

Original Articles.

REMARKS ON THE PSYCHICAL TREATMENT OF NEURASTHENIA.¹

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THERE is hardly a subject in practical medicine which is of wider interest than the study of the nature and treatment of the degenerative neuroses and psychoses which the latitude of the present discussion will allow us to designate as neurasthenia.

For many of these cases to be sure, a simple and wholesome life of active usefulness combined with the steadying influence of encouragement and good advice, and the various means which we possess for improving nutrition and strengthening the circulation—prominent among which is the external use of water—suffices to secure a reasonable degree of health. Of all these methods, valuable as they are, I do not mean to speak. In other cases—and their number is great—the sympathy, the ingenuity, the intelligence and skill of the physician is drawn upon to its full capacity without being able to bring relief to his patient, and then perhaps—to crown his disappointment or increase his puzzle—the patient goes to an irregular practitioner or becomes a disciple of the Christian Science or Mind Cure, and gets better, for a time at least.

In selecting the *psychical treatment* for this discussion, I do not in the least mean to claim for it a place of undue prominence.

The best physician will always be he whose resources are the most extensive and the best mastered. But of these two conditions the latter is the more important, and I think neither the profession at large nor the neurologists have yet learned to master this branch of therapeutics to the extent that it deserves.

Every intelligent physician who deals with cases of this class can show a good list of successful results, the fruit of conscientious and skilful work on his part; but the methods are not yet so systematized but that we can all profitably compare notes and enrich our own resources by a study of the results obtained by those who have been working in special lines.

There are still too many of these cases that we fail to reach, and one still hears too much said about the impossibility of benefiting certain patients without appeals to their superstitiousness, such as a self-respecting physician should be unable and unwilling to make.

In a sense, I grudge the irregulars every case that they win from us, be they few or many, because I believe that with a deeper knowledge of human nature, a better understanding of psychology, a wider range of methods and greater skill in applying them, we could cure more of these patients ourselves.

Many patients are neurasthenic because there is no interest which sufficiently absorbs their energy. It is noticeable that fanatics and enthusiasts, even if naturally feeble or occasionally prostrated by sickness, are rarely permanent invalids. The strong attraction of their one interest focuses their powers, and steadies the ill-balanced forces of the mind. The brain is a machine for grinding out work, and if it can be made to do this effectively, even if the work is of a simple order, so that it be engrossing, the patient is sure to be the gainer. Certainly all of us have had some pa-

tients for whom enforced or chosen labor has been a great blessing, though from time to time it may have seemed to aggravate their sufferings.

Whatever other means of treatment have been chosen, this then, should be the general aim, to teach the brain to maintain a steady outflow of effective work, within the limits of the patient's powers. If I do not dwell on this species of mental influence at such length as its importance would warrant, it is partly because the principle is familiar, and partly because each patient's conditions vary so much that it would be difficult to lay down practical rules. It is, however, important to remember that the great usefulness of systematic gymnastics for neurasthenics is largely to be explained in this way. Children who have a tendency to neurasthenia can profitably carry this form of training to a high point, and for them, also, the training of the kindergarten and the technical instruction in the schools of higher grade may be made of great service, by developing the sense of power in the direction of constructiveness and the overcoming of obstacles.

Every one is familiar with the remarkable benefit occasionally obtained by the use of the so-called Dyer's method in the treatment of asthenopia. The action of the very gradual increase in the use of the eyes must surely be mainly a matter rather of psychical than muscular training. On somewhat similar principles perhaps, the persistent and careful use of gymnastics, directed by a skilled teacher, can often be made of material service in the treatment of neurasthenic patients.

What is meant by mental treatment, and what sorts of symptoms among the many that are met with in neurasthenia may be considered as possibly amenable to it?

A few years ago these two questions would have been answered in a far narrower spirit than now, and it is not probable that our conceptions are even yet as wide as they will eventually become. Inasmuch as the cortex of the brain is a great projection plane, in Meynert's sense, on which all the processes which occur in the body are represented, so that they may and must form part of the raw material of emotions, ideas, and memories, it is theoretically conceivable that all these processes are in some measure liable to be reacted upon by the operations of the mind. But, without taking advantage of so wide a generalization as this, every one will admit that the investigation into hysteria, and the kindred phenomena of experimental hypnotism, and the study of the clinical rôle played by disorders of the mind in the production of such affections as anemia and jaundice, and a host of others, have greatly enlarged our conception of the influence which this unseen agency may exert.

