Miss G. A. Age 55. American. Three brothers died of various forms of cardiac affections. Father died of pneumonia; mother died of fatty degeneration of the heart. One of the sisters suffered from akromegaly and died of heart trouble. There are histories of tuberculosis in the collateral branches of the family. Patient looks poorly nourished, her appetite is completely gone. She suffers from insomnia, headaches, backache, general diffused pains all over the body; complains of lassitude and of lack of interest in what goes on around her. She feels despondent and has crying spells. The depression reaches such an acute stage that the patient is afraid of losing her mind. When a child she suffered from *pavor nocturnus* and when about the age of twelve she took a long fatiguing journey which brought on such a state of exhaustion that on her return she became aphasic and hemiplegic and was confined to bed for six

months. The present condition set in a few years ago,—she lost the sense of smell and of taste, while she fell into a state of deep depression. Neurologists regarded her as a case of some obscure “neurosis,” obstinate and incurable.

I must confess that when I undertook the case I did not expect any favorable results. It was an old, chronic, insidious case. The age of the patient, the apparent obscurity of the trouble, as well as the family history were by no means encouraging. The patient did not go into a hypnotic state and I had to use the hypnoidal state. The first couple of months the treatment dragged along indifferently. All I could then say was that the patient did not get worse under the treatment. The hypnoidal state, however, gradually admitted me into the patient’s early history, and I obtained important clues to her symptoms. Here comes in the value of a knowledge of the course and the development of the malady and the consequent help in the therapeutic treatment of the dissociated systems. With a better insight into the abnormal psychology of the case the hypnoidal state could be used to better advantage. The patient began to improve rapidly and at the end of the fourth month of treatment by hypnoidization completely recovered. It is now more than four years since the end of the treatment, and I may say that the patient has not had a single relapse,—she continues to stay well; she has become an energetic social worker, greatly valued for her indomitable energy as well as cheerfulness of mind. People who know her say that “wherever she goes she brings sunshine with her.” A new life was awakened in her. The subconscious reserve energy which has remained dormant in her for so many years has become unlocked and utilized in her ordinary daily life.

VII. Miss A.W. Age 35. Irish. Housekeeper. Physical condition is good. Occasionally suffers from cephalalgia, but on the whole headaches do not trouble her. She suffers often from auditory hallucinations, thinks she is possessed

by demons. From her ninth year she had hallucinations of spirit voices which tell her very unpleasant things. The auditory hallucinations are accompanied by attacks of automatic speech. It seems to the patient as if another being forces her to tell what she thinks. It is on that account that she shuns her friends and acquaintances. Occasionally she has visual hallucinations of angels and saints.

It would take too much space to give an account of this interesting case. We can only refer here to this case in its main outlines. Our object is not the psychopathological, but the psychotherapeutic aspect of the cases.

The patient could not be hypnotized, but she went easily into the hypnoidal state. At first the improvement was rather slight. In fact, now and then the hallucinations and the automatic speech became even more frequent and more annoying than before. In a couple of months, however, the outlook began to be brighter, the auditory and visual hallucinations began to give way. The automatic speech considerably diminished, and after a few months the symptoms completely disappeared.

In the control of alcoholism the treatment by hypno-dization yields extremely satisfactory results. The principle of subconscious reserve energy stands out clear and distinct in such cases. We shall return to this aspect of psychotherapeutics in its proper place, our object here is simply to bring out the therapeutic value of the hypnoidal state.

VII. Mr. G. S. American. Single. Age 37. Family history is good,—except that one maternal uncle was a victim of drink habit. A physical examination shows an irregular heart due to nervousness, excessive smoking. Liver is enlarged and cirrhotic. The patient was brought to me just after a debauch, was nervous, shaky, with quite an extensive tremor of the hands. He began to drink when in school as a matter of boon companionship and has since become addicted to drink. He kept at it regularly, at times actually soaking in alcohol. The family induced him to

try the treatment of various establishments for the cure of alcoholics, but with no appreciable results. As soon as he left the sanitarium he immediately went off on a debauch. He suffered a few times from severe attacks of delirium tremens. The patient was in such a bad state that he wanted his share of property to devote the remainder of his life to drink.

Under a rigorous treatment by the hypnoidal state the patient ceased drinking, lost all craving for liquor. His physical and mental condition grew in strength. After a few months' treatment he was enabled to return to his business. The man has become completely reformed. He is now manifesting an intense activity, great devotion to and steadiness in his work. No one suspected in him such capacities of foresight and energy in business management. New stores of subconscious, dormant reserve energy have welled up from the depths of his being. He has become a different man. His own brothers are surprised at the radical transformation of his character.

VIII. Mr. J. L. Irish. Protestant. Age 57. Family history is good, except for the fact that his brother is also addicted to drink and was under my care for a few weeks, with the result that he left off drink for two years. Patient is a printer by trade and has been drinking for over thirty years. While he is usually kind natured, when under the influence of drink he is violent, abusive, offensive to his wife and children, who are afraid of him. From his sister and wife I have the information that the patient goes off periodically on a long spree and spends all his money, neglecting his wife and children; when he comes home he abuses everybody in the house. "It is not a home, it is a hell," as his sister puts it. In his better moments the patient himself admits he is a brute, that drink has the best of him. He must keep away from drink completely, because the mere taste of it sets him going. An examination reveals the presence of arteriosclerosis.

I attempted to put the patient into the hypnotic state, but I found the hypnoidal state would meet with less resistance and suspicion on the side of the patient. Hypnoization then was the order of the day. The patient began to improve, was less nervous, slept better, and what was more important, stopped drinking, lost all craving for liquor. After three weeks of treatment by means of hypnoization the patient was discharged. He did not drink for a whole year, but coming in contact with other workmen in the union he was invited to drink, could not refuse, and once more was started on his old career. He came back to me, and this time I treated him daily for a month. Throughout the treatment the hypnoidal state was used. The patient has given up his drink habit, has no craving for liquor, works regularly at his job and no longer associates with companions who are given to drink. His sister and wife keep me regularly informed about his condition, and the report for the last two years has been "John is very good, he is a gentleman, treats the children well." He has become a model father and a good husband.

IX. Mr. C. T. Age 32. American. Father was an inveterate drunkard and was drowned while in a state of intoxication. A maternal as well as a paternal uncle were confirmed drunkards. There was also drunkenness in the collateral branches of the family. The patient learned to drink when very young. His mother, who volunteered the information, told me that she suspected that her son began to drink wine at the age of seven. Since that time the drink-obsession grew on him and he became a confirmed drunkard at the age of twenty. The patient's physical condition is good. The emotional state is one of passive indifference, the intellectual activities are rather in abeyance, the general disposition is inoffensive and even mild. It seems that the alcohol has soaked out of him all his strength. He has no ambition and is not fit to do anything, as he is constantly under the influence of liquor. His will power is weak, he

has no sense of personal responsibility, and nothing of any importance can be intrusted to him. Socially he is ostracized by his relatives, but he seems to mind it little.

Considering the family and personal history of the case I was not enthusiastic over the outcome of the treatment. The family, however, insisted on treatment and the mother was anxious to have me undertake the case as he was her only son. The treatment lasted for about a year and was carried out by means of the hypnoidal state. To my great surprise and contrary to my expectations the patient has given up his drink. He changed so much that even his mother wondered at the transformation. From being apathetic he became ambitious, from being dependent he became self reliant. He manifested a self control which none of his intimate friends ever suspected in him. He became methodical, systematic, conscientious in his work, and displayed an unusual ability in management. From being weak, irregular, and unreliable, his character became energetic, firm, and trustworthy. His abilities were soon noticed, appreciated, and he has since become a manager of a large concern. Nowhere have I observed such limitations, such moral infirmity, such lack of capacity, change so radically to strength of will combined with a sense of personal responsibility and vigor of intellectual activity. Since then I began strongly to doubt the so-called fatal, hereditary dipsomania of psychiatric text-books. I must say that I now completely disbelieve that medico-calvinistic doctrine of "total inability and damnation," in regard to dipsomania. There may be hereditary tendencies to nervous instability, tendencies to excitement with consequent craving for stimuli inducing exaltation, but certainly there is no hereditary alcoholism. What sort of stimuli a person is sensitive to depends on training and environment. It may be art, science, politics, religion, or drink. There is no more hereditary dipsomania than there is congenital gambling. From a mere

anamnesis no snap prognosis should be made without giving the case a good trial and proper treatment; no alcoholic patient should be declared as hopeless.

With the advance of my psychopathological studies and psychotherapeutic work I begin to have more confidence in the principle of dormant reserve energy and have more trust in the *therapeutic value of the hypnoidal state*.

OBSESSIONS AND ASSOCIATED CONDITIONS IN
SO-CALLED PSYCHASTHENIA

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OBSESSIONS AND ASSOCIATED CONDITIONS IN SO-CALLED PSYCHASTHENIA

BY the term *obsession* I shall understand any recurring, extra-voluntary idea, feeling, or emotion which presents itself automatically in consciousness, either alone or in combination; and the clinical syndrome characterized essentially by such obsessions and associated states, I shall, following many others, call psychasthenia. As psychotheraputists we are interested in obsessions, not only as to their content, that is to say, the particular form and character they assume, but also and equally, if not indeed chiefly, as to their mechanism,— the manner in which they arise, the factors by which they are perpetuated, and the methods whereby they may be either alleviated or cured.

Approaching the subject, then, from this angle, we may set out with the observation that every obsession has its history just as truly as has a painting, a poem, or a symphony. Obsessions are not, therefore, as is so often apparently believed, discontinuous and uncaused mental experiences, arising nowhere and disappearing no whither; they are just as much products as are any other of the contents of consciousness; and only in this are they *sui generis*, that they are products of a very special and peculiar kind, whose genesis it may or may not be within our power to discover. To seek out the psycho-genetic mechanism of obsessions is accordingly the first step toward a rational psychotherapy; for only if, and in so far as, a careful inquiry of this sort has been preliminary to any attempt at therapeusis, can the latter hope to be, in some manner and degree, successful.

