## THE

# PRESENT SCIENTIFIC STATUS OF HYPNOTISM.

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BY

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1

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# THE PRESENT SCIENTIFIC STATUS OF HYPNOTISM.

The line of demarkation between the sublime and the ridiculous, between the mysterious and the miraculous, between belief and incredulity, between respect and aversion in this life, is so narrow, that to espouse any cause that is not well understood or that verges on the occult, is really dangerous to one's reputation, and in treating of hypnotism, I should be vain, indeed, did I expect to escape the lot of others who have essayed the role of interpreters for this much abused and little understood science.

Regary Book Staves - 4,11,79 - 15

My object in writing this paper is to demonstrate that there is nothing miraculous, uncanny or even mysterious in hypnotism; that it is one of the most common forces in nature; that we are subject to its influence at all times, and that were it not for suggestion—which forms the basis of hypnotism—we would make but very little progress in this life, for, at best, we are creatures of environment, dependent upon the labors and suggestions of others in most things.

The worst foes of progress are inertia and skepticism. The first is a physical barrier, the second a mental incubus. We hate to strike out in pastures new for fear we shall have to abandon some long-cherished theories, which may necessitate our doing over some of the work of former years that we had supposed completed. But great as is the barrier of fixed habits, skepticism is even a greater hindrance. It not only prevents the individual from advancing himself, but by inuendos and slighting remarks, locks up the innermost thoughts of the best minds in all ages.

The harsh criticism of preconceived opinions robs us of much that is grand and elevating in this world by its unsympathetic attitude. Did it ever occur to you that nearly every advanced thought or idea has cost the life of him who bore it? Not only is this true in song and religion, but in science also.

Mrs. Browning has put the thought very prettily where she says:

"With stammering lips and insufficient sound,

I strive and struggle to deliver right

That music of my nature, day and night

With dream and thought and feeling interwound,

And only answering all the senses round

With octaves of a mystic depth and height

Which step out grandly to the infinite

From the dark edges of the sensual ground !

This song of soul I struggle to outbear

Through portals of the sense, sublime and whole,

And utter all myself into the air.

But if I did it-as the thunder roll

Breaks its own cloud, my flesh would perish there, Before that dread apocalypse of soul."

Let us then, for the time being at least, drop our critical attitude, and give attention briefly to this newest of sciences which has not escaped its share of persecution, but has had thrown around it an atmosphere of mystery and superstition, which seems to envelop all inquiries into the domain of the phenomena of the mind.

Hypnosis is no longer one of the curiosities of science; it is a valuable therapeutic agent in the treatment of nearly all functional disorders. Especially is it a most valuable remedy in the treatment of neuroses and mental diseases, with the single exception perhaps of dementia.

It is a well-known fact that suggestion plays an important role in the functional activity of all the organs of the body in health. The mouth waters at the suggestion of luscious fruit; peristaltic action of the intestines is set up by suggestion; the glands of the stomach secrete gastric juice by suggestion. If these functions can be set in motion in health, why not in disease. Hospitals have been established for the treatment, not only of functional disorders, but for the cure of organic diseases, such as rheumatism, and lesions of the vascular system, and even certain pathologic processes, such as degeneration and derangements of the nervous system, including paralysis. The most prominent are the Salpêtrière of Paris, until recently presided over by the late M. Charcot; Bernheim' at Nancy; Forel's, at Zurich; and Van Cedens, at Amsterdam. Besides these which are wholly devoted to hypnotic treatment, there are many other hospitals that have wards in which hypnotic suggestion is successfully used. Widely differing theories have been advocated regarding hypnosis, some holding that it is a dangerous pathological condition, a neurosis, in fact, most commonly found in hysterical patients. My observations lead me to hold with Bernheim, that it is closely allied to natural sleep, and like the latter can be made a valuable therapeutic agent in the alleviation of many physical disorders.

A recent article on the psychological aspect of hypnosis by Wm. Romaine Newbald, Ph. D., lecturer on philosophy in the University of Pennsylvania, declares regarding this point : "Hypnosis is in a sense a normal state, artificially prolonged. It would. perhaps be too much to say, with Mr. William James, of Harvard, that we all pass through the hypnotic state every night while going to sleep. \* \* \* Yet the changes, which take place in hypnosis probably do not essentially differ from those of normal sleep." Both of these statemants I can freely corroborate from my own personal experience, as I frequently hypnotize myself as many as two or three times in twenty-four hours, in order to get a few minutes' needed relaxation and rest from the fatigue of the daily duties. I have practiced this now for nine years past and find no ill results from it; on the other hand I am satisfied that I have received decided benefit therefrom, as shown by marked increase in capacity for physical and mental labor.