Hysterical edema, hysterical atrophy, hysterical anemia, and the like, are now considered as symptoms of a disturbed action of what may fairly be called the mind; it is probable that more of the symptoms of neurasthenia are of that origin than would generally be admitted, though the ultimate chemical causes of the neural weakness which underlies the disease very likely affect the whole nervous system and not the brain alone. At all events, many of the worst symptoms of neurasthenia, such as the morbid ideas, the causeless exhaustion, the sense of inefficiency and loss of control and of identity, the tendency to depression bordering on melancholia, the asthenopia and kindred

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localized weaknesses, the persistent "associative" pains, are in great part, though perhaps not often wholly, of psychical origin. It is such groups of symptoms as these that I shall have in mind in the following remarks.

The consciousness of any individual at a given moment forms but a small fragment of what may be termed his mind. It consists of the small nucleus of bodily sensations and recurrent ideas, the constant persistence of which is necessary to give the sense of personal identity, and of a certain number of other ideas and feelings which cohere less strongly but form a subconscious background for his thought. Outside of the personal consciousness of the moment there are countless clusters of mental processes which are registering or regulating the movements going on in the vast workshop of the body, and waiting their turn to subserve the interests of the next moment's consciousness. Perhaps, indeed, it may be said that in health, and in proportion to the perfection with which the mind is organized, the consciousness of the moment gains a fullness and background of great value even from mental processes which lie for the most part outside of it. The mind as a whole might be compared to a deep and swiftly flowing river, and the personal or habitual consciousness to an eddy beneath the bank, which forever seeks to change its shape and draw in water from without, yet never wholly loses its identity.

In health there is a certain degree of co-ordination and mutual support between all the vast activities of the mind, binding them to the consciousness on the one hand and to the vital functions of the body on the other; and though these various activities are grouped in clusters which are more or less independent, just as in one stream there may be many eddies, yet no antagonism or interference takes place between them. The healthy man feels himself a consistent character, and can predict what he will do, not only as regards those new exigencies which require logical thought, but also as regards those which depend upon the promptings of all the deeper-lying and subconscious processes with which his mind is stocked. His reactions to the various problems which present themselves are as prompt as the conditions of the case permit, and the attention of his consciousness is at liberty to devote itself, unembarrassed, to the interest of each new question as it arises.

In neurasthenia, and still more in hysteria, this harmony of action, tending to the furtherance of single interests of the individual, one after another, is more or less deeply impaired. The patient's consciousness is no longer permitted to focus itself exclusively upon the main object of his attention, but unrelated ideas and emotions intrude themselves, to the detriment of his flow of thought, just as floating opacities in the vitreous humor of the eye drift over and obscure the field of vision.

I will not pursue this theoretical survey further. I only desire to call attention to the fact that these intrusive ideas and sensations lie partly or wholly outside of the patient's ordinary sphere of consciousness and will. Even when they recur so often as to form almost constant elements of his personal consciousness, the fact that they originated in deeper lying strata of the mind or have become secondarily rooted there makes it almost impossible for him *without special training* to make them objective, or to help himself

much in ousting them through any logical process of thought. The patient is a puzzle to himself and his struggles often seem to carry him deeper into the mire. It is the physician's function to aid him in ridding himself of these disturbing elements of both his conscious and unconscious mental life, partly by surrounding him with influences which will address themselves directly to the subconscious strata of the mind where these morbid processes are going on; partly by teaching him to use his will, indirectly, in displacing them.

It is this notion of the possibility of an outsider's assuming to exert an influence over regions and processes of the patient's mind which he himself is wholly unable to reach and explore, that seems to many persons so foreign, so obscure, and so unreasonable, and yet it is a notion of fundamental importance for securing to the physician the necessary confidence for dealing with neurasthenic patients.

It is also very desirable that the physician should form an accurate physiological conception of the processes by which thoughts are made useful as therapeutic agents, so far as this is possible. A thought is the outcome of a physiological stimulus and becomes a stimulus in its turn, for good or evil.

If it is conceivable that by words or by other forms of adequate stimulus (for a word may be an adequate stimulus just as well as a blow) we can arouse, *within* the realm of consciousness, thoughts and sentiments—or, in physiological language, nerve currents—favorable to the physical and mental health, it is equally conceivable that, by similar stimuli, we should be able to arouse similar images or currents in the regions of the mind lying *outside* the ordinary realm of consciousness. In certain forms of hysteria, indeed, we sometimes have to deal with two definite personalities for each single patient; and even in the case of neurasthenia this is practically true, for the "moods" of the neurasthenic patient are such as to change his characteristics to a high degree. Though ordinarily critical, distrustful, and suspicious to a degree that he cannot control, yet there are times when these characteristics are laid almost wholly aside.