The pursuit of this genetic method leads straight into the complexities and difficulties, sometimes, indeed, into the frustrations of normal and abnormal psychology. Yet, however difficult this domain may appear to be, to enter it is an absolute prerequisite to the progressive treatment of psychasthenia.

The most striking attribute of obsessive mental states is their more or less constantly recurring automatism. They do not appear as normal and harmonious elements within the conscious stream; on the contrary they are intruders whose constant entrance and exit disrupt the customary processes of mental life. In the language of abnormal psychology, they are said to arise as mental states or complexes which have been dissociated or split off from the main stream of the self-conscious personality. Whether an obsession appears in consciousness as a complex whose nucleus is an idea, a feeling, or an emotion, it is to be looked upon as having its origin in the same psychological mechanism, namely, dissociation. The psychological details of this dissociation may vary within comparatively wide limits in particular obsessions, but the general underlying principle would appear to be the same in all.

In the evolution of an obsession, dissociation is but one aspect of the process; for association comes to play an equally important rôle in the drama. Given a dissociated mental element, whether idea, feeling, or emotion, this mental element will not for long remain isolated and unattached, but in accordance with the laws of association will connect itself with some other conscious content to form a definite complex, upon the character of which will depend the type of obsession which appears in consciousness; for obsession is just another name for a particular, actively functioning complex.

Now this obsessive complex may be of multifarious composition; it may be composed chiefly of ideational, feeling, or emotional constituents; it may be thick or thin, wide or narrow; it may contain many elements or few; as time goes on it may function in its original integrity or may become split, thus giving rise to curious and perplexing clinical manifestations; finally, the complex may be wholly or only partially conscious or subconscious; or to state it another way, the obsessed individual may be aware of much or of

little concerning that which is really operative in the production of his abnormal mental condition.

We said a moment ago that association plays an equally important part with dissociation in the mechanism of obsessions. Obviously it is impossible here even to name the numberless associations that may occur between the conscious, subconscious, and co-conscious levels of mind, and the various obsessive complexes which may thus arise. One may point out, however, the important fact that these associations may be found to have taken place not only between ideas as such, but also between any and all of the other elements of consciousness, as well as between these latter and purely physiological processes, such as those mediated by the voluntary and involuntary musculature and by glands. Thus it may be seen that the variety of obsessions is coterminous with the possibilities of abnormal association and dissociation; hence also the impossibility of placing a limit to the patterns according to which obsessions may be formed.

When once an obsessive complex has been definitely established, it may be roused to future activity in a variety of ways. What I desire especially to call attention to here is the law of the substitution of stimulus, which may oftentimes explain the active functioning of an otherwise most puzzling obsession. Suppose the case where a person has had a painful and emotionally upsetting experience with a cat. Out of this experience may arise an obsessive complex, namely, fear of cats. In order to arouse this complex to activity, it is not necessary in the future to experience the actual presence of a cat. All that is required is some stimulus, e.g., the mere word *cat*, that has a symbolic relationship with the original experience. Or take the case of a patient of mine who overheard the doctors at a consultation remark that a certain pathological condition in her breast might be a carcinoma. As a matter of fact it turned out to

be nothing of the sort, yet the obsessive fear of carcinoma of the breast remained with her for many months. In order to rouse her obsession it was necessary merely to present to her something having a direct or indirect symbolic relationship with the breast. On one occasion she was calling upon a friend who had recently given birth to a daughter. Out of the clear sky of conversation came something about the nursing of the child, when straightway an attack of obsession occurred which compelled her to terminate the visit. If we bear this fact of substitution of stimulus well in mind we may perhaps be able to explain an otherwise perplexing assault of obsessions.

Enough has now been said perhaps to give a reasonably clear idea of the psycho-genesis of obsessions,— their origin usually in some previous experience of the individual, which experience is either not remembered at all, or if so, is not recognized as being the point of departure for the obsession; their formation through dissociation of certain mental elements and the subsequent association of these elements with other contents of consciousness to form an obsessive complex; and finally the automatic and recurrent functioning of the complexes thus formed within the field of the conscious personality.

If now we approach the treatment of these psychasthenic obsessions we have at our disposal a variety of methods ranging from simple explanation and persuasion on one side to hypnoidization and hypnosis upon the other. In order to render our discussion of these therapeutic measures as concrete as possible, I shall give a brief report of some cases actually treated, together with an account of what was done in each individual case.

Case I. Mrs. M., aged thirty-five, came into the hospital upon the advice of her physician, complaining of a peculiar constantly repeated and involuntary hacking, which sounded as though she were trying to clear her throat. Her move-

ments involved the muscles of the larynx, those of the neck and thorax, together with the diaphragm; in a word they had the characteristics of a respiratory tic. Drugs, local applications to the throat, and electricity had been tried at intervals during more than four years without avail. Asked regarding the origin of her nervous trouble, the patient could give no information except the fact that she could not voluntarily control the hacking. She was then placed in the hypnoidal state as described by Dr. Sidis, when the following history was obtained: Five years ago while employed as an operative in a mill she suffered from a sore throat which lasted for three days, at the end of which time she consulted a physician, who told her that she had tonsilitis and informed her that it would be necessary to *burn* out her tonsils. She was much frightened by this information and for several days thereafter felt herself quite disturbed. Her tonsillar symptoms soon disappeared and she returned to work. Three weeks later, however, she was attacked for the second time and again consulted another physician who told her that her tonsils were diseased and advised her to have them *cut* out. The fear of cutting added to her previous fear, now revived, of burning her tonsils, threw her into such a nervous state that she was able to think of nothing else. At this time she noticed a disagreeable, stinging, tickling feeling in her throat, which she tried to remove by hacking, but without success. As the tickling remained, her hacking became more and more frequent and at the time she came under observation had taken on the character of a tic; for she said she felt an uncontrollable impulse to hack although she confessed there was little if any abnormal feeling in her throat. Here, then, was an obsessive complex discharging itself through motor pathways as a tic and having its origin in the experiences we have described. At the time of my examination she admitted that the fear of a possible future cutting or burning of her tonsils still possessed her. . While in the hypnoidal state

she was encouraged and helped to recall the complete experience in as great detail as possible. She was then told with much emphasis that her tonsils were perfectly healthy, that no cutting or burning ever was or ever would be required; that the tickling sensation in her throat arose from the constant fixation of attention upon this part; that she would feel no more desire to hack because her supposed reason for hacking had ceased to exist, and finally, that when she should open her eyes she would feel better than she had in a great many years. Much emphasis was placed upon this feeling of health because it was desired to leave her on the crest of a pleasurable emotion, which of itself has a very great suggestive value. What had been predicted in her regard actually occurred. When she sat up, her tic had disappeared, and she expressed herself as feeling quite grateful and happy. The seance of hypnoidization lasted an hour, and except for two slight recurrences easily removed by waking suggestion, this patient has had no further difficulty.

Case II. A young married woman came under observation complaining of a very distressing type of obsession,—namely, the fear of losing control of her bladder. For nine years, with an interval of some six months, during which she was comparatively free, this imperative fear had dominated her mind, so that her life had been ordered with regard to the demands of her obsession. Not only did she have the mental fear, but also a distressing sensation in the bladder whenever her obsession was active. It is scarcely possible to describe the suffering which she had endured. She could not engage in the social functions which she enjoyed for fear of a humiliating accident. The theater was closed to her; she could not ride for any distance upon cars, nor accept invitations to visit any one save friends in whose houses she felt at ease. In her own home she experienced rather a different feeling,—not the fear of incontinence, which did

not often occur, but the depressing idea that her life was to be circumscribed by a malady over which she had no control. On the theory that her trouble was due to cystitis, her bladder had been washed out with various solutions, among them boric acid and nitrate of silver, and she had swallowed a host of drugs like citrate of potassium, buchu, and oil of sandalwood. From a careful consideration of her history it seemed reasonable to suppose her that bladder sensations were secondary to her obsession, rather than that her obsession was consequent upon a real cystitis. An examination of her urine, which contained nothing abnormal, confirmed this view. Upon the principle that every obsession has a history, if only we can discover it, an attempt was made to determine the origin of this one. No special devices were employed other than a precise reconstruction of the clinical history. It then appeared that some nine years ago, a few days after the birth of her first child, she was troubled while in bed with a slight degree of cystitis and as a fact did lose control of her bladder. This made her, as she says, rather ashamed of herself, and struck her as being an unfortunate occurrence. Some few weeks later, while out walking, she suddenly felt a curious burning sensation in her bladder. Immediately she was seized with the fear that there was to be another loss of control; this, however, did not happen. Nevertheless the fear continued, and has persisted to within a very recent period. Here, then, was an obsession of disagreeable type, which had arisen upon the basis of a previous experience. The memory of an actual loss of bladder control plus a certain sensation referred to the bladder had become associated in a complex which functioned as an obsessive fear of incontinence. While the patient could recall perfectly her experiences as given above, she had no idea that they had anything to do with her present fear until this was pointed out to her, whereupon she acquiesced readily in this explanation. Before her treatment had

progressed further than the second consultation, an opportunity presented itself of testing the truth of our hypothesis, namely, that her bladder symptoms were the tail to a mental kite. On this special occasion she was compelled to wait some little time, and when I began to talk to her it was very evident that her obsession was in full swing. An attempt was made then and there to disrupt her obsessive complex by forcibly replacing for the association represented by "bladder loss of control," another association, "bladder full control." This was accomplished by stating and restating very positively and in detail that she could certainly control her bladder, as the event would surely prove. For about twenty minutes her emotional agitation was intense, but finally subsided with the result that although she was anything but calm, her faith in her obsession had been somewhat diminished. By dint of subsequent and repeated persuasion her fear was finally removed, so that ultimately at the end of eight months she entered upon her social pleasures and duties with normal satisfaction. Untiring persuasion in the face of obstacles had succeeded in disrupting an obsessive complex which for nine years had proved rebellious to all other medical treatment.