That it is not injurious when rightly applied, is also demonstrated by its constant and harmless use in childhood. Every time that a mother or nurse *puts a child to sleep*, she hypnotizes it; a more perfect and happy illustration of hypnotism is not to be found, than that of a perfectly healthy child at play one minute and the next enjoying a sound refreshing sleep. The means used are the cradle and the lullaby song, with the command "Go to sleep now darling. Go to sleep—sleep—sleep," etc. Does the child suffer from this kind of treatment? When the moral atmosphere that surrounds the child can be established around the adult individual, then the greatest benefit will be obtained from suggestive therapeutics.

The greatest obstacle to its general employment at the present time, is the mental and moral effects that may supervene through outside influence over which the operator has no control. The best results in treatment have been secured in hospitals where the individual is absolutely separated from outside influence, although it is very difficult even then to disabuse the mind from preconceived ideas of the remedy. The reason that children are so much better subjects for hypnotism than adults, is that their minds are free from any dread of the influence. As soon as a child can understand what it is told, then it can be put into any and all the states of hypnotism.

To define hypnotism simply as "induced sleep" would, however, be to limit the condition. It is that and more. It is a condition in which the individual is oblivious to outward surroundings, in the main, but with quickened powers of susceptibility to suggestion from the hypnotizer and those who may be introduced by him. It is a concentration of the mind of the individual upon some one line of thought or phenomena to the exclusion of all others. It is not essential that the subject should present all the phenomena of sleep. The eyes may remain open and the person be in a complete hypnotic state, obey all direct commands with precision, and yet be wholly unconscious as to what has passed when he is roused to consciousness. The mind may be compared to an automatic self-registering machine that receives ideas, and tabulates and carries out motor impulses that are suggested to it through the senses. For the sensorium to receive and apply the suggestion, it must be of a character that is within the understanding of the individual. To give commands in a foreign tongue is to invite failure, as also the suggestion of thoughts to a hypnotic subject foreign to his ideas of right and wrong will meet with equally negative results.

Constant repetition may, as in all things, educate the individual in the premises, but as we have said before it is very difficult to overcome preconceived ideas. The personality of the individual is not materially altered in hypnosis, it is only modified, partially dominated, if you please, by the will of another for the time being, but only so far as his own ideas are not seriously crossed. Any strong countercurrents of ideas will break the relationship and arouse the individual from the hypnotic state. Furthermore, there must be a condition of absolute sympathy and confidence present in order to secure the best results. *Faith* in the ability and good intentions of the operator is an essential element in hypnotism, and the sensational stories that go the rounds of cheap literature regarding theft, murder and arson committed in the hypnotic state, by reason of the state, are the creations of diseased minds. Unless a person is any or all of these at heart, he can no more be made so in the hypnotic than he can in the waking condition.

In considering this subject, however, it must be remembered that there are people in this world who are negatively honest virtuous and generally well behaved—people who are good simply because they have never been tempted to be bad. Such a person, tempted either in the waking or hypnotic state, might or would fall simply because he had no indwelling force of character. Such a person is only *safe* in a cloister or behind prison bars.

In studying the literature upon the subject, it is always necessary to keep in mind the fact that most of the experiments that have been published, have been made upon the poorer invalid classes of Holland, France and Switzerland.

In order to understand the workings of the peasant mind, it needs be studied on its native heath. The same conditions do not prevail in this country and we need not look for the same phenomena in the hypnotic state here. Statistics gathered at Nancy, in the year 1880, give, out of 1,012 subjects hypnotized, only 27 wholly refractory cases; 33 showed slight drowsiness; 100 light sleep; 460, deep sleep; 230, very deep sleep; 31, light somnambulism, and 131 deep somnambulism.

M. Bernheim in giving these figures says: "It is doubtless necessary to take account of the fact that M. Liébault operates chiefly on the common people who come to him to be hypnotized, and who superstitiously convinced of his magic power, show greater cerebral docility than more intelligent people." I venture to predict that were statistics to be gathered in this country, that there would be a marked increase in the number of refractory patients recorded.

There are three classes of persons that do not submit to hyp-

nosis kindly, idiots, insane persons and skeptics. Were you to try to hypnotize an idiot, he would leer in your face; an insane person would do everything but concentrate his mind, while the skeptic laughs at the idea. I do not know which class is most to be pitied.

In order to be a good subject a person must be willing-he must have will power sufficient to will that he will do as he is told; he must also have faith in the operator. No one can be hypnotized who does not know that he is going to be and be perfectly willing to experience the sensation. It is purely a matter of suggestion; there is no mysterious fluid that passes from one individual to another. Neither do I look upon the paralytic state of the bird that is induced by the presence of the snake as a hypnotic condition. No one was ever hypnotized by fear. He may be paralyzed and struck dumb in some instances, but that is an entirely different condition from hypnosis. Neither is it a magnetic condition, for induced sleep does not depend upon the influence exerted by the hypnotizer, but upon the subject himself-no one can be hypnotized against his will, but many subjects can hypnotize themselves. All the hypnotizer can do is simply to direct the process.