It is under the latter circumstances, that the most effective work is to be done in the way of introducing ideas or sentiments of hopefulness and self-confidence, or of familiarizing the patient with the image of himself freed from harassing thoughts and feelings, and with his nutritive processes in better train. It is, too, in the hope of eventually influencing these deeper strata of the mental life, which form such an important background for the habitual consciousness, that we should stand ready to repeat our encouragements over and over under the same or new forms, or to exert a thousand influences of indirect kinds, some one of which may be successful in planting these sentiments of hopefulness where they cannot easily be dislodged, and where they may act to counteract the emotions and processes adverse to health. The choice of such influences is apt to be determined by the instinct or experience of the physician. This must perhaps always be so; but I think it will be a gain, especially for those physicians in whom these instincts are not strongly developed, to systematize them, and to study the principles on which they rest.

(A) The principal means which have been used to *help the patient exert his own reasoning and will* in overcoming his disease are the following:

By demonstrating to him, with all the patience and

repetition that is necessary, something of the nature of his disease, the fact that his symptoms—his morbid fears, for example—do not necessarily entail the gloomy outlook which he fears, and that if he can change his point of view, can look on himself as capable of better things, and can learn to look in the right direction for the expected good, it will be seen. It is, of course, only now and then that this attempt succeeds; but the better hope is that, if our demonstration is really well thought out, and is presented again and again under different forms, some argument or word may make a relatively deep impression, and *if it happens to coincide with a wave of improvement*, will come to mind again as one of the re-enforcing associations of this latter state and give it a logical cast. In this way it often happens that the physician's logic gets credit which it does not strictly deserve; but nevertheless it does occasionally seem that an intelligent patient is led by a powerfully presented or thoroughly grounded argument to make a strong and successful effort to get the better of his own delusive reasoning.

Dr. Edward Cowles has exerted himself to develop this method, and has succeeded in several cases, even where a good deal of melancholic depression was already present.² It is unquestionably important, if not essential, for success that a definite and sufficiently logical plan of exposition should be followed. Even if this is not clearly understood by the patient in exactly the same sense as by the physician, the presentation can hardly fail to increase confidence in the physician for the thought and study which he has given the case. Usually the anxious patient is keen to detect some flaw in the reasoning, but where the emotional state is not too deep and the symptom is an isolated one, it is well known that success is more common. Abundant instances of this are on record, and a striking example is given by Dr. Prince in his interesting discussion of the "association neuroses" (the use of an artificial rose to cure a fancied imperative tendency to sneeze at the smell of roses).

A great deal is gained if the patient can be taught to really conceive of himself as capable of being a different person; for different he must be, as a rule, in habits of mind, temperament, and often even habits of daily life, if he is to make any material improvement. One reason that this is difficult is that the patient finds for the moment a positive relief in acting out his morbid instincts and indulging his morbid thoughts, just as persons with morbid impulses to repeat words or acts and the like, find for the instant a certain satisfaction in doing so, though it is a satisfaction which entails a new torment. There is a certain temporary relief to many persons in assuming the mental habits of a Mrs. Gummidge, but in the long run it is a drain upon the nervous strength.

It is interesting to note that persons who have been exposed to some powerful influence, such as a deep personal experience or some religious change of sentiment, and have thus had effected rapidly the sort of change in temperament which the physician tries to bring about slowly, are apt instinctively to show their own recognition of their new life by adopting simpler forms of dress or by changing their habits and associates, and, in the reverse sense, it may sometimes be possible to favor the mental change by adopting pri-

marily some outward expression consonant with the desired order of things.

It is a matter of immense importance and often entirely possible, to deliberately adopt and persistently maintain the demeanor of cheerfulness and hopefulness. It is easier to act a new rôle in a new and appropriate dress. Prof. William James has dwelt upon this point in his studies on the nature of emotion.³ It is for this reason, in part, that frequent changes of surroundings, if only for a short time, are often of such benefit to neurasthenic patients.

It must, however, be remembered that it is infinitely more difficult, and requires infinitely more pains and persistence to effect an alteration in character than an alteration in mood. *Cælum, non animum, mutant, qui trans mare currunt.* The physician must distinguish between the cases that can really be helped in this way, and those which might even be made worse. The patients of the latter class, if they are really intelligent enough, can often do best by looking their difficulties clearly in the face and striking for a more radical improvement which shall be associated with the growth of character and will, and the founding of the really soundest and best habits of daily life.⁴

It is better, where the facts justify or can be expected to justify the assumption, that a patient should learn not to look on himself as an invalid, but, rather, as a person who is well, but who must have a shorter working day than some of his neighbors, and who realizes that he has his health at the price of certain sacrifices which he is ready to make.