Case III. A man, aged 32, presented a very interesting obsession, which was this: he could not get upon a street car whose number was odd. Cars with even numbers gave him no trouble, but if an odd numbered car came along he was compelled to let it pass no matter what his hurry might be. He could recall nothing which would shed light upon this curious obsession, but when placed in hypnosis he gave the following story: When about eighteen years old he was one day walking upon the street when he witnessed a street car strike and injure a child who unexpectedly ran out from behind a wagon. The sight of this accident gave him a very marked emotional shock, which upset him for several days thereafter. Standing near the

scene of the accident he noticed that the car bore the number 213, and thought to himself, "Well, there is always ill-luck in 13." Ever since the time of this experience he has had his strange aversion to riding upon cars bearing odd numbers, although his waking self could give no account of or even conjecture regarding the derivation of his obsession. During hypnosis it was suggested to him that the child whose accident he witnessed was not really injured and had recovered completely. Furthermore, he was told that odd numbers were quite the same as even numbers; that they would no longer cause him any trouble, and in fact would give him no concern whatever; and finally that like all other normal persons he would pay no attention to the number of the car he desired to ride upon. These hypnotic treatments were continued daily for eight days and resulted in the complete removal of the obsession, which, so far as I know, has not returned.

Case IV. A young woman, by occupation a stenographer, complained of an obsession which took the form of a more or less troublesome fear of insanity. She was conscious that her intellectual activity was practically normal, because she was engaged daily in an exacting profession, which she carried out with complete success. This fear, however, of insanity, while not painfully imperative, was nevertheless present on occasion as a disturbing undercurrent in her mind. She did not appreciate the origin of her fear until it was disclosed to her as follows: About two years previously, while sitting in her room one night, she was locked in by another woman in the house who had become unbalanced in mind. Being unable to release herself from her confinement, on account of the door having been locked from the outside, she spent something over an hour in dread of what might happen to her should the woman return and attempt to enter the room. As a matter of fact, nothing of this sort occurred, for she was released from her confinement by another dweller in the same house. Naturally, she was

very much upset, and from that time until she came under observation suffered from this disquieting fear of insanity. It was not difficult to trace the origin of the obsessive complex. Psychologically, it was merely the persistence in her mind of the memory of her former experience, bereft of its characteristics as a memory. There had thus arisen an obsessive complex which functioned automatically and appeared in consciousness as a present fear of mental disease. By means of persuasion and explanation, the whole matter was explained to her, and in the course of about four weeks she found her fear gradually fading until eventually she had substituted a complete understanding of the situation for her obsession, and this brought about its ultimate removal.

In the cases just described, one may observe the successful results that sometimes follow the use of hypnosis, hypnoïdization, and persuasion, in the treatment of psychasthenic obsessions. I would not, however, wish to convey the impression that every case which clinically manifests itself by psychasthenic symptoms is treated with equally great success. Some of them are extremely obscure as to their genesis, and equally difficult in the way of successful treatment. In conclusion, I wish to describe such a case, which was characterized by obsessions, feelings of unreality, incompleteness, and strangeness, and to some extent by depersonalization.

Case V. Mr. X., by occupation a postman, complained that from the time he was about seventeen years of age he had been afflicted with feelings of incompleteness, by obsessions of fear of insanity, and by the lack of emotional reaction to his environment, whether pleasurable or painful. Throughout his life, as long as he could remember, he had always been reticent, and as a boy found it difficult to associate with his playmates because of shyness. On one occasion, when at school, he attempted to give a recitation, but failed through an acute attack of stage fright. He got along tolerably well until he was seventeen, when he suffered an attack of typhoid fever, at which time the more troublesome symptoms of

which he complains began. He says that he seems to lack the ability to feel pleasure or pain in what he does. At the theater, for example, he experiences no emotion, but sits there, as he says, "equally indifferent to whatever may be going on." He sees the play and hears the actors, but cannot get in tune with them. In his daily work of delivering letters he finds no pleasure, except that it serves him as a means of occupation and a source of livelihood. Constantly throughout the day, more particularly when he is unoccupied, the thought flashes into his mind that he is going to become insane, or that his malady will terminate in complete despair. He used to enjoy the reading of poetry, but complains that now poems are to him merely so many words, and that while he understands what the poet is trying to convey, he derives no answering emotion from his reading. He states his feelings thus: "I seem to myself to be another person. It appears to me that there is a split between my emotional and my intellectual nature. I cannot get in tune with things, and the greatest good fortune or the greatest misfortune in the world would leave me, I believe, equally unaffected."

Throughout several months the attempt has been made by psycho-analysis to uncover some source for the psychasthenic symptoms presented, but without success. His seems to be one of those cases wherein the psychasthenic feelings of incompleteness, insufficiency, and strangeness, together with obsessions, are so interwoven with the texture of the mind as to render their complete removal practically impossible. No matter what he attempts to do, there is a fundamental perversion of feeling and emotion, and so long as this is present, his obsessions of anxiety and despair arise and continue. By persuasion and frequent practice he has been enabled so to switch his obsessions into a corner of his mind as to enable him to pursue his daily work with a certain external and mechanical success. This, however,

requires a constant effort on his part, because there is always a tendency for his psychasthenic symptoms to obtrude themselves. Hypnoidization and hypnosis have been of some value in the sense that after a treatment he experiences a certain relief for a time, but this never lasts more than two or three days, at the most. His treatment has extended over the greater part of a year, but it must be said that the psychasthenic substrate of mind continues virtually unchanged.

PSYCHOPROPHYLAXIS IN CHILDHOOD

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PSYCHOPROPHYLAXIS IN CHILDHOOD

DEFINITION. Just as psychotherapy denotes not treatment *of* the mind, but treatment *by* psychic means (1), so I shall use the word psychoprophylaxis, not to signify the prevention *of* psychic disorders, but to mean the preservation of health *by* psychic means.

The exigencies of time, however, will on this occasion restrict the consideration of the subject to the psychic means to be employed for the restriction of psychic disorders, leaving aside the fascinating psychoprophylactic procedures, which are one of the main elements used by the physician to persuade patients whose symptoms have been long absent, to regulate their life so as, for instance, to prevent failure of cardiac compensation and asystole, or to continue a mercurial course; or, again, in order to cure an incipient tuberculosis, to persuade them to continue to visit him, to avoid foul air, take regular meals, and avoid excesses of work and pleasure. Still more largely is psychoprophylaxis employed by the sanatarian, who persuades first his colleagues, later public opinion, and lastly legislatures and municipalities to adopt the means for the prevention of disease. For instance, the greatest obstacle to the employment of efficient means to combat yellow fever lay in the psychological attitude of the people of the South. Their horror of "yellow jack" was so great that they could not even discuss the subject. It was only when some hope was inspired that the dreaded disease might be prevented that the phobia could be controlled sufficiently to permit of action.

In short, the means of overcoming public and personal apathy and mental inertia are the most difficult problems of preventive medicine. Were this done, the tuberculosis dispensary would really perform the functions it is supposed to perform, and which I am assured it does not do from a lack

of this psychic motive power of persuasion. The disgraceful typhoid situation in Pennsylvania will terminate only when the people's feelings are aroused by conviction to the pitch of real will that the abuse shall cease.

Only those ignorant of psychology, and especially laymen, and more particularly ecclesiastics, who are always dualists, will expect too much from psychoprophylaxis. The physician is not likely to forget the state of physical nerve insufficiency (10), which is at the root of so many psychic perturbations, which are often mere exaggerations of the tendencies of the character, normal and morbid; nor will the physician forget the role of intoxication in inducing mental confusion, melancholy, acute psychasthenic symptoms, twilight states, often miscalled hysterical. The physician will take care that the exhortation, advice, and instruction he brings to bear are not obstructed by the intellectual handicap of exhausted or intoxicated neurones (11), nor by the affective distress caused by insufficient oxidation, intestinal irritation, and so on.

In other words, he will adopt a monistic interpretation of his patient, contrary to the view of Déjérine (12), who has said that to be a good psychotherapist one must not be a determinist. He has not taken into consideration the fact that the therapist himself, in becoming part of the patient's environment, determines a new sequence of ideas. On the contrary, as monists we shall protect our patient from such dualistic vagaries as Christian Science, for with the monistic attitude we are much more apt to constantly relate mind and brain to one another.

But one must be careful to avoid the pitfall into which many psychiatrists at one time fell, but which we now know how to avoid, thanks to the efforts of the French school and of men like Adolph Meyer and Morton Prince in America. I refer to the premature attempt to refer every psychic perturbation to a vice of structure, as, for example, is done by

Swift (13) when he relates the difference of mental capacity between the adult and a child of seven to corresponding neural changes. As a matter of fact, such difference is one merely of orderliness of mental reactions, as is shown by the superiority of the child in acquiring unrelated facts, as, for instance, words and the use of language. A man deprived of education would show no greater capacity and have perhaps less potentiality than a child of seven. Of course, ultimately, any acquired skill must depend upon neuronie dispositions of molecular kind; but we are not even in a position to perceive the nature of these, though that they depend upon the functional capacity of the neurones is evident from the disappearance of skill and other forms of memory during intoxication, as well as after destruction of nerve matter.

Thus, as of all prophylaxis, an essential preliminary is diagnosis, by which only an intelligent prophylaxis can be guided.

The essence of psychoprophylaxis, as of psychotherapy and education, is to associate useful activities with agreeable feeling-tones, and to disassociate from useless or injurious acts the agreeable feeling-tones that may have been acquired. For instance, the kind of social obsession which eventuated in the crusades does not differ psychologically from that which leads to empire building; but the former was a pernicious activity, while the latter may have its uses. A fixed idea may often prove an incentive to useful work in individuals as well as in societies.

Fundamentally none of the processes we employ differs from those used by Pawlow (2) in "conditioning" the reflexes of his experimental dogs, when he caused an expectant wagging of the tail and a flow of saliva and gastric juice upon ringing a bell.

Similarly, when the petted child ceases his crying upon seeing his father, it is because he reflexly has associated a

greater discomfort with the persistency of his tears than with their cessation. The affect, fear, aroused by association, banishes that of fretfulness.

Gradually the emotional element of the reflex fades (3), and sight-of-father connotes cessation-of-weeping. This leads to a respect-reflex. On the contrary, the intellectual content of the phenomenon may be submerged below the threshold of consciousness, only the affect persisting; in which case occur painful or pleasurable emotions, the origin of which is not manifest in the subject. Recollect that functional derangement may continue just because it began.