Hypnosis primarily is beyond question a mental rather than a physical state. Time was when such a statement was or had to be a sufficing answer, but the rapid advance made in the study of psychology in the past few years has thrown much light on this even now little understood realm of scientific research.

Mental states are to be expressed in physiological terms and have causes and effects. The workings of the mind are to be read in the realm of the physical. The brain is the organ of the mind, and experimental physiology has gone so far as to locate several different centers that control different functions; even as the function of the several organs of the body may be developed so may the mental states that control them be educated and developed. The mental state can and does exist independent of the physical expression; in fact, may be highly perfected in a very imperfectly developed physical body. Barring a few of the involuntary functions, man performs nearly all his acts by knowledge gained through imitation. He walks, sings and talks, etc, because he has seen and heard others do so. Man is an upright animal only by imitation. The process of our education begins very early and the mental development precedes the physical. The idea must be grasped before even an attempt to execute it can be imitated.

The imitative is not alone confined to the physical, but pervades the mental state as well. Man thinks by imitation. We are born into our mental and moral atmosphere just as surely as we are into our physical environment. Mental states run in families, just the same as the color of eyes, hair and skin. We are methodists, baptists or presbyterians, republicans, democrats, or whatnots, according to the belief of our parents-with this division of ancestral influence, that we inherit our religious beliefs from our mothers, but political adherence in the main from our fathers. It is very amusing to listen to ardent discussions between children on religious or political subjects-before they have sufficient mental training even to know the force of an argument. They use the same language they have heard their elders use, that is, as far as they can remember it, and they even go farther and adopt the very tones and gestures of their parents-"like father, like son." In most instances the imitation is wholly unconscious. The suggestion has fallen on fertile soil and taken deep root. These early suggestions become a part of our very being and dominate our whole after life. Who has not at times, even in adult life, felt the fears of childhood take hold upon him? The nursery tales of black men and bears and hobgoblins, always remaining with us. To what extent may not the lives of individuals, instincts, tastes and even physical faculties be influenced by continued and insidiously directed suggestion in the waking state; its possibilities are boundless; its powers appalling to think upon.

The doctrine of suggestion, if accepted, overthrows the whole theory of heredity at one full swoop. Man is born into the world, little more than a mass of undifferentiated protoplasm—a creature of environment and suggestion—unless a difference in the character of his constituent protoplasm can be demonstrated, which I fully believe can be. We owe everything to our environment and it has been said that "we should be very careful in selecting our parents," but I say we should be more careful in selecting the environment of our own offspring, especially in their early infancy. First impressions are very lasting because there is little to divert attention and the mind dwells upon them. As we grow older a thousand and one things force themselves upon our waking senses and clamor for recognition. As a result we develop a double, yes, a manifold personality. This is a matter of constant surprise unconscious cerebration is going on in our waking state constantly. We fritter away our vitality to a very great extent in this way, and it forms a fruitful source for the population of our insane asylums.

I once heard of a business man who could dictate to seven stenographers at one time. He was pronounced a phenomenon, as he surely was. He kept this up for a few years, and the last I heard of him he was *resting*— in a mad house.

In our great cities we are in a constant whirl of conflicting suggestions, out of the babel of voices and the ever unrolling panorama of printed matter that is forced upon us, we catch only a glance of the passing vision and hear a fragment of the unending song of weal or woe, as the case may be. Into this busy, bustling life, hypnotic suggestion comes bringing promise of wonderful things. The mind quickened by its training to the very highest powers of perfection is relieved of all distracting influences and confined to a limited number of ideas or suggestions. The hypnotic subject is made oblivious to all outward conditions and is placed en rapport with the hypnotizer, to direct as he chooses without let or hindrance, provided that the idea suggested is cautiously advanced so as not to arouse opposition and is not opposed to the subject's ideas of right and wrong. Minutes in the hypnotic state may be sufficient, in the hands of an expert hypnotizer, to accomplish what would take years to bring about in the waking state. The mind relieved of all mental control that is evident in the waking state performs prodigious feats. Time and space are eliminated and imagination rules supreme. The "astral body" soars away to distant lands and spheres, if we may believe the statements of certain classes of individuals, and brings back reports good or bad as the case may be; that these flights are of the imagination only, the earthly interpretation of the phenomena observed is about all the proof that is needed to convince most mortals.