Some neurasthenic patients suffer very much from a sense of disgrace at being ill with a condition of nervous weakness; and I cannot but think that this is partly due to the existence in the community at large of a barbarous sentiment of this sort like that which used to be held with regard to insanity. If the patient can be persuaded that he is no more responsible for an attack of neurasthenia than for an attack of gout, provided he is doing his best to get rid of it, and if in this way he can be led to take a somewhat objective interest in seeing what he can make of himself, an important point will have been gained.

A special cause of distress to many of these patients is the fear of insanity, to which they think their symptoms are tending. Fortunately, it usually lies in the power of the patient and his physician to make this fear a groundless one; and no effort tending to this end should be spared, especially in the early stages of a neurasthenia which is likely to become chronic. In this, as in every part of the treatment, it is essential to form powerful associations in the mind, which have a strong sense of hopefulness and cheerfulness as one of their elements; hopefulness associated with signs of improvement which the patient should be systematically taught to recognize; hopefulness associated with definite logical processes through which the patient has been taught to disprove his own morbid reasoning; and with active and engrossing occupation. Van Eeden says that he has

³ See also Lange, *Les émot ons*; and Féré, *La pathologie des émot ions*.

⁴ "In the Will work and acquire, and thou hast chained the wheel of Chance, and shalt sit hereafter out of fear from her rotations. A political victory, a rise of rents, the recovery of your sick or the return of your absent friend, or some other favorable event raises your spirits, and you think good days are preparing for you. Do not believe it. Nothing can bring you peace but yourself. Nothing can bring you peace but the triumph of principles."—*Emerson, Self-Reliance*.

² See also Prof. Josiah Royce's very interesting analysis of the case of John Bunyan, in *Philosophical Review*, 1894.

found it of service to recommend to patients harassed with morbid ideas to study some foreign language and to repeat their lessons to themselves when alone, as a distraction from their thoughts; and the same writer speaks of the fact that the artist, William Blake, got rid of his visions by painting them, thus making them an object of objective interest. Others have similarly helped themselves by studying and describing their morbid fancies.

(B) Methods of influencing the patient's mental state *without the direct intervention of his own will.*

It is needless to point out that the most striking of these methods are those which have been discussed under the name of hypnotism. I should, however, be glad if I could show that the hypnotic methods used in practical therapeutics by the best men have nothing abhorrent in them, and are only a further development of various means of treatment familiar to every one.

These methods may be looked at from two points of view: first, as increasing the personal influence of the physician; second, as increasing the susceptibility of the patient.

Every one who deals with neurasthenic patients knows how much the *personal influence* of the physician counts for in their treatment; and knows, too, that the gain of this personal influence is not without its objectionable side. It furnishes opportunities to the charlatan as well as the conscientious physician; and it is a truism to say that the latter is under obligation to use the influence which he gets, solely for the benefit of the patient and for his best benefit. He should feel it his responsibility to leave the patient not only improved in health but with a stronger character, and so far as practicable free from a sense of dependence upon him. It is the duty of the physician, as Madame de Staël said of the ideal legislator, to make himself unnecessary.

Besides the many and almost indescribable means at the physician's disposal for increasing his personal influence, there is one of some slight value which is secured to him by the growing habit of the physician's dispensing his own medicines, at least to a certain extent. It is not a good thing for a nervous patient to carry off a prescription which he can mull over and criticise at his leisure and perhaps get refilled or hand to his friends as if he were himself the doctor. The physician's medicine ought, logically, to be, like his advice, a part of his personal armamentarium, and if it brings him a little additional glamour in the eyes of the patient, there is gain for both, provided the doctor is an honest man.

More important than the therapeutic influences already alluded to, if only because more capable of systematization, are the means — to use a conventional phrase — of increasing the patient's *suggestibility* to the beneficial influences of every sort by which the physician seeks to surround him. In general, this is done either by taking advantage of states in which the consciousness is favorable to the particular influence and lends it its support, or else states in which the conscious attention is otherwise absorbed, or temporarily in abeyance. Under the latter circumstances an impression can sometimes be made upon the mind which may be so strong as to become a permanent working force, affecting nutrition on the one hand and modifying the current of thought on the other hand. The new influence gets into the cham-

bers of the mind by the back door, but for that very reason is able to entrench itself the more strongly, because the owner of the house hardly realizes what the intruder is about until his presence has become so familiar that he passes for an assured member of the family. To use another simile which I have found very useful, let us suppose that we wish to drop a marble down through a funnel. So long as the funnel is kept in motion, the marble will roll round and round in the brim; bring it to rest and it will fall through. In the same way, if it be desired to drop an effective idea into the deeper strata of a patient's mind, his critical consciousness must first be shunted out, or the idea will be rolled about and torn to pieces in the cogwheels of his habitual and false logic.