The interest sentiment is an essential of all psychotherapy, as of effective pedagogy; as when a young child about to cry is quickly diverted to a passing scene or made to perform an act. The doing so quickly substitutes the new interest sentiment for the disagreeable former one, the feelings are changed, and we have performed psychotherapy by distraction and substitution.

This simple principle, then, of finding or creating the interest-affect, associating it with the desired conduct, and training it into habit, as simply illustrated above, may be found at the bottom of even the complicated ratiocinations required in the therapy of the psychasthenic, and is also the outstanding indication in all paranoid psychoses.

On the other hand, in the hysteric, if the *tour de force* cannot be employed or fails, the method of repetition is requisite. Those who do not depend upon reason must *grow* into feeling by accustomedness, if the first blow fails. Who does not know of communities where a doctor's prestige is measured by the years he has spent there, of the reverence derived from seniority? The mentality which accedes to such a criterion is, of course, irrational, and it is at bottom that of the hysteric. Hence, the clinical procedure of isolation to increase the speed of accustomedness, and of reiteration to force into the unreasoning affectivity a realization of

the notions to which the patient is refractory. This is not persuasion: it is the method of pertinacity.

Hypnosis, hypnoidization, etc., are merely means of increasing impressionability to suggestions. In principle there is no difference between these and such means as were empirically used in ancient times through ceremonies, religious observances, ritual, etc., for the same purpose. (Such methods can perform nothing more wonderful than Judge Lindsay's feat of persuading the incorrigible truant boy to himself purchase a ticket and travel many hours to a reform school.)

As set forth elsewhere, the distinction between suggestion and persuasion is one of awareness by the percipient (4), the acceptee. Hence, to be unaware of why one accepts an opinion that so and so is the most skillful, and to do so on length of acquaintance is to do so by suggestion; and an idea received by suggestion is a hysterical one, as shown by Babinski in his definition, "A hysterical symptom is one susceptible of induction by suggestion and of removal by suggestion — persuasion. (5) "

In all of these procedures the preliminary sentiment of respect, reverence, awe, is engendered among the people by the devices of expectation, unfamiliarity, and sacredness or mystery. This sentiment in modern democratic days is less the actuating factor than that of the pseudo-intellectual shibboleth, which seems to be a strongly determining factor in the popularity of modern movements of all kinds. The social tropisms of the unthinking may be graded in three categories of decreasing strength, beginning in ritual and passing via shibboleth to snobbery, its modern attenuated form. In all these modes of conveying influence, distraction is obtained by engaging the sight by the rhythm of the ceremony and by engaging the hearing by the rhythm of music, to which are often added the dynamic rhythms of movements directed conformably with the desires of the priest or other operator.

The distraction thereby obtained, almost tantamount in some cases to a dreamy state, favors what we nowadays variously call passivity, psychological automatism, mental dissociation, suggestibility.

In this state, plasticity of the desires is much facilitated, the operations of the will are in abeyance; for the critical judgment of the intelligence is no longer in action. The subject does not attain to the phantasmagoria of the complete dream state; for susceptibility to extraneous stimuli is much stronger than in sleep, or even than in somnambulism. The state resembles that in the day-dream, in which, however, the meditations are less systematically determined.

The moral control, the psychoprophylaxis, secured by these means has in the past been incalculable; but as the sanction of these procedures has been crumbled by the trenchancy of modern analysis, and we now live in a scientific age, it is necessary to employ psychoprophylactic means which accord with the intellectual development of civilized man. Thus the further we depart from the methods of mental distraction, mystical appeal, and pseudo-scientific shibboleths (6), the more soundly and permanently shall we succeed in preventing the vagaries of the neurotic, and the less shall we be a party to the justification of the occult manner in which many of the public, and even some doctors conceive such psychological interpretations as hypnosis, sub-consciousness, divided personality, subliminal phenomena, mental dissociation, etc. The more we appeal to the method of common sense, plain matter of fact every day conduct (which is obviously the method so clearly explained and outlined by Dr. Taylor) (7), the less chance shall we give for the delusional interpretations of clairvoyants, medium spiritualists, and others whose sentiment of psychic imperfection leads them to seek in the occult the satisfaction they cannot find in current explanations of their mental life.

It is to be hoped that our labors along with other sym-

posia like this may eventuate in a working doctrine held in common by the whole medical profession, which will enable us to forestall and prevent the development of misinformation concerning psychic states which have been responsible for the birth and evolution of such modern movements as Christian Science, Emmanuelism, neo-yogiism, and other harmful misapplications of psychotherapeutics.

A concrete illustration of what psychoprophylaxis can do is afforded by a recent communication of G. Guidi (8), who has shown that fifteen per cent of attacks of migraine are preceded even for days by psychic symptoms either of excitable or depressant type, e.g., the need to move about, to talk, tell funny or obscene stories, to look out for ridiculous situations, to laugh at them, or by a desire to go alone, irritability, sadness, anxiety, even tears. I have myself noticed a feeling of unusual mental clarity, of power, in certain cases. (Every one's disposition is modified (9) by exercise, oxygen, food, etc.; we all have defective times. Want of exercise and elimination leaves toxins which cause restlessness, irritability and prevent quiet intellectual work.) Now if the migrainous attack can be prevented as a result of diagnosing this modified psychic state, it is evident that by prescribing mental and physical, including digestive, rest, we shall have performed psychoprophylaxis.

We must recollect that during the period while the functions of the neurones are perverted by physical maladies, especially the intoxicative ones which we call fevers, bad habits of action may be initiated and be reinforced through convalescence and become characteristics of the individual. As a matter of fact more careful psychic discipline is needed while neuronic activity is perverted (14) than when it is healthy, and it is the family physician's task to guide the psychic management of his patients as well as the physical.

The principle of mental prepossession and inertia shows the power of an idea, which may originate as the result of

slight physical disorder. Binet (15) has illustrated this experimentally by showing how children will go on increasing the length of a line when drawing from memory a series of lines shown them, though only the first few of them were actually increased. Another example (16) is the remarkable experience of the enumerators of the last census in endeavoring to adapt themselves to the supposed difficulties of a new dactylograph. Their work was rendered so disappointing by the "pressing" under difficulties that new clerks had to be employed: these quickly surpassed their more experienced colleagues. To be "on edge" is not the best state for showing high skill: as every golfer knows, it connotes divided attention.

The state of keyed-up prepossessedness is induced by an excessive interference (19) with the activities of the child; when every act has been regulated and controlled, he will constantly be referring for approval instead of confining himself to the task in hand. This principle may be illustrated by the boy who instead of looking at a ball he is expected to catch looks at the thrower for the approval or blame he anticipates. Overconscientiousness is quickly developed by such procedure; but, again, psycho-diagnosis will eliminate the danger, for it would be a mistake, for fear of risking over-conscientiousness, to have upset the entire sense of fitness of a boy of three who came to his father to be thrashed, declaring he had thrown a knife at the cook, an act which had been specifically forbidden.

The source of another danger proceeding from overconscientiousness is that of shame of eating (18), as illustrated by the same boy, when conscious of wrongdoing, repeating "no bananas for boy" (a dish he loves). But it is very easy to prevent a perverted affect in this case, while at the same time furnishing a consistent and coherent system of conduct and morality.

In this connection one must avoid formation of bad

affective habits during the temporary intoxication of poor oxydation due to a full stomach or too heavy a meal. In this state a child while playing hard may be carried away by excitement till he loses his temper and begins to cry, just because "things are too much for him."

Again, constantly interrupting him in a train of thought by regulating his least little impulse promotes suggestibility, and the child becomes accustomed not to act until told. In not availing one's self of a moment of excitement to inculcate a difficult act, one loses a chance of cultivating presence of mind, even during emotional states. This may even be done during pain and tears by making the child do something else during them, thus gaining self-control. In speaking slightly of what one wishes contemned, be sure it is not against human nature. To forbid healthy acts to a boy is detrimental to him, he derives a false notion of morals when he knows that innocent acts are forbidden. So provide ample outlet for spirit of adventure, without which a boy's whole character suffers. It either is exercised illicitly, or is suppressed and forms intellectual dishonesty and emotional incompleteness, so fertile a source of psychasthenia.

But in early childhood, and in some matters even in adolescence, it is best to employ authoritative affirmation rather than suggestion. A child cannot see the reasons for the need for certain prohibitions; and it is a bad principle to be constantly side-stepping issues by the giving of suggestions. Besides, it prevents the child acquiring the power of immediate subordination of his own desire to what after all must be done sometime. For instance, a boy who cannot understand the rationale of bacterial infection is forbidden to take milk unless boiled. The mandate can be enforced by the suggestion that boiled milk is a delicacy, and that he is privileged in being permitted to have it; but this procedure is quite unnecessary when a mere affirmation should suffice, which, moreover, will prevent the danger of his foregoing the

privilege, in order to drink raw milk. The advantage of assured obedience to authority is most manifest during such periods of emotional motor or intellectual hyperexcitability as precede exhaustion. They may be compared to the paralytic secretion of the physiologists. Hence the more simple the brake used the better, for complex means of arrest only increase the cerebral activity.

Another example of a misapplication of suggestion consists of saying to a child, "You are not afraid," when he shows timidity in some unusual situation. The child knows quite well that the mere making of the remark indicates a reason for fear; and the real effect produced is the suggestion of fear, which might have been avoided by assuming a matter of fact manner as soon as indications of hesitancy or timidity were shown by the child, taking care at the same time to replace the unpleasant affective mode by another, through substitution and distraction. Of course, reliance on simple affirmation must be maintained by truthfulness, and later by reasonableness.

The habits of accuracy and orderliness may be inculcated without the danger of their becoming besetments, if it is done, so to speak, spontaneously as a pleasure, and not as a duty Calvinically, that is, if it is made kinetic rather than inhibitive. For example, a boy of two and a half is asked to bring in two balls with which he was playing in the garden, and later to pick out from some others those he brought. This exercise not only cultivates memory and accuracy, but the power of perception of difference as well as the notion of responsibility and the pleasure in having it recognized.