I am confident that the "trance state" of spiritualistic mediums will be proven to be a condition of lucid somnambulism in which all the perceptive senses are exalted to the very highest degree, and that the "communications," so called, are suggested, either by persons who have the medium in charge, or by the individual who seeks the message. Only a person who has had an extended experience with the hypnotic state can have any appreciation of the degree of exaltation of the senses in some somnam-

This same condition is evident in some children, in fact bulists. to a greater or less degree in all children that have not been maltreated and made prematurely aged. What I mean, is the power to divine the thoughts and intentions of those with whom they are brought in contact. Who has not experienced it-not had his very thoughts read even when he was trying to cover them up? If this is possible, and no one doubts it, in childhood, how much easier in the adult life where the senses of perception are whetted by training to an exalted degree if only the conflicting emotions and scenes could be taken out of the way by hypnosis, and the mind left to concentrate itself on one set of sensations or phenomena. It is impossible for man to conceal his thoughts. The inward workings of the mind find outward expression in some form or other. It is true that they are to be read only as the reader is versed in reading expression. But in order to fully present this phase of the subject it would be necessary to enter into the subject of physiognomy, which the limits of this paper will not permit.

Many people go stumbling through the world without any appreciation of the wonderfully complex nature of this body of ours. Just think of its marvelous possibilities. How it may be attuned until it will respond to the promptings of the most exalted conditions or situations. Every sensation finds visible expression in our physiognomy—only the sordid and callous are expressionless. The physical can be, and is at times, so enveloped and permeated by the immaterial, that the very countenance is transfigured; we have all seen it. Given, then, a naturally perceptive person in a condition of lucid somnambulism, and all the phenomena of mind reading and spiritualism can be explained on purely psycho-physiological grounds.

In this state the subject not only enters into the very being of the interlocutor, but he seems to divine his thoughts and to put them into acts or words before the originator of the thought has had time to frame expression of them. In order to fully understand this condition it is necessary to disabuse our minds of the idea that the mental state of the hypnotic—during sleep—is the same as in the waking state. It is essentially different. Self-consciousness is set aside and all personal and mental, but not moral control is checked for the time being, and the brain of the subject with its varying degrees of education is free to enter upon new lines of thought.

The degree of lucidity depends, therefore, upon the intelligence

of the hypnotic subject. Some minds are mere blanks in the hypnotic state, molded by any passing idea that may be suggested, while others take up the thought and clothe it with wonderful brilliancy, developing the scene or act into pictures, real or imaginary as the case may be, but always weaving into the warp and woof their own personality.

This exaltation in the hypnotic state is not confined alone to the mental perceptive faculties; the so-called five senses may be quickened to almost any degree by suggestion; not only these but the function of any or all of the organs may be increased. Even what is in the waking state considered as involuntary functions, may be influenced and to such a degree in some instances that one is led to believe that there is no such thing as involuntary function, and that what passes for such, is only so because of lack of education as to its use.

Then, again, any and all function may be inhibited and the ordinary processes of nature set aside for the time being without any apparent harm to the organization. May it not be that the enforced hibernation of bears and other animals, including man in the northern regions, is a condition bordering on hypnosis? Can we not explain the burial of the Indian jugglers for months without apparent physical injury, to some such condition? And, lastly, who knows that Dr. Tanner is not an auto-hypnotist, who has the power of inhibiting the functions of the body, for the time being, and thus preventing the ordinary waste of destructive metabolism.

Auto-suggestion forms a most interesting line of study. It has been very conclusively demonstrated that it is not absolutely essential that the subject be put into the sleeping state in order to receive suggestions. The possibility of suggesting to one's self freedom from pain during painful experiences has long been known. Such individuals are the exception and not the rule, however. They belong to a class known as *ecstatics* in past ages, enthusiasts in this age when every one is affected by *ennui*, or at least affects to be. Martyrs in all ages have used some talisman to give them immunity from suffering. These were secreted about the person or swallowed in order to prevent their being taken from them.

Suggestion is not by word alone ; anything that stands for an idea in the mind of the individual is sufficient to produce the effect. Suggestion in the waking state sometimes becomes epidemic. Witness the crusades of the middle ages, where men, women, and

even children became carried away by the millions with the one idea of rescuing the Holy City.

Epidemics of crime seem to spring up as the result of some dastardly deed as the incentive. Lynching "bees" follow each other in rapid succession when once started. Except when we come to consider it carefully, it would seem as if people were creatures of impulse and suggestion, rather than sane, reasoning beings.

Suggestion offers a fruitful field for investigation in judicial and medico-legal lines. Every court should have some trained physician upon whom it can call in order to determine the presence or absence of suggestion in evidence presented. This is especially needed in criminal cases where children are employed as witnesses. Skilled attorneys by plying witnesses with leading questions many times elicit anything but the truth in the case. Even when the question is overruled the suggestion has been given and the desired information obtained later on. All witnesses in any given case should be examined separately as they often suggest to each other, and, above all, lawyers should absolutely be prevented from intimidating witnesses.

If suggestion seems to possess the power of aiding evil and crime, it also offers a remedy. It should be made a valuable agent in the reformation of criminals. They should be surrounded on all sides with suggestions to a better life. They should be frequently hypnotized and placed under the influence of good and noble suggestions while in this susceptive state. New impulses might in many cases take root and grow into an ennobled existence.