It is well known that many healthy persons may be made, in an abstracted mood, to perform quite complex mental acts almost automatically, also that powerful impressions made on any one, especially in youth, may excite antipathies or prejudices which the reason, even years afterwards, is helpless to dislodge.

It is in this way that "fixed" ideas become such dominant forces in men's lives. Some of these fixed ideas are habitually present to consciousness, though even then they have their roots tenaciously intertwined with mental processes over which consciousness never had or has ceased to have authority.

In other cases, and especially with hysterical patients, the fixed ideas are known to consciousness only through the acts to which they prompt. If, under these circumstances, it be considered a misnomer to speak of these mental processes as "ideas," or as evidences of a "subliminal consciousness" (Myers), or of "unconscious cerebration" (Carpenter), at least it will be admitted that these words denote physiological processes occurring in the brain and leading to such and such results, and that for exciting such physiological processes, words falling on the ear, or any of the more subtle modes of human converse may be an adequate stimulus. In other words, there is nothing unreasonable in the notion that mental processes of which the patient is unconscious should be induced or modified by "verbal suggestion."

The working out of the methods for taking advantage of susceptible or "suggestible" moments for the implantation of ideas or initiating physiological processes favorable to mental and physical health, either with or without the conscious co-operation of the individual, has been carried on by educators, psychologists, irregular practitioners, and by regular physicians; by every one, in fact, with whom it has lain deeply to exert a strong influence over his fellows.

A large part of the study of these methods has been conducted wholly unsystematically, and often for selfish ends, but may still be psychologically of interest.

The physicians who have had the most success in the treatment of neurasthenic cases have gained it by working up special methods, which although dissimilar in detail have been from the very nature of the case similar in principle. Some of them have bent themselves to invent new ways of diverting their patients' morbid energies into channels of active work, or of keeping them under the healthy influence of an intelligent nurse, and prescribing with care the details of their daily life; while for a certain class of patients the plans worked with so much skill by Dr. Weir Mitchell, have been studied and utilized with profit by physicians to whom this method was congenial.

Putting aside the influences directed to the improvement of the nutrition, it may be said that all these methods have one feature in common.

Whether it is sought to make the patient realize that he can after all do some effective work, or learn to be cheerful, or learn to accept, temporarily, the physician's will for his own, it is always found advisable to place him under special and peculiar conditions to get the best effect. Either he is isolated, or he is put to bed, or he is kept under the new and carefully chosen influence of another individual. In other words, to use the terms of the day, it is sought to influence him in "suggestible" or susceptible moments of his life.

All those who have studied the literature of this subject are aware that not only the artificial but the natural sleep, or half-sleep, sometimes brings with it an increased receptivity of verbal suggestion. I do not know to what extent this has been utilized, but I was interested to find, one day, that an intelligent nurse was using this method, either following her own instincts or led by some tradition, for the sake of making a child sleep better.

It is, however, the modern students of hypnotism and hysteria and kindred subjects that have undoubtedly carried on these inquiries the most deeply and systematically. There is no doubt that the methods of the school of Nancy are invaluable for those who have to use them properly, and practically free from danger under the same conditions. The physician's personal influence over the patient is increased, but so far from this in itself tending necessarily to enslave the patient's will, it may be made, as in health, to strengthen his will and character if the physician's efforts are intelligently directed to this end.

There is, however, a strong prejudice in the minds of some of the best and soundest people in the community against the use of anything which goes under the name of hypnotism, as seeming to imply the reign of superstition and mysticism, and a falling off from the sound principles which underlie the best mental health. This prejudice is founded on a misconception, but it must be respected, and yet it must not be allowed to interfere with our giving such persons the full benefit of our skill any further than is necessary. Very often it is possible to secure the first degree of the hypnotic sleep, or enough increase in susceptibility to be useful, without mentioning the word hypnotism. If a patient comes to us already coached in hypnotic doctrines, it is often an excellent plan to talk it over with him further; and there are many cases where it is desirable to do this in any event. In general, however, it seems to me a mistake for the physician to assume that a patient can really understand so complex a subject unless when presented in the simplest way; and I think it is better for him to come down to the patient's level and to explain his intentions briefly and in popular language, than to use terms which may, for all he knows, carry mysterious or terrifying associations. All that is necessary is that the patient should give his full and intelligent co-operation to promoting the induction of quiet or sleep; and if he has confidence in his physician, it can often be made sufficiently clear to him that this is a suitable thing to do.