A boy's whole world of fitness is upset when unusual acts are done. A boy of three will allow no one else to touch the letters placed on his father's plate. After playing with his father and wanting "more fun," he would not desist from his demands when told it was too hard for his

father, replying "not too hard," but at once did so when told "Father tired." He recognized this from his mother's and his own experience as a valid excuse for stopping.

These habits become morally imperative (19), and are very hard to eradicate in after life, for they do not depend upon clarity of conception, as is well shown by the fact that most of us do not act entirely in accord with our intellectual convictions, but persist in regulating our conduct by doctrines long outgrown. Hence, the importance of preventing the feeling of dependence by encouraging the child's desire for and pride in performing tasks about the house and garden. If, for instance, a child is encouraged to put on his own clothes under the belief that it is a clever act or to wash itself, these actions will become automatic, and he will not later have to go through the difficult acquisition of the clean hand instinct and that of self-helpfulness (20).

The ineradicability of fear when inculcated in early childhood is clearly illustrated by the Southern lady, who even in advanced age dared not go alone into the dark, although she has long ceased to believe in the stories which first made her afraid to do so. She realized this so forcibly that she would not permit her three daughters to be told any of the alarming stories which most Southern children learn. Her psychoprophylaxis resulted in the girls never having known what it meant to be afraid in the dark. Indeed, it was the habit of their schoolfellows to send them into dark and eerie places to show off their powers. The tenacity of early affects is again illustrated by the immovable depression produced by the playing of gospel hymns on a reed organ in the case of a lady in whose childhood the Calvinical Sunday had almost caused fear. The psychoprophylaxis here is obvious (21). In another case the hearing of a brass band invariably produces weeping and terror. This is due to the fact that such playing occurred during the horrors of the civil war.

In some children (22) care is needed to avoid the '*besoin d'être aimé*,' the craving for sympathy. This may be induced by excessive petting and loving while a child is tired or after injury. It is better to send the child to bed when tired and to divert his attention when injured. But denial of sympathy is equally bad, and is the cause of the intense love hunger seen in many young people whose surroundings have suppressed their natural affection.

It must be remembered that the fundament of altruism lies in the affectivity (23), and this must not be suppressed, but must be controlled and used. For instance, during sympathy, interest may be aroused and turned into an unrelated channel, and thus used for moral and intellectual teaching instead of being roughly ignored.

These may appear small matters, but they illustrate important principles, as will appear when they are applied to the matter of lying and the acquisition of the sense of responsibility and right conduct.

The mythomaniac (24) tendency, which is responsible for so many medico-legal difficulties, would be much diminished by a psychoprophylaxis addressed to the aforementioned habit of accuracy; for the conduct indicated is merely a mode of truth in act, which to a child precedes the significance of truth in speech. The latter is discouraged, I believe, by mystery tales, as well as by those of voodoo, though I am aware that much difference of opinion on this point exists among pedagogues. I cannot enlarge upon this theme, except to point out how often mythomaniac manifestations are miscalled hysteria by medical men who have been unduly impressed by the doctrines of Charcot (25); whereas, the difference has been clearly pointed out by Dupré (26) and Babinski (27). The newspapers of the day afford innumerable examples of the dishonest point of view which eventuates in mythomania. It is almost entirely preventable by a proper psychoprophylaxis, if not on the part of the

parents, then later and with more difficulty on the part of the schoolmaster.

In this connection, I must express the belief of the need for men in the moral training of boys. The best elements of moral development are inculcated, not in the schoolroom, but at play, in which the masters must participate more or less: and as at present trained, very few women are capable of this. The revolution effected in the habits or character of the English school boy by the methods of Thomas Arnold of Rugby (28) afford a striking illustration of this.

To attempt to manage boys by religious sentimentalism and softness, the woman-and-slave morality of Nietzsche (29) is to encourage hypocrisy in the strong and the exaggeration of weakness in the feeble. Of course sympathy must be used, but it must be a manly one, referring mainly to the forceful activities of the life of a normal boy. In this way a self-reliant character is built up by the encouragement of constant relation of itself to the welfare of a society in the responsibilities of which each boy has a separate niche to fill.

Than this there is no better prophylactic against dependency, suspiciousness, and other anti-social feelings of paranoid type. By this system of encouraging morality to become constantly kinetic and to be thought of and controlled by its relation to others while self-respect is maintained, the hyper-suggestibility is restricted and hysteria prevented.

Psychasthenic types too are not apt to develop in an environment where solitariness is impossible, and where the stresses are healthy and kinetic, and the emotional and intellectual appeals are of a positive and clear comprehensibility. Hence the rarity of psycho-neuroses in the men who have been trained in the public schools of Great Britain. And their influence has not ceased here; for the habits of conduct illustrated and brought into prominence by Arnold's boys

have permeated the whole national life, with the result that De Fleury (30) has been able to comment with admiration upon the freedom of the nation from the psycho-neuroses, the study of which has given such distinction to French neurologists.

Similar methods may be applied with success even to boys perverted by faulty environment; for instance, Tomlins (37) developed a thieving jail boy into a useful citizen by reversing the mawkish treatment he had been receiving in the reformatory, and substituting a peremptory and rough method of making him responsible for certain duties and for other boys, and showing surprise that he did not do better work than he at first showed.

On the other hand, there is the case of a girl in whom intractable fits of temper were cured by one display of kindly sympathy after she had torn up her books in a fit of rage. The prophylaxis in each of these cases meant the saving of a whole life from the misery which would have arisen in a purely psychogenetic way.

The psychological insight which enabled the reflexes to be "conditioned" in these two cases is responsible for these two useful lives.

Many a phobia or *angoisse* can be prevented by psychic means. Similar in principle are the means to be employed against the self-distrust and diffidence of the psychasthenic form of insufficiency. The natural desire of a child to play with its fellows will soon disappear if he is too slow-witted to comprehend the game or too clumsy to take his due part, or is constantly humiliated by his failure or by the mockery of his fellows. Want of capacity in some study arising from the defect of some motor sensorial or associational process may produce a self-deprecatory or anxious attitude very unfavorable to healthy psychic development and most provocative of the scrupulosity of psychasthenia.

The method of conditioning the reflexes is illustrated

most clearly by human beings in cases of sexual perversion where some artificially introduced element becomes the efficacious provoker of future sexual desire, or at least satisfaction. The genesis of the fetich constitutes the conditioning of the sexual reflex in that person.

The whole element of the sexual element in the causation of the psycho-neuroses is too long to discuss here. I must, however, deplore the difficulties thrown in the way of the study of these very important problems of psychoprophylaxis by the unwillingness of some observers to investigate the sexual life of their patients. To establish a solid psychoprophylactic doctrine we need accurate information, and the scientific search for such information must not allow itself to be hampered by national prudishness. It is this *noli me tangere* perversion of morality which arrogates to itself the exclusive title of morality which is responsible for much of the prurient attitude of the young towards sexual relationship.

What shall we think of a civilization which permitted a highly respected woman physician of twenty years' standing to be placed in jail for having written a book instructing young women upon sexual hygiene? This actually happened less than five years ago in Chicago. Such an attitude fosters ashamedness in the young; and shame of the bodily functions as we know frequently dominates the field of consciousness of a psychasthenic. An adolescent who has been discouraged from discussing or understanding the phenomena even of his own sexual life and taught to regard them as different in kind from other facts of personal function and hygiene is sadly handicapped in the difficult process of somato-psychic or allo-psychic adjustment in that difficult period of his life.

Similar animadversion may be made against what is now less common — the state of apprehension and terror induced by religious teachings founded upon the doctrine of man's

inherent evil nature and damnableness. A research by Coe showed that less than ten years ago a very large percentage of college students had suffered severely from the spiritual agonies of the attempt to reconcile their dawning knowledge of the universe with the inadapative and injurious doctrines they had been taught in the name of religion and morality.

Now it is very simple to forestall such morbid reaction by directing the activity of such children into channels for which they show aptitude. From the feeling of accomplishment and triumph thus engendered the child will gradually learn to adjust himself to difficulties which mental prepossessions and inertia would have rendered impossible to overcome. A delusion of persecution so often fertile in dangerous reactions has really its source in a mistrust and suspiciousness which might have been prevented or removed by the self-satisfaction coming from the fulfilled desire of productive activity. The delusion is essentially a defense reaction against the feeling of self-distrust. Such feeling is powerfully conduced to by cultivating in children a pride not consonant with their true relation to others; for the social activities of such children will be contaminated by an exaggerated self-respect which will necessarily be constantly wounded, whence an inevitable withdrawal from social activities which do not minister to their pride, and therefore an ever-increasing seclusion which is more and more dominated by suspicious inferences from innocent words and acts of others and brooding thereupon until this ideational-emotional complex dominates and becomes the character of the person and refractory to intervention; but the psychoprophylaxis would have been simple, and is obvious.

The gastric neuroses are a striking example of the non-use of psychoprophylactic power by medical men: for the great majority of these cases occur as the result of the suggestions of medical men while prescribing for patients suffering from temporary indigestion (33) or by the indirectly

gained notions of medical origin with regard to eating and diet. Again, recent work has shown the difference between tic and true chorea, and also that the latter, now clearly shown to be an organic disease (37) may begin by intellectual and emotional perturbations long before the motor areas are affected.

The only practical way of detecting these early conditions is through medical inspection of school children by trained neurologists whose knowledge of physical and mental test signs will anticipate many a breakdown, besides removing from the other children the contagion which habit-spasm and chorciform movements are known to exercise on their plastic minds. As a matter of fact the co-operation which should be sought is much less that of the priest than that of the teacher of the young. We can hope to influence him to a scientific attitude toward the biological phenomena with which he deals; besides which the help in managing difficult and neurotic children which he gains from neurological advice makes him very ready to welcome it, as my experience shows.