While suggestive therapeutics is not a new subject, it has only within the past few years been placed upon anything like a scientific basis. With the advance in our knowledge regarding the physiology of function through physiological chemistry, we are becoming better prepared to direct it. The power of the imagination has long been called upon to assist in the cure of diseased conditions. Lack of knowledge as to how the special functions of the body produce results has prevented the intelligent use of this valuable agent in the past. History is, however, full of the records of miraculous cures of all manner of disorders. The strong hold that faith cure and christian science has gotten upon the people witnesses the power of suggestion in the treatment of disease. They will no longer down by pooh-poohing them. Suggestion has come to stay, and why should we not welcome it as a valuable adjunct to our pharmacopœia and use it in the treatment of disease? In classing faith cure and christian science, so called, with hypnotism, and offering an explanation based upon purely physiological grounds, I do not want to be understood as attacking any one's religious faith, or detracting from the miraculous character of the work done by our Saviour when on earth. Far be it from me to wound the religious sentiment of any one or to cast doubt upon the sincerity and honest conviction of many of the followers of these latter day miraculous healers. The safety of the church, though lies in accepting these forces, and interpreting them according to the light of modern scientific revelation which, in so far as it contains God's truth, is God's word.

The phenomena of life have long been before us, the application of the cure is yet to be made, for as yet, we have caught only a glimpse of the boundless possibilities of suggestive therapeutics coupled with a judicious use of specific drugs. "It is a physiological law, that sleep puts the brain into such a psychical condition that the imagination accepts and recognizes as real the impressions transmitted to it. To provoke this special psychical condition by means of hypnotism and cultivate the suggestibility thus artificially increased with the aim of cure or relief, is the role of psychothera-Couple with this a careful scientific explanation of the peutics." functions of the disordered part and the specific line of action of any given drug in aiding nature in the cure of the condition and an ideal line of treatment is established. To doubt the direct influence of the mind over the body, is to doubt the evidence of one's senses. Who has not witnessed the influence of mentation over the functions of the body by inhibition? Is it rational then to deny the power of the mind to assist in constructive metabolism when we freely admit its influence in destructive metamorphoses?

It has always seemed to me that I have had the best success in treatment where I have been able to inspire a high degree of faith in the mind of my patient, both as to my own ability and the efficacy of the particular drug used in the treatment of the case, The most successful physician, as a rule, is optimistic in his views. looks on the bright side of things and has the power of inspiring the same feeling in his patient. M. Liebault's method of applying suggestion in the treatment of disease is summed up in the following paragraph by M. Bernheim:

"The patient is put to sleep by means of suggestion, that is by making the idea of sleep penetrate the mind. He is treated by

means of suggestion, that is by making the idea of cure penetrate the mind \* \* \* by affirming in a loud voice the disappearance of his symptoms. We profit by the special psychical receptivity created by hypnosis, by the cerebral docility, by the exalted idio-motor-idio-sensitive-idio-sensorial reflex activity, in order to provoke useful reflexes, to persuade the brain to do what it can to transform the accepted idea into reality." Bernheim goes on to "Since 1882, I have experimented with the suggestive sav: method which I have seen used by M. Liebault, though timidly at first and without any confidence. To-day (1887) it is daily used in my clinic; I practice it before my students; perhaps no day passes in which I do not show them some funtional trouble, pain, paresis, uneasiness, insomnia, either moderately or instantly suppressed by suggestion."

"Up to the present time, only a few physicians have followed the Nancy School in its trials of suggestive therapeutics according to M. Liebault's methods. We must mention M. Auguste Voisin, who at the Blois and Grenoble Congresses, called attention to its application to the treatment of mental diseases. A very much agitated hysterical patient was calmed by hypnotic suggestion, and moral sentiments and sentiments of affection were awakened, at least for a short time in her. Three new observations, given in the *Bulletin general de therapeutique*, April 15, 1886, are entitled:

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1. Hystero-epilepsy. Erotic delirium, with hallucinations of sight and hearing. Treatment by hypnotic suggestion. Cure.

2. Melancholic delirium. Hallucinations of sight and hearing. Refused nourishment. Cure by hypnotic suggestion.

3. Hysterical insanity. Hallucinations of sight and hearing. Ideas of suicide. Hæmianæsthesia and hæmidyschromatopsia. Cure by hypnotic suggestion.

New observations have been published since by the author in the *Revue de l'hypnotisme*.

We must mention still another interesting observation on suggestive therapeutics successfully used in a case of hysteria, published by M. Séglas (*Archives de Neurologie*, November, 1885), and one published by M. Lombroso (*la Sperimentale*, November, 1885).

M. Desplats, of Lille, M. Berillon, M. Debove, and M. Deboeuf, have cited a certain number of facts relating to suggestive therapeutics. M. Fontan, Professor at the Toulon School, and

M. Segard, Chef-de-Clinique in the same school, have published in their elements de medicine suggestive, ninety-one most interesting observations, which throw brilliant confirmation upon the facts stated by the Nancy School.