To illustrate my meaning more fully, I will give briefly the case of a lady who has been suffering for many years from a distressing nervous cough which attacked her on the occasion of every embarrassment,

even the slightest. I persuaded myself very soon that no treatment but one of a psychical character would help her, and was ready, if it should prove necessary, to propose to her hypnotism, pure and simple. Before doing this, however, I determined to secure the quiet and suggestibility which often attends, or more strictly speaking, can be made to attend the use of static electricity. I told her that I was going to give her a treatment addressed to quieting the general mental irritability from which she suffered, and that at the same time her cough, which was a sort of nervous trick, would become less troublesome; that I wanted her to relax her muscles and her thoughts, and let herself sink into a state of restfulness, which would then stay with her through the day. The result was eminently satisfactory. She made in all ten visits, and before these were over her cough had become so much better that she considered it practically cured, while her general conditions likewise improved. The word hypnotism was never mentioned, and though I am not sure that she went actually into the stage of not being able to open the eyes, yet all the abstraction that I needed was obtained, and that without the necessity of explanations on my part, or of making her an adherent and perhaps prophet of hypnotism, which she would surely have misunderstood. I have treated many other patients in this same way with excellent effect, sometimes using more, sometimes less, in the way of verbal suggestion. I recall especially two cases of asthenopia of long standing, which were greatly benefited.

It often happens that patients fall actually asleep under the agreeable sensations and monotonous sounds attending the application; and although it may well be that for the best "suggestive" effect the operator must take special pains to keep the patient's mind in touch with his own during this process, yet there would seem to be no reason why this should not be done if necessary. On the other hand, the treatment often carries its own suggestion, and the necessity for the physician to intrude his own personality is largely obviated. I am myself in the habit of asking an assistant nurse to carry out the applications, so far as possible, and consider that if the patient is thus led to take a more matter-of-fact view of this process, it is so much the better, provided the desired end is gained.

In this way I have treated with good though not invariable success a number of cases of neurasthenia, and several cases of the milder forms of melancholia. How much the electricity in itself has contributed to the result, I do not feel able to say; but a little light may perhaps be thrown upon this point by some observations on temperature to which I shall refer in a moment. I do not vaunt this method as making hypnotism unnecessary, for both my experience and judgment would lead me to think that where it is a question of dealing with a serious case, requiring a high degree of personal influence or of suggestibility—suggestibility, that is, with special relation to the physician—more can be accomplished through the methods of Nancy, than in any other way, provided the physician is skilled in their use.

It is often said that neurasthenics are not hypnotizable, but the facts do not bear out this view, although success often implies more time and patience than most physicians can give. These statements are borne out by the elaborate statistics of Schrenck-Notzing based on the analysis of 228 cases treated

by a limited number of the best observers.^b About 7.3 per cent. were shown to be non-influenceable; about 32 per cent. influenceable only in slight degree; nearly 61 per cent. susceptible of deeper degrees of influence. As regards the result, about 31.6 per cent. received but slight benefit or none; nearly 37 per cent. were considerably relieved; 31.6 per cent. were reported as cured.

The detailed histories illustrating the psychical treatment of the psychoses of this class which are given by Van Renterghem and Van Eeden^c are full of interest, since they enable us to see the progress of the cases, their exact character, and force us to recognize that in some of them the treatment only reinforced the patient's efforts in his life-long struggle with an incurable malady.

The details of their treatment, which is by no means confined to the use of verbal suggestion, but are those of the broad-minded physician as well, are worthy of special note. To make up for the slight degree of induced suggestibility they sometimes continued the treatment through one or two hours, the patient lying quietly with closed eyes and being talked to from time to time in an appropriate manner. I cannot but refer in this connection to an important suggestion of Bernheim's, to the effect that a hypnotized patient is not a totally changed person, much less changed into a mere lump of clay, and that frequently it is necessary to address him with the same forms of argument that would have been used in his waking state. It is also important to remember Forel's caution, that the hypnotized patient is a keen mind-reader and may readily detect a false note in the physician's treatment. If he does not detect it to resent it, as he might do if appealed to with sentimental terms, or as a child, or an inferior person, and the like, then he may detect it and accept such terms as appropriate, to the injury of, we will say, his subliminal self-respect. It is not to be forgotten that the physician is a dual or complex person as well as the patient, and he owes it to the latter to have a sharp lookout on the workings of his own subconscious personalities, which are to be brought into such close contact with those of his subject. It is this sort of thing rather than anything more gross, that seems to me to constitute the true danger of modern hypnotism. The physician's personal influence is heightened, and if it is not sound the patient may detect the fact to his own disadvantage, in spite of the verbal suggestion which is made to him.