And indeed pedagogues themselves have noticed the need of medical psychoprophylaxis. Thus Swift (*loc. cit.*) says, "Half an hour's observation of pupils at their school work will convince one skilled in interpreting nerve signs that nervous disorders have become so common as to menace our national health, and the significance of this for education has been too generally ignored." And again further, "It is unfortunate that instincts are so frequently the child's only defense against pedagogical enlightenment (*sic*) medical supervision cannot fully meet the need unless a nervous affection is detected in its incipency; so the teacher must be taught about the early signs, so as to call in a physician to prevent aggravation by the continued irritation of test and examination."

As desirable would be the teaching of the mothers to

form healthy emotional habits in their children. The happy-go-lucky absolutism which so often asserts itself as capacity is sadly defective as such a guide for hesitating childhood. The management of the mind and the emotions into a morality constitutes the most difficult study and art. But it can hardly be expected that fortitude can be inculcated by a mother who has not herself shown it sufficiently to even attempt to understand the biological laws upon which depend the reactions of the nervous system which we call conduct, for the ethics taught to most children is a vestige of medievalism conspicuous for its poverty in such criteria of modern civilization as justice, liberty, courtesy, altruistic sympathy. The child's natural good impulses are checked and twisted; when his reasoning from cause to effect is not neglected or obstructed, he is thus confused and finally often discouraged into sadness or indifference, becoming as a man either despondent or happy-go-lucky, with either no morality or one of words only, which has no efficacy in preventing maladjustment.

But a morality which is really active instead of being merely received on faith becomes a part of a boy's character and is carried out in his conduct. It intertwines with his every thought often quite unconsciously. Suggestions contrary to this trend are then automatically repulsed, and we secure reliability of conduct; and socially speaking that power of prediction which gives security in man's relationship with man.

Now this may appear hardly a medical but more a sociological matter; but there is no difference of kind between a perversion of conduct which we call criminal, that is, anti-social, and an aberration proceeding from ideas which we call hysterical. The false belief that one's limbs are incapable of locomotion or the comfortable and cherished feeling that one is an invalid and unable to support one's self are both anti-social attitudes, in whatever good faith they are assumed.

Now their prevention as well as their cure is the prerogative and duty of medical science, which is called upon to distinguish from the aberrations of conduct due to the changes in the secretions, and the nervous system those due to aberrant notions. And, nowadays, as this symposium shows, we have to apply the remedy, not only to the former, but the latter in supplementing the activities of the pedagogue and priest with the special means the psychiatrist's training permits; that is to say, when a pathological type of reaction has been constituted by the hurtful suggestions of a faulty environment, it is the doctor's province to eradicate the hurtful suggestions and to emplant a habit of mind tending for the good of society and refractory to suggestions contrary to that object. For a close analysis shows that the real cause of most so-called "nervous prostration" is failure of adjustment to environment, and is psychogenetic. A rest cure in itself is inefficacious, but gives the doctor the opportunity to re-educate the perverted trends of the patient's disposition. Before reaching the neurologist, a patient has been "suggestioned" *ad nauseam*: and such empirical therapy has failed, as has the injudicious appeal to his will power already exhausted by the complexities, social and professional, which have contributed to his failure of adjustment.

To arrest a morbid train of thought and set a mind at rest is an art requiring knowledge and skill. Its attempt by untrained men has been even more disastrous than the work of the tyro in gynæcology; for it is the direct cause of the rise of Christian Science, Emmanuelism, and such cults. Happily, a body of experts in psychopathology is now counteracting their injurious influence: for an affectation of knowledge will not supply the public's demand for real psychic treatment. But we require greater facilities for instructing medical men in the principles of psychopathology and therapeutics; and proper wards and out-patient clinics under competent teachers should be provided, at least in every large city.

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THE RELATION OF CHARACTER FORMATION
TO PSYCHOTHERAPY

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THE RELATION OF CHARACTER FORMATION TO PSYCHOTHERAPY

MY object in this paper is, first, to indicate the place of a study of character in a scheme of psychotherapy; next, to define what we mean by character; and lastly, to point out how far it is reasonable to expect to modify character and under what principles this is to be attempted.

The word character will be here employed in its usual double sense; first, as in describing the prevailing tendencies of a man's life without reference to their value as regards the securing of results; next, as a sort of estimate of value—intellectual, esthetic, moral, volitional,—of these various tendencies.

In accordance with the former of these two meanings we might speak of a person as being sanguine or volatile, stolid or visionary, dependent or independent, etc. In accordance with the second meaning we might speak of him as being a man "of character," meaning thereby that he was of "fine" or "strong" character. It is needless to say that these terms "fine" and "strong" have a relative significance, but into this consideration we need not enter here. The antithesis between these two meanings of the word character is best shown when we say of a person, as we clearly may, that his character is to be defined as consisting in an absence of character. It will be seen that the various terms hitherto used for the designation of character will have to give place to others of more exact scientific meaning, or else to get themselves reclothed with connotations of a new sort, but the word character is likely, none the less, to preserve its double signification.

It must be evident to every one who looks closely at the facts, that the therapeutic efforts of those physicians who

concern themselves especially with the study of the functional psychoses have been rapidly developing on new and interesting lines. The neurologists of the present day tend less and less to treat the nervous invalids entrusted to their care in accordance with the principles of a narrow militarism or as subjects for cajoling, and more and more as reasonable beings possessed of consciences and independent wills and capable of intelligent co-operation. In proportion as our knowledge of the mental life has become deeper and more accurate there has been a growing tendency to seek further and further for the causes of distressing mental symptoms, whether these causes lie in the environment of the patients or in habits and instincts and experiences dating back to the years of childhood or expressed in inherited physical traits. Hand in hand with these tendencies towards a more searching analysis of symptoms with reference to this origin there has come a willingness to undertake a modification of the mental mechanism such as was not characteristic of the therapeutic efforts of earlier days. Success in these efforts constitutes the triumphs of modern neurological practice. The more complex of these methods might be described as constituting the major surgery of this form of therapeutics, since to utilize them at their best requires both skill and insight and willingness to expend a vast amount of time for the accomplishment of the results. The modern practice has come more and more to deserve the name of education. Less effort is now made to shunt out the critical powers and instincts of our patients; greater effort to lead them into paths of intelligent insight. Hypnosis is less often used for the purposes of pure suggestion, while the induction of hypnoid states, for the purposes of analysis, and through analysis, of treatment, has become more common, and even this method is giving place to kinds of mental probing in which the patient takes a conscious and a willing part. "Isolation cures" and "work cures," valuable as they are,

are found to yield their best results when made parts of a broad system of education. The final aim of the isolation should be social life, in its best sense, and work done by the invalid should lead to work done for the social welfare. In the same sense, *rules* of living are found to yield their best results when made subservient to *principles* of living, and success in treatment is estimated, not so much by the disappearance of symptoms as by the appearance of a thoughtful individual, liable to fail, but competent to use his failures in the interests of progress.

It is on the basis of a firm belief in the value of these new forms of inquiry into the mental life that the following remarks on character are offered. The object of these new and searching inquiries is to make us intimately acquainted with the nature of the man with whom we have to deal. But it is precisely in attempting to define his character that we put this knowledge to the best test. For the character is the epitome of the man. It is no longer enough to characterize a man as "self-centered," "irresolute," "dominated by envy, suspicion, jealousy;" or, on the other hand, as a person of "fine" or "strong" character, as if we had the right to assume that we had thereby added something material to our knowledge of him, in a scientific sense. If the person in question is not unified, in respect to his mental states, but "dissociated," as through strong emotional strain or through even moderate emotional strain acting on tendencies already physiologically unstable; in other words, if he is a "hysteric," with contracted field of mental vision, then of course he is self-centered, and the physician's duty is, not to *blame* him but to *recognize* him, to see that he is not misjudged, and if possible to cure him.

The truth is that ever since the day when medical observation first began to intrude itself definitely into the field of psychology, a new vocabulary and new synonyms have been more and more demanding recognition.

It is as true in the mental as it is in the physical field that "disease is but health under altered conditions" and that many a moral ban of the conventional social judge will have to give way before a truer re-statement of the facts than our ignorance had known. So far as we can, then, let us in the future strive to infuse new meaning into our conceptions of the terms character and characters. Let us be more chary of roughly grouping men as bad, selfish, or weak in character, and more ready to search diligently for the exact influences that made them what they are. Nothing happens by pure chance.

The most fruitful work in the way of mental analysis, and therefore incidentally, of character analysis, has been that which has centered round the observations of Janet, of Bergson, and of Freud — to mention only a few of the foremost names — and the main object of their researches has been to discover the influence of the unseen mental life. Most people feel as if they could point distinctly to the influences that have shaped their characters and conduct. But, in fact, the necessity of action, the necessity of social conformity, force our choices, narrow our vision, and compel mental conflicts which take a silent part in shaping the habits and tendencies of response that we call our characters. Thus the lives even of the best men are compromises, adaptations for more or less special ends. It has often been pointed out of late years what an important part emotion and emotional interests play in determining the current of our thought and actions, and that when a painful emotion is suppressed it is apt to carry with it a cluster of memories into a species of oblivion. But this grouping of mental processes around emotions, which gives a tendency to our thoughts to recur in "constellations" rather than isolated, one by one, typifies the construction of our mental lives in general. It is therefore theoretically explicable that the tendency to the formation of double or multiple lives, or to

what has been called dissociation and reassociation on new lines, should occur to a certain extent not only in hysteria, but under conditions commonly called normal. It can be understood on the same principle how a person's character may be double, and inasmuch as our subconscious mental lives, those portions of ourselves which we exclude from the focus of our immediate interest, are far more comprehensive than our lives of self-conscious awareness, it is also comprehensible that large tendencies and even personalities, each expressible in condensed form as character, should exist side by side and affect our conduct without being readily observable in and for themselves.

Equally important with this principle of dissociation and reassociation is the principle of the persistence into later years, of mental twists and habits formed in childhood, not in their own form, but strangely altered and concealed. The principle itself is familiar enough, but it is to the keenness and genius of Freud that we owe its working out in ways which must indeed be tested further, but which are certain to be of great utility, both in helping us to understand character and to treat its morbid modifications. Underneath the cloak of fears and terrors we are taught by this writer to seek for the hidden element of desire, and are given directions for the search which demand our thoughtful consideration.