In Germany, M. Berger (*Breslauer Zeitschrift*, 1880) reports that an hysterical contracture of the fingers was cured while the patient was in the hypnotic condition.

Preyer (*der Hypnotismus*, Berlin, 1882) says that his assistant, Dr. Creutzfield, has stopped neuralgic pains by means of hypnotism.

Dr. Fisher der sog. Magnetismus oder Hypnotismus, Mainz 1883), has observed a similar result. Reiger (der Hypnotismus, Jena 1884), says that he has also obtained very good effects by means of it, notably in the case of a young girl with contracture.

Dr. Wiebe, from whom the preceding citations are borrowed, has had recourse to hypnotism as a therapeutic means four times in Prof. Baumler's service at Fribourg in Breslau.

The following are the results he obtained (Berl. Klin. Wochenshr., 1884, No. 2):

In three of these cases, hypnotism acted as a prompt and lasting cure; in the fourth the effect was not complete, but nevertheless it was useful. In the first case, hypnosis cured anæsthesia; in the third clonic convulsions were stopped, and in the fourth, clonic convulsions were benefited.

Among the physicians who have applied hypnotism to therapeutics, we must mention Prof. Achille de Govanni (*Clinice medica della Universita di Padowa*, 1882). The following is a résumé of his observations, taken from the *Revue de Medecine*, 1883:

1. Persistent rachialgia in a patient who was much weakened and of a nervous constitution. The rachialgia had been preceded by contracture of the lower limbs, cured by massage. Sleep was easily induced. The patient was hypnotized every day for a week; the rachialgia grew better, then disappeared. There was simultaneous improvement in her normal condition.

2. A woman eighteen years old, troubled with a neurosis, between which and hysteria the author makes a distinction. After intermittent fever and a dangerous attack (about the nature of which the author is doubtful), arthralgia developed with contracture in the right leg and arm without any apparent lesion. This contracture grew better, and was then entirely cured by the application of electricity over the homogenous groups of muscles of the opposite side. Attack of fever without any known cause. Incomplete hemianæsthesia of the right side, glossalgia, labio-glossopharyngeal paralysis, a crisis of hystero-epilepsy; neuralgia in the shoulder with ecthyma boils, ganglionic congestion. The first trial of hypnotism did not induce sleep, and no tremor of the upper and lower limbs; at the third seance there was a sleep and no tremor. From this time on the patient rapidly improved. In fifteen days, with one, two and three seances a day, she was cured.

3. Patient had alopecia areata, great muscular weakness, pain in the knees, and certain nervous troubles. The patient was hypnotized in order that a piece of the skin could be obtained for microscopical examination. The operation was performed unknown to the patient, and without any pain.

4. A young man suffering from acute coxalgia with pain in the knee, and whom it was impossible to move or even to touch, was hypnotized; in that condition he was examined easily. Upon waking he said that the pain in his knee had disappeared.

Let us glance at the following observations by Bernheim arranged in order:

A-ORGANIC DISEASES OF THE NERVOUS SYSTEM-10.

1. Cerebral hæmorrhage, hemiplegia, hemianæsthesis with tremor and contracture. Cure.

2. Cerebro-spinal disease; apoplestiform attacks, paralysis, ulnar neuritis. Cure.

3. Partial left hemiplegia. Cure.

4. Traumatic epilepsy with traumatic rheumatism, Cure.

5. Sensory organic hemianæsthesia. Cure.

6. Diffuse rheumatic myelitis. Improvement.

7. Cerebro-spinal insular sclerosis. Marked improvement for six months.

8. Nervous troubles (organic cause?) in the brachial plexus. Temporary suppression of the symptoms. No cure.

9. Paresis of the extensors of the hand and saturine anæsthesia. Cure.

10. Paresis of traumatic origin of the muscles of the hand. Cure.

#### **B**—HYSTERICAL DISEASES—17.

Hystero-epilepsy in a man, sensitivo-sensorial hemianæs-11. Cure. thesia.

12. Hysteris, sensitivo-sensorial anæsthesia. Transient suppression of the symptoms. No cure.

Hemiplegia with left sensitivo-sensorial hemianæsthesia. 13. Cure.

Hysterical sensitivo-sensorial hemianæsthesia. Cure. 14.

Hysteriform paroxysms with hysterical somnambulism. 15. Cure.

16. Anæsthesia, hysterical spinal pain. Cure.

17. Paralysis with hysterical anæsthesia. Cure.

18. Convulsive hysteria with hemianæsthesia. Cure.

19. Hysteria, paroxysms of convulsive weeping. Cure.

20. Convulsive hysteria. Cure.

Convulsive hysteria with hemianæsthesia. Cure. 21.