The principal good effect to be looked for from the psychical treatment of neurasthenics is, by general acknowledgment, an improvement in hopefulness and the general emotional background of the thought and the relief of certain symptoms. The attempt has sometimes been made to go further than this, and, after patiently unravelling the web of false logic which the patient's fears have woven, and tracing back his fixed and morbid thoughts to their original source, to neutralize this primal mental conception with the aid of the hypnotic sleep.

It is well known to all students of the subject that Janet and Breuer and Freund have published remarkable cases of relief from fixed ideas in *hysteria*, obtained through this method; but I doubt whether

we can in strictness admit that the same process is likely to occur with neurasthenic patients, whose mental machinery and its disorders are more complex than those of the hysteric. It is legitimate to make the attempt, and probable enough that the patient would be relieved, but in many cases a close critic might say that the patient had probably only lent himself to the belief that the cause of his unhappiness had been unearthed, with the half-whispered hope that he might thus be cured.

In the course of the treatments with static electricity I have been much interested in studying the changes of temperature which occurred, being led to do so through interest in the extended observations of like character made by Dr. W. J. Morton of New York.

Dr. Morton had found that the temperature of neurasthenic patients was generally subnormal, though sometimes above the normal, and that under an electrical treatment it usually swung, in either case, towards the normal line; and he was inclined to attribute the change to the tonic action of the electricity upon nutrition.⁷

I have observed the temperature in a limited number of cases, during applications of static electricity (breeze, with enjoined rest), and I have also studied the effects of a modified suspension treatment in cases of locomotor ataxia, of massage, and of spurious electrical application, the patient being placed in the chair as usual and enjoined to relax the muscles and close the eyes yet without being connected with the plates of the machine, which, however, were put in motion as usual.

The results were as follows: The temperature in a case of exophthalmic goitre, with nervousness and debility, was either unaffected, or, what was more common, rose from a few tenths of a degree to a degree, but on several occasions when no electricity was actually given the result was the same.

		Temperature		Pulse	
		Before.	After.	Before.	After.
March 11	. . . . .	98	99	150 ($\frac{1}{4}$ hour later, 140)	154
" 13	. . . . .	99	100	128	118
" 15 (no elec.)	. . . . .	99	99	128	128
" 20 (no elec.)	. . . . .	98	98	112	104
" 22	. . . . .	99	99.8	..	..
" 27 (no elec.)	. . . . .	98.4	99.8	125	123
" 29	. . . . .	98.8	99.3	125	124
April 1 (no elec.)	. . . . .	98.6	99.9	124	118
" 3	. . . . .	99.8	100.6	134	129
" 5 (no elec.)	. . . . .	99.2	101.2	138	134
" 10	. . . . .	100	101	130	130
" 12	. . . . .	99	101	..	..

In the case of a boy with a slight chronic chorea the figures were as follows:

		Temperature		Pulse	
		Before.	After.	Before.	After.
March 28	. . . . .	98.8	99.6	83	80
April 1 (no elec.)	. . . . .	99	99.4	78	76
" 4	. . . . .	98.6	99.2	78	75
" 8	. . . . .	99	99.2	80	78
" 11 (no elec.)	. . . . .	99	99	78	80

To judge from these two observations there would seem to be some doubt whether it is the action of the electricity in itself that causes the elevation of temperature, and not rather some more subtle influence on the nervous system, which can be exerted in various ways.

⁷ Transactions of the Electro-Therapeutic Association, 1893.

^b Ein Beitrag zur Psychischen und Suggestiven Behandlung der Neurasthenie, 1894.

^c Psycho-Therapie, Paris, 1894.

For the sake of control I give a summary of the temperatures taken before and after the treatments by modified suspension in cases of tabes, partly at the Massachusetts General Hospital, partly at my private office. These observations led me to note, incidentally, the interesting fact that, occasionally, in tabetic patients, the temperature is regularly very low. In one case the highest (morning) temperature that I could get, during the period of observation, was 98.2° F., with five minutes' exposure of the thermometer in the mouth. Generally it ranged from 97° to 97.8°, and after one treatment it dropped to 96.5°. In another case the initial temperature (taken at about 10.30 A. M.) was on one occasion 96.4°; and that after treatment, 96.2°.