It might appear from these remarks that I regard the psychological method as the only one likely to help us in this study of character and its treatment, and likewise that the sole use of the tendencies to reaction that deserve the name of character is to secure an adaptation to a given environment. But this is by no means true. In the first place our knowledge has not yet reached so far but that our instinctive judgment outstrips it still at many points. Try as we may to explain character by studying its genesis, it has still a meaning which is certain to elude our critical inquiry, yet

which we strongly feel. In the next place, the explanation of the progress of vital processes as here hinted at, does not supply the meaning of life nor the motives for living. It is one of the great mistakes of modern science to assume that we can get on without interesting ourselves in these matters. It is widely thought that a man need not speculate about his origin and his destiny, or upon the obligations of loyalty furnished by considerations of these sorts. These sentiments I by no means share. I think, on the contrary, that physicians are as much bound to study philosophy as psychology and to carry their patients with them so far as it is practicable to do so, through this path. Then, as regards the matter of adaptation, I believe it is only just to speak of character as standing for adjustments to the environment if we are ready to define our environment in a broader way than it is usually defined. We are surrounded by a world of spirit just as obvious as the world of matter to any one who has the knowledge and willingness to probe beneath the surface, and possessed of a reality more basal than any reality that it is possible to assign to the material world, considered in and for itself.

Excellence of character, then, is definable with reference to the degree to which it represents all the different portions of a person's history and nature, and may be defined as of a better sort the more completely it implies a unification of the powers, physical, and mental, of which he is composed, and the more it indicates that he is capable of adapting himself to a variety of environments. But these environments must not be purely of a material sort. The individual possessed of the best form of character must be suited not alone to the environment which he sees but to an environment which he imagines with the vision of an intelligent and critical idealist.

The treatment of patients from the point of view of character is then identical with the treatment of them as partial

neurasthenics, hysterics, or psychasthenics, etc., on the one hand, and as individuals standing in need of a broader vision, on the other.

A man's character is not something superadded to his other qualities, something capable of existing independently and to be recognized in and for itself. It is only picturesquely and for convenience' sake that we speak of character as of a sort of seal stamped on the record of a person's life, a diploma of success or failure, granted from without. Each one of a man's acts is the outcome of all the acts that have preceded it in the past, *plus* a quality derived from free choice. This free choice is based partly on a divination of the future, or — to speak more accurately — on a half-unconscious recasting of the present in terms of a wider order than that which is represented by experience alone. We outside observers compare and contrast a series of such acts and when we find that there are features common to them all or to large groups of them, we collect and name these common features, and thus assume for them by implication a separateness of existence which in fact they cannot claim. In reality every act represents an indivisible effort of the actor's mind, and it is only by abstraction that we assign a definite portion of a given result to the man's character.

From a single base an infinite number of triangles can be drawn, and all will have something in common though each may be conceived of as independent of the rest. And so may the same basal elements of character permeate an infinite number of single acts, each of which has an autonomy of its own.

When we state, then, in respect to a person's intellectual, emotional, or volitional life, that it has this or that character, we render, primarily, a judgment based on observation of his conduct under various conditions. But this judgment contains also an implied belief that his conduct owed its

Each person builds it as he goes, through acting out his own nature. Neither can the goal be foreseen except in very general terms. As the needs change so do our acts and purposes shift and become modified, and so likewise our character. For a man's character is a sort of composite photograph of his life. The portrait is bound to be genuine, whether the elements to be portrayed represent genuineness and consistency in the ordinary moral or intellectual sense, or lack of genuineness and inconsistency, effectiveness or ineffectiveness.

The more symmetrical, unified, and adequate a man's development has been, the more consistent is his conduct. On the other hand, not only the best in each person but also the worst and the indifferent elements in him necessarily play a hand in this game. Fortunately, in the continual melting up and remelting that goes on within the crucible of progress, the worst may be made eventually an element of the best, but, for the time being, if it becomes a fixed habit to be trivial that habit will be faithfully represented in a person's character, for this represents the master habit of his habits, the master tendency of his tendencies. There is no room for deception in the judgments of that court.

A person's character is, however, not always just the same. It presents itself under different forms, corresponding to the changing aspects of his personality and his moods, though shifting less than they, just as the trunk of a tree moves less than the branches. Each phase of a multiple personality has its own character, and these phases reappear as *quasi* normal moods. The severe test of illness sometimes develops forms of character that otherwise might have remained undeveloped. Within the orbit of the invalid, which includes the doctor and the nurse, selfishness sometimes reigns and narrow egotism, together with sentimentality, ignorance, and weakness of the will, and these tendencies may remain active long enough to make themselves felt through modifi-

cations of the character. But,—what is more important for our purposes,—unselfishness, devotion, willing sacrifice of ambitions and desires, thoughtfulness, persistent effort, loyalty, the sense of service, may likewise be manifested here, in their best form. The invalid may make excursions into certain realms which are rarely open to the well and strong.

There are forms of character in which patience is unified with clear intelligence and strong will, with instincts which have found natural expression and ideals which have grown broader with experience. The possessor of such a character as this has at his command a means of combating illness, a compensation for illness, and a safeguard against certain forms of illness, which are of inestimable value. These aids are needed, for the tests to which the invalid is exposed are serious tests. Pain, disappointment, the necessity of sacrificing cherished hopes; the necessity of ceaseless struggles with the sense of weakness, of exhaustion, of isolation; the necessity of living in almost perpetual companionship with some parasite or demon or phantom of the fancy, hardly less hard to bear for being recognized as fictitious; harder still, the tearing asunder of strong ties of family and friendship; trials such as these may mar, but often make a fine character, and many examples of the latter result are known to all. Such persons are 'unified' to a remarkable degree. The syntheses that represent each one, even of their more trivial acts are enriched and animated by similar memories and motives. The emotional 'core' of each harmonizes readily with all the rest.

But, it might be urged, to what purpose cite the examples of eminent heroes of invalidism if it is an impossible task for most of us to follow where they have led? If our characters depend so much on our inherited traits and on instincts arising at the very threshold of infancy that our very carriage and gestures, our voices, and the expressions of our faces

reveal our natures and stamp us to the casual observer for what we are, why should we fret ourselves with vain attempts at change? We cannot change our bodies, how, then, can we hope to alter our characters, some elements of which are almost as fixed as our spinal reflexes themselves? The most trivial habits, even if recently acquired, obstinately resist dismissal, and the same is still more true of our obsessions. The causes of many of our abnormal traits lie out of reach, it is said, buried in the form of bodily mechanisms and forgotten experiences of the past. Timidity, vanity, selfishness, may be graven so deeply into our lives that although we can conceal them for a certain period it is often claimed that we cannot eradicate them altogether.

So strongly do many persons feel that a man's character is in many ways outside of his control, that the very knowledge that he belongs to a certain family, even to a certain race, is enough to make them doubt his capacity for any considerable change. Various students of heredity rate the influence of education very low * as compared with that of hereditary tendencies. Even admitting that a real changing of the character is possible, the invalid — many men would say — is heavily handicapped for such a struggle. His inheritance may be dark, his interests narrow, his opportunities for mingling actively in the stimulating game of life and feeling the warm breath of others' zeal are relatively few. He must often stand by and "look on with cold hands while they join in the whirling game." He is tempted, pushed and drawn towards a life of selfishness, discouragement, and inertness. But, fortunately, there is another and very different side to this picture, and one which both science and observation contribute the materials for painting. The argument for the inalterability of the fundamental tendencies to conduct is unsound; the motives and opportunities present to the invalid are inaccurately stated. Character is to be measured in terms, not of quantity, but of

*Cf. *Heredity in Royalty*. Woods.

quality. What a person needs in order to fulfill his destiny, to reach his goal, whether in a personal sense or with reference to his obligations towards the world, is a power of insight and a sense of progress and freedom, rather than any special form of external accomplishment. There are many kinds of insight and many doors and avenues to the realms of freedom. It is only necessary to look at the invalids who have accepted their conditions cheerfully and taken their lot at its best, to realize what possibilities are open to those who can escape from estimating the pleasure and value of their lives in too conventional terms.

We see daily, to be sure, persons who refuse to regard sickness in any light except as an obstacle and a misfortune of a wholly different class from those of a more familiar sort, and in whom it excites no note of response other than that of terror or indignation. Overwhelmed by a sense of isolation and of personal grievance, they can do nothing but repine. But very different is the picture presented by those persons whose characters are so made that they move forward in spite of the handicap of illness, so steadily that like a stream of water poured upon the ground, which finds itself met by one obstacle after another only to turn in a new direction and pass on, while the idea of being conquered or permanently checked seems not to present itself before their minds. The characters of such persons may vary greatly in detail, but they resemble each other in the respect that they all point to more or less effectively unified personalities, to a fairly concurrent action of the multifold tendencies through which their actions are determined.

Even faults, failures, and defects have no prescriptive right to bar one's way to a larger view of illness or of trouble, and should not be allowed to do so. Morbid self-consciousness, egotism, the tendency to follow aims less desirable than the best, unwelcome as they are, should nevertheless be actually welcomed, if, as so often happens, they mean

movement and progress. The outlook for the invalid is also for another reason much better than it is frequently pictured. The dead hand of an inheritance, assumed (usually on very insufficient grounds) to be "morbid," of habits supposed to be unalterably fixed, often owes its baleful power to the fact that its workings are concealed from us.

It is the skeleton in the closet, the tug of an evil spirit residing in the mysterious depths of our subconscious life, the misunderstood twists and tendencies derived from unfortunate experiences in childhood, experiences which at the time may have seemed innocent and trivial enough — that contribute many of the specters which terrify us and seem to block our paths. It is among the best contributions of modern psychiatry and psychotherapy that it has been shown to be possible, in a remarkable degree, to reverse these hidden influences, which are due to old environments, to misinterpreted emotions,— in brief, to ignorance. The discovery that even patients with dementia precox can be measurably helped through application of this principle is one of the encouraging developments of modern medicine.