22. Convulsive hysteria. Cure.

Convulsive hysteria with hemianæsthesia. Cure. 23.

24. Convulsive hysteria with hemianæsthesia. Cure.

25.Hysteria with hemianæsthesia. Cure.

26. Hysteria in the male; weeping and convulsive paroxysms. Cure (at least temporary).

Hysterical aphonia. Cure. 27.

C-NEUROPATHIC AFFECTIONS-18.

28. Nervous aphonia. Cure.

29. Moral inertia with subjective sensations in the head. Cure.

30. Nervous aphonia. Cure.

Post-epileptic tremor, cephalalgia and insomnia. Cure. 31.

Nervous gastric troubles. Anæsthesia. Improvement. 32.

Neuropathic pains. Cure. 33.

Epigastric pains. Cure. 34.

Neuropathic lumbar pains. Insomnia. Cure. 35.

36. Paresis with sense of weight in the right leg. Cure.

37. Pains in the right leg. Cure.

Girdle pain and pain in right groin, with difficulty in 38. walking, for twenty months.

Insomnia, loss of appetite, mental depression, tremor. 39. Cure.

40. Gloomy ideas. Insomnia, loss of appetite. Cure.

41. Insomnia through habit. Partial cure.

42. Cephalalgia, intellectual obnubilation. Cure.

43. Vertigo, moral depression connected with cardiac disease. Cure.

44. Laziness, disobedience, and loss of appetite in a child. Cure.

45. Pseudo paraplegia with tremor. Cure.

#### D-VARIOUS NEUROSES-15.

46. Choreic movements consecutive to chorea. Cure.

47. Choreic movements consecutive to chorea. Cure.

48. Choreic movements from moral emotion. Cure.

49. Post-choreic tremor in the hand. Cure.

50. Post-choreic trouble in writing. Cure.

51. Choreic movement in the hands. Cure.

52. Hemichorea. Rapid improvement. Gradual cure.

53. General chorea. Gradual cure.

54. General chorea. Gradual cure.

55. Obstinate writer's cramp. Rapid improvement. Gradual cure.

Cure.

56. Attacks of tetany, nocturnal somnambulism.

57. Nocturnal somnambulism. Temporary cure.

58. Nocturnal incontinence of urine. Cure.

59. Nocturnal incontinence of urine, Cure,

60. Nocturnal incontinence of urine. Aphonia consecutive to pneumonia.

E-DYNAMIC PARESES AND PARALYSIS-3.

61. Sense of weight with paresis of the left arm. Cure.

62. Dynamic psychical paraplegia. Cure.

63. Pains and paresis of the lower limbs. Cure.

F-GASTROINTESTINAL AFFECTIONS-4.

64. Alcoholic gastritis with insomnia and weakness of the legs. Improvement.

65. Chronic gastritis. Dilation of the stomach and vomiting. Improvement.

66. Gastric troubles. Burning sensation over sternum. Insomnia. Cure. 67. Gastrointestinal catarrh. Metritis. Neuropathy. Improvement.

#### G-VARIOUS PAINFUL AFFECTIONS-12.

68. Epigastric pain. Cure.

69. Umbilical and epigastric pain. Cure.

70. Interscapular pain. Cure.

71. Thoracic pain. Insomnia (Tubercular diathesis). Cure.

72. Hypogastric and supra-inguinal pains on the left side connected with an old pelvic peritonitis. Cure.

73. Intercostal pain. Cure.

74. Thoracic pain. Gradual cure.

75. Painful contusion of the deltoid. Cure.

76. Muscular pain in the flank. Cure.

77. Painful spot in the side. Cure.

78. Pains in the epitrochlear muscles. Cure.

79. Pain in the shoulder and upper right limb from effort. Cure.

#### H-RHEUMATIC AFFECTIONS-19.

80. Rheumatic paralysis of the right forearm. Cure.

81. Rheumatic scapulo-humeral arthritis. Improvement without cure.

82. Muscular rheumatism with cramp. Cure.

83. Ilio-lumbar rheumatic neuralgia. Cure.

84. Arthralgia consecutive to an arthrisis. Cure.

85. Pleurodynia and lumbar pain helped by suggestion. Cure.

86. Apyretic articular rheumatism. Gradual cure.

87. Chronic articular rheumatism (wrists and insteps). Cure.

88. Muscular articular and nervous rheumatism. Gradual cure.

89. Acromioclavicular and xiphoid rheumatic pains. Cure.

90. Muscular lumbo-crural rheumatism, with sacrosciatic neuralgia. Rapid improvement. Almost total cure.

91. Apyretic articular rheumatism. Gradual cure.

92. Acromioclavicular rheumatic pains. Cure.

93. Muscular rheumatism in the arm and right leg. Cure.

94. Gonorrhœal rheumatism. Gradual cure.

95. Acromioclavicular and xiphoid rheumatism. Cure.

96. Rheumatic articular pains. Cure.

97. Dorsal and metacarpo-phalangeal rheumatic pains. Cure.

98. Rheumatic, dorsolumbar, and sciatic pains. Cure.

I-NEURALGIAS-5.