There was no regularity as to the direction in which the changes occurred, nor could it be said that, as Dr. Morton's observations seemed to indicate, the deviation was regularly towards the normal line. The amount of change varied from nothing to .11° F., but changes of .4° to .6° were common.

This is not the place to discuss the psychical treatment of tabes, and I will merely say in passing that it is to this influence that I have been inclined to attribute the favorable effect of the stretching treatment in several cases.

It is, I think, certain that just as patients with sclerosis and organic degenerations are liable to exhibit more or less tendency to neurasthenia and hysteria, so the same class of patients often have more power to counteract some at least of their symptoms than they are aware of or can voluntarily command.

I have recently had a patient, a young girl, with diffuse sclerosis of the spinal cord (verified by autopsy, after death from an intercurrent disease), whose power of getting about was very materially increased through the mental aid of a skilful treatment by Dr. Hamilton Osgood.

In conclusion, I wish to say a word about the "Mind Cure" and "Christian Science" movement, which seems for some reason to have found a safe anchorage in our community. Although, in general outline, this is only the re-echo of old histories, yet such movements get a special tone from the characteristics of the generation and community in which they occur; and I have been greatly interested in the observations which I have made during the past few years.

It has seemed to me noticeable that patients of a simple and impressionable and at the same time not critical disposition, may become more sober, serious, and independent, and far more likely than before to count as figures instead of ciphers in the world. If they are sincere, they are apt to become fanatical for their new doctrines though not necessarily intolerant of those of others. If their critical instinct is a little stronger they are likely to suspect that they have bartered a part of their mental independence for the sake of their recovery.

Another interesting fact is, that besides the improvement in spirits and hopefulness, and what might be called moral regeneration, there are often certain by-products, as one might say, of this treatment, which are noteworthy, especially because they are liable to appear under any treatment of analogous kind, even when not made the subject of verbal suggestion. Such are the relief of constipation and menstrual pain, and improvement in the general nutrition. It is also noteworthy that in many instances the whole treatment

is carried on, not only without specific suggestion, but without even conversation of any kind between the patient and the operator. The two simply sit side by side for a sufficient length of time for the production of the required state of mind on the part of the patient, who then takes his leave without a word. A reasonable theory to account for the good effect of the treatment is, that the patient, whether he starts in a receptive mood or not, finds some day, perhaps through the operation of outside causes, that he is better, and at least suspects that the treatment is having its mysterious effect. The seeds of hopefulness and confidence which are thus implanted so regulate the subconscious forces of the mind that the gain becomes steady and progressive.

HEAT PROSTRATION. AN ANALYSIS OF ONE HUNDRED CASES OCCURRING IN THIRTEEN CONSECUTIVE YEARS.¹

BY CHARLES F. WITHERINGTON, M.D.

THE dangers arising from heat prostration affect most particularly that portion of the community which is obliged to work at all times, irrespective of weather and in exposed situations,—in other words, exactly the class of persons for whom a hospital is especially designed. Hence, probably, a larger proportion of the cases of sunstroke and heatstroke which occur in the city are brought to the City Hospital than of any other accident to which the community is liable. It has seemed, therefore, useful to collect some facts from the hospital records bearing upon insolation. The records of the various medical services have been examined from the year 1882 to 1894 inclusive, and all cases of heat prostration tabulated. These numbered a little over a hundred, but after rejecting a very few in which the evidence was not perfectly satisfactory as to the nature of the illness, or where the records were incomplete, there remained exactly one hundred well-marked cases of insolation upon which the following report is based.

As was, of course, to be expected, the male sex was affected in a vastly preponderating degree. There were 95 males and five females. The oldest patient was 70, and the youngest 19, the average age being about 30, and representing that of the most laborious portion of the community.

The time of day at which the attack occurred was deemed of sufficient interest to be noted, and it appears that most of the cases happened in the afternoon. Fifty-two are recorded as occurring after noon, as against 15 in the forenoon, three at noon, and one in the night. Two to three P. M. represents the most frequent hour of the day, as would be natural, after several hours of heat have overcome the resisting capacity of the organism.

The great variation in a number of cases of insolation in consecutive years is illustrated by the following table:

CASES BY YEARS.

1882	4	1890	2
1883	8	1891	5
1884	8	1892	16
1885	3	1893	9
1886	2	1894	14
1887	19		
1888	9		100
1889	1		

¹ This paper will appear in the Boston City Hospital Reports, Sixth Series.