The invalid who finds himself in face of difficulties which seem so hard to overcome is drawn forward and held back by strong and varied groups of impulses in which good and evil, basal instincts and fresh ideals, traditions of courage and traditions of cowardice, confidence, and terror, love of his fellowmen and fear of his fellowmen, freedom and prejudice, seem to be joined in combat for the formation of his character. The physician's duty is to aid him in discovering his best birthright, in helping his best instincts, the best fruits of his intelligence, the best conquests of his will, to gain the mastery.

The habits that we seek to alter, after all, are habits only. They reside in the physiological mechanism of our bodies, and these, just because they live, are more or less susceptible of change. I recall an interesting conversation

with an able student of these subjects with relation to the bodily signs of neurasthenic states, and remember well his agreement with my view that many of them, deep-seated though they seem to be, are susceptible of modification in the direction of more normal nutritive development, provided only that their mental accompaniments can be improved. The bare fact, indeed, that the nutrition of the body can be modified, even in its most intimate forms, through the action of mental states, is too well acknowledged to need further emphasis.

Every one has seen individuals whose characters have been so changed through development that for all practical purposes they have become fundamentally different from what they had been before. In many of these cases the influence of illness has been one means through which this change was brought about. The mode in which the change takes place seems usually to be one of either of two sorts. First, the former traits of character are, as it were, side-tracked by the formation of new habits, a new personality, dependent on new interests and developed in practical substitution for the old. Next, the new character may absorb the old; as when a person utilizes, more or less consciously, all the influences, painful as well as pleasurable, which have been brought to bear upon him, and makes his faults as well as his virtues, his weakness as well as his strength, materials for the formation of a new character which without these influences could not have been formed. Intensely self-conscious persons of the type of Bunyan are among those who adopt this latter plan, and there are various other types of invalids whose development follows similar lines.

Whichever of these two modes of effecting a change in the fundamental movements of one's life is chosen, three great influences, sanctioned alike by the experience of educators and the observation of physicians who have dealt with morbid minds, must be mainly relied upon in the ac-

complishment of the task. These are, on the one hand, the utilization of emotions, desires, strong interests, enthusiasm, even the enthusiasm attending intellectual convictions of a high order; on the other hand, persistent, arduous, and thorough training, carried out under a clear conception of the difficulties in the way; and, finally, the eradicating of hidden obstacles to success residing in the form of motor habits and memories not clearly present before the waking consciousness. The principles underlying these three methods need to be separately considered.

To speak, first, of the "side-tracking" plan, it is obvious that if the invalid is to be led to adopt new interests, to gain new enthusiasms of sufficient strength and enduring power to modify his character, these interests and enthusiasms must be in harmony with his own nature; he cannot be expected to form a wholly artificial self. And yet by assumption he is cut off from many of the special interests and pleasures prominent in other persons' lives and perhaps previously in his own. If success is to be obtained it must be because every person's nature is in reality far broader than at first appears. There are persons who appear able,—not merely as a matter of hypocritical pretense, but actually—to feel their interests merged in the interests of the community, taken in a larger or a narrower sense. Parents usually care intensely for the happiness of their children, and do not feel aggrieved and depressed if they are obliged to sacrifice lesser personal interests for interests of this greater sort. Citizens, and even races, in whom the sentiment of patriotism has been strongly developed, work and die, cheerfully and loyally, for national successes that they will never see. These community sentiments, which are thus so strong, may take a definitely personal or a relatively impersonal form. If, now, some persons are so powerfully moved by these feelings, it must be that all persons are capable of responding to them, and that the physician's

problem is to find means of rousing these sentiments into flame. I believe that the difficulty in the way of this result consists less in overcoming an essential resistance than in overcoming conventional habits of thought and feeling.

The fear of others' criticisms makes us cold. Our conventional views of success, misfortune, death, are too often irrational and even positively low, and it is custom more than nature that makes them so. The very fact that the habit of esteeming the community success or the success of a cause as preferable to personal success may become, within certain limits, a national habit, is a sort of warrant for the possibility of exciting it in a given case. Invalids should learn to regard themselves as members of an imaginary band of persons, inspired by loyalty to sentiments of health and courage, although, like themselves, obliged to carry burdens of a certain sort. The numerous individuals who suffer from ideas of morbid self-consciousness carry about with them a band of imaginary critics and enemies, and can often substitute for them without great difficulty this ideal band of allies. It is a question of gaining new ideals of living and making these ideals actually count as standards. "I have tried to live so that my smallest act would correspond to my highest ideal," wrote an intelligent patient with whom this sentiment had become the prevailing motive of her thoughts and conduct.

Every invalid has also many capacities for genuine interest and pleasure of the lighter sorts, which are capable of exciting enthusiasm if only they are followed without the reserve induced by conventional restraints and by the habit of comparison of one's self with others. In the way of this result stands the instinctive longing for individual success, misunderstood and taken in an exclusive and personal sense, as if one man's success must mean another's failure. Personal courage and personal energy and enterprise do indeed seem to stand at the very center of all progress, but they

connote much that is barbarous and need the counterbalancing note of the "courage to let the courage sink."* We continually underrate or wholly fail to recognize the deeper motives by which we might be impelled. We like too well to imagine that our lives and impulses are clear before us, and to gain this seeming clearness we close our eyes to great masses of influences which it would cost us much pains and perhaps pain to analyze.

It is obvious from what has been said that character serves as a stimulus to action. It is likewise known that through experimental methods, as in the case of a hypnotized patient, it is possible to secure impulses to action which, primarily at least, do not deserve the name of character or even of emotional interest. In other words, it has been found that any positive suggestion made when the mind is in a receptive state is likely to be carried into execution. In fact, the attempt has been made to form character through "suggestion," especially with children, and it is indeed possible that certain steps in this progress can be thus accomplished. It is, however, instructive to note that there is a striking difference between the impulses to action formed through suggestion and those gained through experience and struggle, even though the apparent result and form of the action might seem, now and then, to be the same in the two cases. This difference resides in the fact that although an impulse to action secured through suggestion may fit us to carry out a certain result, and thus make us adapted for a definite environment, the position of character — assuming, of course, that it is character of a desirable sort — adapts us for environments of many sorts. The memories of the experiences through which a person has passed, under these circumstances, come to his aid in the way of enriching his perceptions and his thoughts, to an extent which it would be otherwise impossible.

The second of the two methods of character modification

*Arthur H. Clough.

consists in the systematic study of one's personal experiences and traits in the interest of an outcome better than the present. Much has been said of the evils of introspection, and this would seem to imply introspection on a large scale. But there are two sorts of introspection. One of them is simply emotional, morbid, and depressing, and ends in nothing that is useful, while the other is a thoughtful study of one's self, made desirable either for the sake of increasing the general sum of knowledge, or for the sake of the correction of tendencies which absolutely need correction. This self-investigation, which is much better conducted with the aid of the skilled physician, may take either one of two forms. The patient may scrutinize the obstacles consisting in his own peculiarities of disposition and of habits, and learn to estimate them at their true value, regarding them, so far as practicable, in a matter of fact way and without undue emotion, especially without self-reproach, and may utilize the information that he gains in the interests of progress. Or, he may make a very thorough scrutiny of the origin of his symptoms, be they what they may,—morbid self-consciousness, fears, undesirable feelings toward those around him, dissociations of the hysterical type. Every thoughtful person is aware that many of these symptoms have their roots in experiences and habits formed in childhood, but there are few persons, even though thoughtful, who have as yet learned to appreciate the full bearing of this principle. Mental conflicts may begin almost in the cradle, and are often attended or soon followed by desires, aspirations, and fears, which too often are given no outlet, but are ostensibly suppressed. In reality this suppression means frequently conversion into some other form and the establishment of an undesirable tendency to morbid growth. The paper of this series, by Dr. Ernest Jones, describes this principle with far better justice than I can render it in these few lines. I will only say that the longer I have studied the matters of

which his paper treats, the more fully I am convinced of their significance. I have already discussed them somewhat in the earlier portion of this paper.

Besides these two great methods of character formation, that which operates through the operation of new interests and that which operates through the scrutiny of past experiences and present peculiarities,—there is a large field for efforts toward character-formation through the systematic training of the will and the assumption of duties and obligations toward individuals and the community.

Back of them all, however, lie the question and the doubt, “Do we mean to substantiate our principles with acts” ? “Are we prepared to pay the price, in labor, of freedom and self-control?” If these questions can be honestly answered in the affirmative, the battle is half won. For the development of character in harmony with new ideals and needs it is not necessary or desirable to eradicate the past, but only to make it lend some element of value to the present. The oriental philosophy would see virtue reached through the obliteration not only of sensuality but of the senses. A typical *reductio ad absurdum* of this principle is furnished by the conduct of those devotees who have themselves immured in narrow cells to be thereafter kept alive for varying periods through food thrust in by narrow apertures.

The Western philosophy adopts sense pleasures as elements to be utilized; adopts the seeming paradox that sins and pains, even if apparently useless, are not incompatible with the theory of a moral universe. The man of finest character has long ceased to be sensual; yet he does not, for that, shut his eyes upon his natural instincts, but remains sense free and sense active, and recognizes the splendid working out of sense instincts in civilization and community life. Neither do the temptations and trials of illness and misfortune fetter his thought any more than the temptations of sensuality.

The development of character in a desired direction is then to be secured through free choice, but, as a rule, slowly, perhaps painfully, and under constant vigilance and effort.* Most of all, the principle should be recognized that in the conscious attempt to modify character and to escape from the bondage of hampering habits, what we really seek is not the destruction of order, in the supposed interests of freedom, but acceptance of a more comprehensive order as the highest choice of freedom. It is the conception, under the form of an ideal vision, of this higher order, combined with the power which the vision furnishes of seeing one's self as part of a larger whole, one member of a great company of persons not wholly describable in terms of bodily forms, a company whose pleasures and progress each one may enjoy, regardless of his individual lot; it is this conception that makes illness not only bearable, but sometimes the road to a more satisfactory sort of health.

* It is interesting to note that Dante, in his *Purgatorio*, while asserting the possibility of progress, symbolizes, by the lengths of time which he assumes to be required for his modifications of character, the practical difficulty in the way of the result.