99. Rebellious sciatica. Cure.

100. Recent sciatica helped by one suggestion. Cure.

101. Rebellious sciatica. Cure.

102. Rebellious sciatica. Gradual cure.

103. Neuralgia of the trigeminus with facial tic douloureux. Almost complete cure.

#### J-MENSTRUAL TROUBLES-2

104. Menstrual retardation. Suggestion for the periods for a fixed day.

105. Profuse menstruation every eleven or fifteen days. Interval lengthened by suggestion to twenty-eight or twenty-nine days.

The following taken from the *New York Evening Post*, 1894, very clearly sets forth the present status of hypnosis in its relation to medicine :

"The extent to which therapeutic experiments in hypnotic suggestion are exciting the attention of physicians and awakening the interest of the general public, may be inferred from the fact, that during the past year more than 100 books and brochures, especially devoted to the discussion of this subject, have been published. One of the most valuable of these is the small volume just issued by Bong, in Berlin, entitled "Die Bedeutung der Hypnotischen Suggestion als Heilmittel." The author, Dr. J. Grossman, editor of the Zeitschrift fur Hypnotismus prints communications from thirty of the most eminent professors and physicians of Europe giving the results of their experience in the application of hypnotic suggestions to the healing of disease. Thus Van Ceden and Van Reuterghem, of Amsterdam, report that from May 5, 1887, to June 30, 1893, in the institution under their charge, 1,098 patients were subjected to the treatment; of these 28.28 per cent were entirely cured, 23.69 per cent permanently improved, 21.02 per cent slightly bettered,

17.81 per cent unaffected, and in 9.18 per cent of the cases the results were unknown. Dr. Wetterstrand, of Stockholm, has used this method of medical treatment in 7,000, and Dr. Bernheim, of Nancy, in 12,000 cases, and both express themselves strongly in favor of it. Another important point brought out by Dr. Krafft-Ebing, of Vienna, is the influence of "autosuggestion" in the production of disease. The number of ailments and morbid conditions of this kind that have their origin in the nervous system and are indicated by pains, paralysis, and other symptoms of hysterical, hypochondriac, and neurasthenic affections is astonishing. Although not merely imaginary complaints, they cease with the removal of "autosuggestive cause," which may be effected by any change of scene banishing it from the thoughts, or by heterosuggestion (fremden suggestion) on the part of a physician, who may impart it verbally or in the disguise of a dose of medicine. In obstinate cases, in which the autosuggestion is firmly entrenched in mental imbecility, superstition, morbid appetites and passions, inveterate habits, or abnormities of character, recourse must be had to hypnotism. That the great majority of mankind are capable of being hypnotized, is shown by the experiments of Dr. Freihorr von Schrenk-Notzing, of Munich, in 8.705 persons of different nationalities, of whom only 6 per cent proved to be entirely unsusceptible."

After several years spent in the careful study of the phenomena of inebriety, morphine and allied habits, I am convinced that they are mostly mental diseases and that the habit may be broken up by suggestion and suitable medication in subjects that really desire to be cured. It is my intention to put my theory into practice at the first favorable opportunity. I have no positive method to prescribe, but shall be guided by indications presented in each case.

Suggestive therapeutics, like all other lines of treatment, has its limitations, else final dissolution could be abolished. The first limit is lack of faith in the complete efficacy of the remedy. We stop short of success in many things in life by reason of our inability to persist to a finish. This is not always the result of lack of faith, but is many times a physical defect. Poor human nature becomes exhausted, and we give up the ghost, literally as well as figuratively. There is a limit to the resistive quality of protoplasm just as positively as there is a point where cohesion in the molecules of metals fails, and yet it goes without dispute that the will has saved the life of many a man by carrying him over the crisis. Physicians all recognize it in the treatment of disease.

In conclusion, I desire to say that I am a firm believer in the value of suggestion in medical and dental practice, and that experience based upon years of scientific study in the phenomena of function leads me to earnestly advocate the use of hypnotic suggestion in the treatment of certain forms of disease.

Nearly all the work done so far has been in the direction of investigating its value as a therapeutic agent rather than as an anæsthetic. The special line of work that I have been and am still engaged upon is its application to surgery upon which little or nothing has been written. The value of hypnosis as an analgesic in neuralgia has long been known, but my clinic, while running, daily demonstrated its value as an anæsthetic. It is fitting that a dental clinic should be the first to take the lead in the matter, as dentistry has always been in the front rank in experimenting with anæsthetics, and with excellent results. Dentistry gave nitrous oxide, gas and ether to surgery, and now leads in the introduction of hypnosis.



